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#### **Foreword**

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

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### 1 Scope

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

### 2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TS 23.003: "Numbering, addressing and identification". [2] 3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling". 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for [3] DCH Data Streams". [4] 3GPP TS 25.427: "UTRAN Iur and Iub Interface User Plane Protocols for DCH Data Streams". [5] 3GPP TS 25.435: "UTRAN Iub interface User Plane Protocols for Common Transport Channel Data Streams". [6] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception". 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception". [7] [8] 3GPP TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)". 3GPP TS 25.212: "Multiplexing and Channel Coding (FDD)". [9] [10] 3GPP TS 25.214: "Physical Layer Procedures (FDD)". 3GPP TS 25.215: "Physical Layer – Measurements (FDD)". [11] [12] 3GPP TS 25.221: "Physical Channels and Mapping of Transport Channels onto Physical Channels (TDD)". 3GPP TS 25.223: "Spreading and Modulation (TDD)". [13] 3GPP TS 25.225: "Physical Layer - Measurements (TDD)". [14] 3GPP TS 25.304: "UE Procedures in Idle Mode" [15] [16] 3GPP TS 25.331: "RRC Protocol Specification". 3GPP TS 25.402: "Synchronisation in UTRAN, Stage 2". [17] ITU-T Recommendation X.680 (2002-07): "Information technology – Abstract Syntax Notation [18] One (ASN.1): Specification of basic notation". [19] ITU-T Recommendation X.681 (2002-07): "Information technology – Abstract Syntax Notation

One (ASN.1): Information object specification".

[20]	ITU-T Recommendation X.691 (2002-07): "Information technology – ASN.1 encoding rules – Specification of Packed Encoding Rules (PER)".
[21]	3GPP TS 25.213: "Spreading and modulation (FDD)".
[22]	3GPP TS 25.224: "Physical Layer Procedures (TDD)".
[23]	3GPP TS 25.133: "Requirements for support of Radio Resource management (FDD)".
[24]	3GPP TS 25.123: "Requirements for support of Radio Resource management (TDD)".
[25]	3GPP TS 23.032: "Universal Graphical Area Description (GAD)".
[26]	3GPP TS 25.302: "Services Provided by the Physical Layer".
[27]	3GPP TS 25.213: "Spreading and modulation (FDD)".
[28]	3GPP TR 25.921 (version.7.0.0): "Guidelines and Principles for Protocol Description and Error Handling".
[29]	Void
[30]	ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
[31]	RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
[32]	3GPP TS 25.425: "UTRAN Iur and Iub Interface User Plane Protocols for Common Transport Channel data streams".
[33]	IETF RFC 2460 (1998-12): "Internet Protocol, Version 6 (Ipv6) Specification".
[34]	IETF RFC 768 (1980-08): "User Datagram Protocol".
[35]	3GPP TS 25.424: "UTRAN Iur Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams".
[36]	3GPP TS 44.118: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) Protocol Iu mode".
[37]	Void
[38]	3GPP TS 48.008: "Mobile-services Switching Centre – Base Station System (MSC – BSS) interface; Layer 3 specification".
[39]	3GPP TS 43.051: "GSM/EGDE Radio Access Network; Overall description – Stage 2".
[40]	3GPP TS 25.401: "UTRAN Overall Description".
[41]	3GPP TS 25.321: "MAC protocol specification".
[42]	3GPP TS 25.306: "UE Radio Access capabilities".
[43]	3GPP TS 25.101: "User Equipment (UE) radio transmission and reception (FDD)".
[44]	IETF RFC 2474 (1998-12): "Definition of the Differentiated Services Field (DS Field) in the Ipv4 and Ipv6 Headers".
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[46]	3GPP TS 25.222: "Multiplexing and Channel Coding (TDD)".
[47]	3GPP TS 44.060: "General Packet Radio Service (GPRS); Mobile Station (MS) – Base Station System (BSS) interface; Radio Link Control/Medium Access Control (RLC/MAC) protocol".
[48]	3GPP TS 32.421: "Subscriber and equipment trace: Trace concepts and requirements".
[49]	3GPP TS 32.422: "Subscriber and equipment trace: Trace control and Configuration Management".

[50]	3GPP TS 25.346: "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in the Radio Access Network (Stage-2) ".
[51]	3GPP TS 23.246: "Multimedia Broadcast Multicast Service; Architecture and Functional Description".
[52]	3GPP TS 25.319: "Enhanced Uplink; Overall description; Stage 2".
[53]	Galileo OS Signal in Space ICD (OS SIS ICD), Draft 0, Galileo Joint Undertaking, May 23 <sup>rd</sup> , 2006.
[54]	3GPP TS 23.251: "Network Sharing: Architecture and functional description".
[55]	IS-GPS-200, Revision D, Navstar GPS Space Segment/Navigation User Interfaces, March 7 <sup>th</sup> , 2006.
[56]	IS-GPS-705, Navstar GPS Space Segment/User Segment L5 Interfaces, September 22, 2005.
[57]	IS-GPS-800, Navstar GPS Space Segment/User Segment L1C Interfaces, March 31, 2008.
[58]	Specification for the Wide Area Augmentation System (WAAS), US Department of Transportation, Federal Aviation Administration, DTFA01-96-C-00025, 2001.
[59]	IS-QZSS, Quasi Zenith Satellite System Navigation Service Interface Specifications for QZSS, Ver.1.0, June 17, 2008.
[60]	Global Navigation Satellite System GLONASS Interface Control Document, Version 5, 2002.
[61]	3GPP TS 36.401: "Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture Description".
[62]	3GPP TS 36.104: "Base Station (BS) radio transmission and reception ".
[63]	3GPP TS 25.308: "High Speed Downlink Packet Access (HSDPA); Overall description; Stage 2".
[64]	3GPP TS 36.133: "Requirements for support of radio resource management".
[65]	3GPP TS 23.195: "Provision of UE Specific Behaviour Information to Network Entities".
[66]	3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".
[67]	3GPP TS 44.108: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol".
[68]	3GPP TS 25.422: "UTRAN Iur interface signalling transport".
[69]	3GPP TS 45.005: "Technical Specification Group GSM/EDGE Radio Access Network; Radio transmission and reception"

# 3 Definitions, Symbols and Abbreviations

#### 3.1 Definitions

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

**Elementary Procedure:** RNSAP protocol consists of Elementary Procedures (Eps). An Elementary Procedure is a unit of interaction between two RNCs. An EP consists of an initiating message and possibly a response message. Two kinds of Eps are used:

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

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

#### Successful

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

#### Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 Eps are considered always successful.

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

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

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

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

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

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

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

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

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

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

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

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

### 3.2 Symbols

Void.

#### 3.3 **Abbreviations**

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

A-GPS Assisted-GPS

**ALCAP** Access Link Control Application Part

Access Point Name APN

Abstract Syntax Notation One ASN.1

Bit Error Rate **BER BLER Block Error Rate BSS** Base Station Subsystem **CBSS** Controlling BSS

Common Control Channel **CCCH** 

**CCPCH** Common Control Physical Channel **CCTrCH** Coded Composite Transport Channel

CFN Connection Frame Number

C-ID Cell Identifier

Compressed Mode CM

Core Network CN

Common Pilot Channel **CPICH CRNC** Controlling RNC

**CLTD** Closed Loop Transmit Diversity

**DBSS Drift BSS** 

C-RNTI Cell Radio Network Temporary Identifier

Circuit Switched CS

**CTFC** Calculated Transport Format Combination DCH Dedicated Channel

**DGANSS Differential GANSS** Differential GPS **DGPS** Downlink

DL

DPC Downlink Power Control

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

Drift RNC DRNC DRNS Drift RNS

D-RNTI Drift Radio Network Temporary Identifier

Discontinuous Reception DRX Downlink Shared Channel **DSCH** Energy in single Code Ec

E-DCH Absolute Grant Channel E-AGCH

E-DCH Enhanced UL DCH

E-HICH E-DCH HARQ Acknowledgement Indicator Channel E-PUCH Enhanced Uplink Physical Channel (TDD only)

E-RNTI E-DCH RNTI

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

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

**Evolved UTRA** E-UTRA

Enhanced Downlink Shared Channel Power Control **EDSCHPC** European Geostationary Navigation Overlay Service **EGNOS** 

Elementary Procedure EP **FACH** Forward Access Channel Frequency Division Duplex FDD

Fractional DPCH F-DPCH FN Frame Number FP Frame Protocol

Fractional Transmitted Precoding Indicator Channel F-TPICH **GANSS** Galileo and Additional Navigation Satellite Systems

**GERAN** GSM EDGE Radio Access Network

Geographical Area GA

GPS Aided Geo Augmented Navigation **GAGAN** 

GAI Geographical Area Identifier

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

GNSS Global Navigation Satellite System

GPS Global Positioning System
GRA GERAN Registration Area
GSM Global System Mobile
GWCN Gateway Core Network

HSDPA High Speed Downlink Packet Access

HW Hardware

IB Information Block

ICD Interface Control Document ID Identity or Identifier IE Information Element

IMSI International Mobile Subscriber Identity

IP Internet Protocol
IPDL Idle Period DownLink

ISCP Interference Signal Code Power

LAC Location Area Code

LCR Low Chip Rate (1.28 Mcps)

LCS Location Services
MAC Medium Access Control

MBMS Multimedia Broadcast Multicast Service

MDT Minimization of Drive Tests MOCN Multi-Operator Core Network

MRNC MBMS Master RNC MS Mobile Station

MSAS Multi-functional Satellite Augmentation System

NACC Network Assissted Cell Change

NAS Non Access Stratum No Reference Noise NRT Non Real Time

O&M Operation and Maintenance

P(-)CCPCH Primary CCPCH PCH Paging Channel

OTD Observed Time Difference

P(-)CPICH Primary CPICH

PCS Personal Communication Services
PDSCH Physical Downlink Shared Channel

PDU Protocol Data Unit PhCH Physical Channel

PICH Paging Indication Channel

PLCCH Physical Layer Common Control Channel

Pos Position or Positioning

PRACH Physical Random Access Channel

PTP Point To Point
PTM Point To Multipoint
PS Packet Switched

PUESBINE Provision of UE Specific Behaviour Information to Network Entities

QE Quality Estimate

QZSS Quasi-Zenith Satellite System

RAC Routing Area Code
RACH Random Access Channel
RAN Radio Access Network

RANAP Radio Access Network Application Part

RB Radio Bearer RL Radio Link

RLC Radio Link Control
RLS Radio Link Set
RM Rate Matching

RNC Radio Network Controller RNS Radio Network Subsystem

RNSAP Radio Network Subsystem Application Part

RNTI Radio Network Temporary Identifier

RRC Radio Resource Control

RT Real Time

RSCP Received Signal Code Power

SBAS Satellite Based Augmentation System

SBSS Serving BSS

Rx Receive or Reception

Sat Satellite

SCCP Signalling Connection Control Part

S(-)CCPCH Secondary CCPCH
SCH Synchronisation Channel
SCTD Space Code Transmit Diversity

S-DPCCH Secondary Dedicated Physical Control Channel

SDU Service Data Unit
SF System Frame
SFN System Frame Number
SHCCH Shared Control Channel

SHCCH Shared Control Channel
SIR Signal-to-Interference Ratio
SNA Shared Network Area
SRB2 Signalling radio bearer 2

SRNC Serving RNC SRNS Serving RNS

S-RNTI Serving Radio Network Temporary Identifier

STTD Space Time Transmit Diversity

TDD Time Division Duplex TF Transport Format

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set

TGCFN Transmission Gap Connection Frame Number

TMGI Temporary Mobile Group Identity
ToAWE Time of Arrival Window Endpoint
ToAWS Time of Arrival Window Startpoint

TPC Transmit Power Control TrCH Transport Channel

TS Time Slot

TSG Technical Specification Group
TSTD Time Switched Transmit Diversity
TTI Transmission Time Interval
TX Transmit or Transmission

UARFCN UTRA Absolute Radio Frequency Channel Number

UDP User Datagram Protocol UC-ID UTRAN Cell Identifier UE User Equipment

UL Uplink

UMTS Universal Mobile Telecommunications System

URA UTRAN Registration Area

U-RNTI UTRAN Radio Network Temporary Identifier

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

UTRAN Universal Terrestrial Radio Access Network

WAAS Wide Area Augmentation System

#### 4 General

### 4.1 Procedure Specification Principles

The principle for specifying the procedure logic is to specify the functional behaviour of the DRNC/CRNC exactly and completely. The SRNC functional behaviour is left unspecified. The Physical Channel Reconfiguration procedure, [TDD – the UE Measurement Initiation, the UE Measurement Reporting, UE Measurement Termination, UE Measurement Failure,] and the Reset procedure are an exception from this principle.

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

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

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

04. ☐ Functionality which "shall, if supported" be executed

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

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

### 4.2 Forwards and Backwards Compatibility

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

### 4.3 Source Signalling Address Handling

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

### 4.4 Specification Notations

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

[FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to

FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the

section following the heading applies only to FDD.

[TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to

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

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

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

[1.28Mcps TDD]	This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
[7.68Mcps TDD]	This tagging of a word indicates that the word preceding the tag "[7.68Mcps TDD]" applies only to 7.68Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[7.68Mcps TDD]" and the section following the heading applies only to 7.68Mcps TDD.
[FDD]	This tagging indicates that the enclosed text following the "[FDD – " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
[TDD]	This tagging indicates that the enclosed text following the "[TDD – " applies only to TDD including 3.84Mcps TDD, 7.68Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
[3.84Mcps TDD	.] This tagging indicates that the enclosed text following the "[3.84Mcps TDD – " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 3.84Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.
[1.28Mcps TDD	.] This tagging indicates that the enclosed text following the "[1.28Mcps TDD – " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.
[7.68Mcps TDD	.] This tagging indicates that the enclosed text following the "[7.68Mcps TDD – " applies only to 7.68Mcps TDD. Multiple sequential paragraphs applying only to 7.68Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 7.68Mcps TDD specific paragraphs.
Procedure	When referring to an elementary procedure in the specification, the Procedure Name is written with the first letters in each word in upper case characters followed by the word "procedure", e.g. Radio Link Setup procedure.
Message	When referring to a message in the specification, the MESSAGE NAME is written with all letters in upper case characters followed by the word "message", e.g. RADIO LINK SETUP REQUEST message.
IE	When referring to an information element (IE) in the specification, the <i>Information Element Name</i> is written with the first letters in each word in upper case characters and all letters in Italic font followed by the abbreviation "IE", e.g. <i>Transport Format Set</i> IE.
Value of an IE	When referring to the value of an information element (IE) in the specification, the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)".

## 5 RNSAP Services

### 5.1 RNSAP Procedure Modules

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

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

#### 5. RNSAP MBMS Procedures.

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

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

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

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

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

#### 5.2 Parallel Transactions

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

# 6 Services Expected from Signalling Transport

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

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

### 7 Functions of RNSAP

The RNSAP protocol provides the following functions:

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

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

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

Table 1: Mapping between functions and RNSAP elementary procedures

Function	Elementary Procedure(s)	
Radio Link Management	a) Radio Link Setup	
Tradio Eliik Wahagomoni	b) Radio Link Addition	
	c) Radio Link Deletion	
	d) Unsynchronised Radio Link Reconfiguration	
	e) Synchronised Radio Link Reconfiguration	
	Preparation	
	f) Synchronised Radio Link Reconfiguration	
	Commit	
	g) Synchronised Radio Link Reconfiguration	
	Cancellation h) Radio Link Pre-emptioni) Radio Link	
	Activation	
	j) Radio Link Parameter Update	
Physical Channel Reconfiguration	Physical Channel Reconfiguration	
Radio Link Supervision	a) Radio Link Failure	
	b) Radio Link Restoration	
Compressed Mode Control [FDD]	a) Radio Link Setup	
	b) Radio Link Addition	
	c) Compressed Mode Command	
	d) Unsynchronised Radio Link Reconfiguration	
	e) Synchronised Radio Link Reconfiguration	
	Preparation f) Synchronised Radio Link Reconfiguration	
	Commit	
	g) Synchronised Radio Link Reconfiguration	
	Cancellation	
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation	
	b) Dedicated Measurement Reporting	
	c) Dedicated Measurement Termination	
	d) Dedicated Measurement Failure	
DL Power Drifting Correction [FDD]	Downlink Power Control	
DCH Rate Control	a) Radio Link Setup b) Radio Link Addition	
	c) Unsynchronised Radio Link Reconfiguration	
	d) Synchronised Radio Link Reconfiguration	
	Preparation	
	e) Radio Link Congestion	
CCCH Signalling Transfer	a) Uplink Signalling Transfer	
	b) Downlink Signalling Transfer	
GERAN Signalling Transfer	a) GERAN Uplink Signalling Transfer	
Doging	b) Downlink Signalling Transfer	
Paging Common Transport Channel Resources	Paging a) Common Transport Channel Resources	
Management	Initiation	
	b) Common Transport Channel Resources	
	Release	
Relocation Execution	Relocation Commit	
Reporting of General Error Situations	Error Indication	
Measurements on Common Resources	a) Common Measurement Initiation	
	b) Common Measurement Reporting	
	c) Common Measurement Termination	
Information Evolutions	d) Common Measurement Failure	
Information Exchange	a) Information Exchange Initiation     b) Information Reporting	
	c) Information Exchange Termination	
	d) Information Exchange Failure	
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control	
Reset	Reset	
UE Measurement Forwarding[TDD]	a) UE Measurement Initiation	
	b) UE Measurement Reporting	
	c) UE Measurement Termination	
Topics	d) UE Measurement Failure	
Trace	a) lur Invoke Trace	
	b) Iur Deactivate Trace	

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

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

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

Table 1A: RNSAP elementary procedures applicable on the lur-g interface

Function	Elementary Procedure(s)
GERAN Signalling Transfer	a) GERAN Uplink Signalling Transfer
	b) Downlink Signalling Transfer
Paging	Paging
Relocation Execution	Relocation Commit
Reporting of General Error Situations	Error Indication
Measurements on Common Resources	a) Common Measurement Initiation
	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Information Exchange	a) Information Exchange Initiation
	b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure
Radio Resource Reserve Handover [1.28Mcps	a) Enhanced Relocation Resource Allocation
TDD]	b) Enhanced Relocation Resource Release

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

# 8 RNSAP Procedures

# 8.1 Elementary Procedures

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

**Table 2: Class 1 Elementary Procedures** 

Elementary	Initiating Message	Successful Outcome	Unsuccessful Outcome
Procedure		Response message	Response message
Radio Link Setup	RADIO LINK SETUP	RADIO LINK SETUP	RADIO LINK SETUP
•	REQUEST	RESPONSE	FAILURE
Radio Link	RADIO LINK	RADIO LINK	RADIO LINK ADDITION
Addition	ADDITION REQUEST	ADDITION	FAILURE
		RESPONSE	
Radio Link	RADIO LINK	RADIO LINK	
Deletion	DELETION REQUEST	DELETION	
		RESPONSE	
Synchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
Reconfiguration	PREPARE	READY	FAILURE
Preparation			
Unsynchronised	RADIO LINK	RADIO LINK	RADIO LINK
Radio Link	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
Reconfiguration	REQUEST	RESPONSE	FAILURE
Physical Channel	PHYSICAL CHANNEL	PHYSICAL CHANNEL	PHYSICAL CHANNEL
Reconfiguration	RECONFIGURATION	RECONFIGURATION	RECONFIGURATION
rtocomigaration	REQUEST	COMMAND	FAILURE
Dedicated	DEDICATED	DEDICATED	DEDICATED
Measurement	MEASUREMENT	MEASUREMENT	MEASUREMENT
Initiation	INITIATION REQUEST	INITIATION	INITIATION FAILURE
milation	I WITH THOM REGISTER	RESPONSE	INTERIOR PARENT
Common	COMMON	COMMON	COMMON TRANSPORT
Transport	TRANSPORT	TRANSPORT	CHANNEL RESOURCES
Channel	CHANNEL	CHANNEL	FAILURE
Resources	RESOURCES	RESOURCES	TAILORE
Initialisation	REQUEST	RESPONSE	
Common	COMMON	COMMON	COMMON
Measurement	MEASUREMENT	MEASUREMENT	MEASUREMENT
Initiation	INITIATION REQUEST	INITIATION	INITIATION FAILURE
i i i i i i i i i i i i i i i i i i i		RESPONSE	I WITH THE WITH THE
Information	INFORMATION	INFORMATION	INFORMATION
Exchange	EXCHANGE	EXCHANGE	EXCHANGE INITIATION
Initiation	INITIATION REQUEST	INITIATION	FAILURE
i i i i i i i i i i i i i i i i i i i		RESPONSE	17.11261K2
Reset	RESET REQUEST	RESET RESPONSE	
UE Measurement	UE MEASUREMENT	UE MEASUREMENT	UE MEASUREMENT
Initiation[TDD]	INITIATION REQUEST	INITIATION	INITIATION FAILURE
i intation (100)	"""   ""   ""   ""   ""   ""   ""	RESPONSE	I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Enhanced	ENHANCED	ENHANCED	ENHANCED RELOCATION
Relocation	RELOCATION	RELOCATION	FAILURE
Relocation	REQUEST	RESPONSE	TAILORE
Enhanced	ENHANCED	ENHANCED	ENHANCED RELOCATION
Relocation	RELOCATION	RELOCATION	RESOURCE FAILURE
Resource	RESOURCE	RESOURCE	NEOGOROE   AILONE
Allocation[1.28Mc	REQUEST	RESPONSE	
ps TDD]	NEGOLOT	INLOI OINOL	
Enhanced	ENHANCED	ENHANCED	
	RELOCATION	RELOCATION	
PAIOCATION	NELOCATION	INLLUGATION	
Relocation	PESOLIBCE	DESCHIDCE	
Relocation Resource Release[1.28Mcp	RESOURCE RELEASE COMMAND	RESOURCE RELEASE COMPLETE	

**Table 3: Class 2 Elementary Procedures** 

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

## 8.2 Basic Mobility Procedures

## 8.2.1 Uplink Signalling Transfer

#### 8.2.1.1 General

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

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

## 8.2.1.2 Successful Operation

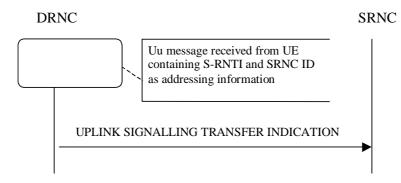


Figure 1: Uplink Signalling Transfer procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 8.2.1.3 Abnormal Conditions

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## 8.2.1A GERAN Uplink Signalling Transfer

#### 8.2.1A.1 General

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

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

## 8.2.1A.2 Successful Operation

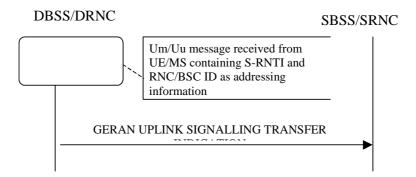


Figure 1A: GERAN Uplink Signalling Transfer procedure, Successful Operation

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

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

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

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

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

#### 8.2.1A.3 Abnormal Conditions

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## 8.2.2 Downlink Signalling Transfer

#### 8.2.2.1 General

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

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

## 8.2.2.1.1 Downlink Signalling Transfer for lur-g

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

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

## 8.2.2.2 Successful Operation



Figure 2: Downlink Signalling Transfer procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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

### 8.2.2.2.1 Successful Operation for lur-g

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

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

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

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

#### 8.2.2.3 Abnormal Conditions

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

#### 8.2.2.3.1 Abnormal Conditions for lur-g

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

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

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

## 8.2.3 Relocation Commit

#### 8.2.3.1 General

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

This procedure shall use the signalling bearer mode specified below.

## 8.2.3.2 Successful Operation



Figure 3: Relocation Commit procedure, Successful Operation

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

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

## 8.2.3.2.1 Successful Operation for lur-g

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

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

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

## 8.2.3.3 Abnormal Conditions

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## 8.2.4 Paging

#### 8.2.4.1 General

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

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

## 8.2.4.2 Successful Operation



Figure 4: Paging procedure, Successful Operation

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

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

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

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

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

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

#### 8.2.4.2.1 Successful Operation for lur-g

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

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

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

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

#### 8.2.4.3 Abnormal Conditions

## 8.2.4.3.1 Abnormal Conditions for lur-g

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

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

## 8.2.5 MBSFN MCCH Information

#### 8.2.5.1 General

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

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

## 8.2.5.2 Successful Operation

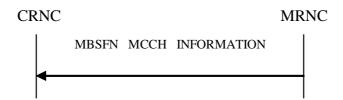


Figure 4A: MBSFN MCCH Information procedure, Successful Operation

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

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

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

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

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

#### 8.2.5.3 Abnormal Conditions

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## 8.2.6 Enhanced Relocation Resource Allocation[1.28Mcps TDD]

#### 8.2.6.1 General

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

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

## 8.2.6.2 Successful Operation

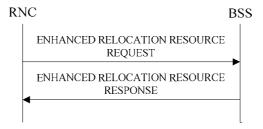


Figure 4B: Enhanced Relocation Resource Allocation Procedure, Successful Operation

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

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

## 8.2.6.3 Unsuccessful Operation



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

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

## 8.2.6.4 Abnormal Conditions

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## 8.2.7 Enhanced Relocation Resource Release[1.28Mcps TDD]

#### 8.2.7.1 General

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

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

#### 8.2.7.2 Successful Operation



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

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

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

## 8.2.7.3 Abnormal Conditions

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## 8.3 Dedicated Procedures

## 8.3.1 Radio Link Setup

#### 8.3.1.1 General

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

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

## 8.3.1.2 Successful Operation

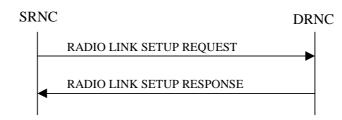


Figure 5: Radio Link Setup procedure: Successful Operation

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

Upon receipt of the RADIO LINK SETUP REQUEST message, the DRNS shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

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

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

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

#### **Transport Channels Handling:**

### DCH(s):

[TDD – If the *DCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new DCHs according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then the DRNS shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[TDD – If the *DSCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall establish the requested DSCHs. If the *Transport Layer Address* IE and *Binding ID* IE are included in the *DSCH Information* IE the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DSCH. In addition, the DRNC shall send a valid set of *DSCH Scheduling Priority* IE and *MAC-c/sh SDU Length* IE parameters to the SRNC in the RADIO LINK SETUP RESPONSE message. If the *PDSCH RL ID* IE indicates a radio link in the DRNS, then the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI* IE in the RADIO LINK SETUP RESPONSE message.]

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

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

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

#### [TDD – USCH(s):]

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

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

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

[TDD – If the *USCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS shall establish the requested USCHs, and the DRNC shall provide the [3.84 Mcps TDD – *USCH Information Response* IE] [1.28 Mcps TDD – USCH Information Response LCR IE] [7.68 Mcps TDD – *USCH Information Response 7.68 Mcps* IE] in the RADIO LINK SETUP RESPONSE message.]

## [TDD - CCTrCH Handling:]

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

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

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

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

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

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

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE or *MIMO with four transmit antennas Activation Indicator* IE or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD– The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK SETUP RESPONSE message.
- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK SETUP REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to the value "Flexible MAC-d PDU Size", then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer I in RADIO LINK SETUP REQUEST in the *HS-DSCH MAC-d*

Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.

- [FDD If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD HS-PDSCH Timeslot Specific Information Response IE] [1.28 Mcps TDD HS-PDSCH Timeslot Specific Information Response LCR IE] [7.68 Mcps TDD HS-PDSCH Timeslot Specific Information Response IE] in the HS-DSCH Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the RADIO LINK SETUP RESPONSE message.]
- If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK SETUP REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the MIMO Activation Indicator IE, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Information IE, then]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD If the Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response

- IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration are set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [1.28 Mcps TDD If the *MIMO Activation Indicator* IE is included in the *HS-DSCH TDD Information* IE, then]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS shall decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the HS-DSCH MAC-d PDU Size
  Format IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the DRNS
  shall include the HS-DSCH TB Size Table Indicator IE in the RADIO LINK SETUP RESPONSE
  message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport
  Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE;]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP RESPONSE message. This *SixtyfourQAM DL Support Indicator* IE is related to the HS-DSCH Radio Link.]
- [1.28 Mcps TDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP RESPONSE message.]
- If the RADIO LINK SETUP REQUEST message includes the *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK SETUP REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows*

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

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

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

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

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

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

- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and more than one secondary serving HS-DSCH Radio Link is setup, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If Sixtyfour QAM will not be used for the secondary serving HS-DCSH, the DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK SETUP RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for the secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

#### [FDD - Multiflow Setup]:

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

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

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DCH Minimum Set E-TFCI Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS shall use the value for the related resource allocation operation.]

[FDD – If the *E-TFCS Information IE in the E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10].]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10].]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *E-DPCH Information* IE, which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the DRNS shall use the value to determine

the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16].

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

- [FDD The DRNS shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the Transport Layer Address IE and Binding ID IE in the RL specific E-DCH Information IE for an E-DCH MAC-d flow, then if the Transport Bearer Not Requested Indicator IE is not included for this E-DCH MAC-d flow, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. The DRNC shall include in the RADIO LINK SETUP RESPONSE message the Binding ID IE and Transport Layer Address IE for establishment of a transport bearer for every E-DCH MAC-d flow being established for which the Transport Bearer Not Requested Indicator IE was not included.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer shall not be Established" for an E-DCH MAC-d flow, then the DRNC shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the DRNC establishes a transport bearer for the concerned E-DCH MAC-d flow, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the DRNC does not establish a transport bearer for the concerned E-DCH MAC-d flow, the DRNC shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK SETUP RESPONSE message.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK SETUP REQUEST message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]

- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK SETUP REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD The DRNC may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence IE* and the DRNC may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message, for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
  - [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK SETUP REQUEST message contains the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this DRNS:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both and include these E-RNTI identifiers and the Channelisation Code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *RL Information Response* IE for the indicated RL in the RADIO LINK SETUP RESPONSE message.]
  - [FDD The DRNS may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK SETUP RESPONSE message for the initial grant for the serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
  - [FDD If a serving cell change is performed the RADIO LINK SETUP RESPONSE message may contain invalid data (see 9.2.2.4C).]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]
- [FDD The DRNS may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK SETUP RESPONSE message for the serving E-DCH RL.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *Bundling Mode Indicator* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related

MAC-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]

- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK SETUP REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the RADIO LINK SETUP REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

#### [FDD – Additional E-DCH Setup:]

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

- [FDD The DRNS shall setup the E-DCH on the secondary uplink frequency and setup the requested E-DCH resources on the Radio Links and in the cells indicated by the E-DCH Additional RL ID IE and the C-ID IE in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]

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

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

- [FDD – If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

## [FDD – E-DCH –HS-DSCH:]

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

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

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

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

#### **Physical Channels Handling:**

#### [FDD – Compressed Mode:]

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

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

- [FDD – If any received *TGCFN* IE has the same value as the received *CM Configuration Change CFN* IE, the DRNS shall consider the concerned Transmission Gap Pattern Sequence as activated at that CFN.]

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

[FDD – If the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence is set to "SF/2" in the RADIO LINK SETUP REQUEST message and the UE Context is configured to use DPCH in the downlink, the DRNS shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK SETUP RESPONSE message indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE and the *Active Pattern Sequence Information* IE and the concerned UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the information provided by the *Downlink Compressed Mode Method* IE if included for the concerned Transmission Gap Pattern Sequence(s).]

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

#### [FDD – DL Code Information:]

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to TS 25.211 [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]

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

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

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

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

#### [FDD - UL CLTD Handling]:

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

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

#### [FDD – UL MIMO Setup]:

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

#### General:

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

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

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

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

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

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

[FDD – If the RADIO LINK SETUP REQUEST message includes the F-DPCH Information IE, then:]

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

### [FDD – E-DPCH Handling:]

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

## [FDD – Continuous Packet Connectivity Handling:]

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

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

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

- [FDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectivity HS-SCCH less operation according to TS 25.214 [10].]
- [FDD The DRNS shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the *Continuous Packet Connectivity HS-SCCH less Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

- [FDD – If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the DRNC shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK SETUP RESPONSE message.]

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

[1.28 Mcps TDD – If the RADIO LINK SETUP REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]

[1.28 Mcps TDD – If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent Resource Reservation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall include *Allcoated HS-PDSCH Semi-persistent resource* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall include *Allcoated E-DCH Semi-persistent resource* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]

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

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

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

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

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

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

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

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

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

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

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

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

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

one of the DCHs in the set of co-ordinated DCHs [FDD – where the *Transport Bearer Not Requested Indicator* IE was not included].

#### [FDD – Transmit Diversity:]

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

[FDD – When the *Diversity Mode* IE is set to "STTD", or "Closed loop mode1", the DRNC shall activate/deactivate the Transmit Diversity for each Radio Link in accordance with the *Transmit Diversity Indicator* IE.]

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

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

[FDD – If both the *Initial DL TX Power* IE and *Uplink SIR Target* IE are included in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value. If the value of the *Initial DL TX Power* IE is outside the configured DL TX power range, the DRNS shall apply these constraints when setting the initial DL TX power. The DRNS shall also include the configured DL TX power range defined by  $Maximum\ DL\ TX\ Power$  IE and  $Minimum\ DL\ TX\ Power$  IE in the RADIO LINK SETUP RESPONSE message. The DRNS shall not transmit with a power higher than indicated by the  $Maximum\ DL\ TX\ Power$  IE or lower than indicated by the  $Minimum\ DL\ TX\ Power$  IE on any DL DPCH or on the F-DPCH of the RL except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

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

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

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

[TDD – If [3.84Mcps TDD and 7.68 Mcps TDD – the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD – the *DL Time Slot ISCP Info LCR* IE] is present, the DRNSshould use the indicated value when deciding the Initial DL TX Power for the Radio Link. The DRNS shall use the indicated DL Timeslot ISCP when determining the initial DL power per timeslot as specified in TS 25.224 [22], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.]

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS should assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS should assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS should use the indicated value when deciding the Initial DL TX Power for the Radio Link.]

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

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

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

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

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

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

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

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

[FDD – If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the DRNC shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the lifetime of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see TS 25.214 [10]).]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the DRNS shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.15, using the *DL Power Balancing Information* IE. If the DRNS starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing i.e. *P<sub>init</sub>* shall be set to the power level indicated by the *Initial DL TX Power* IE (if received) or the decided DL TX power level on each DL channelisation code of a RL based on the *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE.]

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

#### **Neighbouring Cell Handling:**

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

- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the

Frame Offset IE, Primary CPICH Power IE, Cell Individual Offset IE, STTD Support Indicator IE, Closed Loop Model Support Indicator IE, Coverage Indicator IE, Antenna Co-location Indicator IE and HCS Prio IE in the Neighbouring FDD Cell Information IE, and the Frame Offset IE, Cell Individual Offset IE, DPCH Constant Value IE, the PCCPCH Power IE, Coverage Indicator IE, Antenna Co-location Indicator IE and HCS Prio IE in the Neighbouring TDD Cell Information IE or the Neighbouring TDD Cell Information IE includes the Sync Case IE for the set to "Case1", the DRNC shall include the Time Slot For SCH IE in the Neighbouring TDD Cell Information IE. If the Neighbouring TDD Cell Information IE includes Sync Case IE set to "Case2", the DRNC shall include the SCH Time Slot IE in the Neighbouring TDD Cell Information IE.

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

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

the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset* IE in the *Neighbouring GSM Cell Information* IE. If available the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring GSM Cell Information* IE. If available, the DRNC shall also include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring GSM Cell Information* IE.

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

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

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

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

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

#### [1.28Mcps TDD – Shared physical channels Synchronisation Detection:]

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

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

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

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

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

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

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

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

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

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

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

#### **MBMS Handling:**

If the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall, if supported, perform the UE Linking as specified in TS 25.346 [50], section 5.1.6. If the UE Link is currently stored in the UE Context or the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message and if an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in some of the cells identified by the *C-ID* IEs in the RADIO LINK SETUP REQUEST message, the DRNC shall include for each of these active MBMS bearer services in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE in the concerned *RL Information Response* IEs in the RADIO LINK SETUP RESPONSE message.

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

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

[FDD – If the RADIO LINK SETUP REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE for a Radio Link not indicated by the *HS-PDSCH RL ID* IE the DRNS shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:

- [FDD The DRNS shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message. The list of secondary serving HS-DSCH cells is designated by the list of *Secondary C-ID* IEs in the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK SETUP REQUEST message.]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]
  - [FDD by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell.]
  - [FDD by the *Num Secondary HS-SCCH Codes* IE in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells.]
- [FDD –If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in TS 25.214 [10].
- [FDD The DRNS shall return these codes in the Sets of HS-SCCH Codes IE along with the corresponding per-cell HS-DSCH-RNTI IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK SETUP RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE message.]
- [FDD The DRNS shall use the first in the numbered list of the primary serving HS-DSCH cell's HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK SETUP FAILURE message, IEs according to the rules defined for HS-DSCH setup and: ]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE.]
  - [FDD if *Ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE.]

- [FDD if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE.]
- [FDD if *MIMO* with four transmit antennas Activation Indicator IE is included in the *HS-DSCH* Preconfiguration Setup IE or in the Secondary Cells IE in the *HS-DSCH* Preconfiguration Setup IE the Pilot Configuration and MIMO N/M Ratio in *MIMO* Information Response IE]
- [FDD if *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE]
- [FDD if *Multiflow ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE.]
- [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the preconfiguration, the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
- [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell.]
- [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE.]
- [FDD if the UE with enhanced HS-SCCH support indicator IE is included in the HS-DSCH Preconfiguration Setup IE, then the DRNS shall store this information in the preconfigured configuration.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH Preconfiguration Info* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD the SixtyfourQAM DL Support Indicator IE shall be included.]
- [FDD if the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
- [FDD the DRNS shall, if supported, include in the Sets of HS-SCCH Codes IE the Measurement Power Offset IE for each preconfigured cell.]
- [FDD The DRNS shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK SETUP FAILURE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows: ]
  - [FDD The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
  - [FDD The DRNS may preconfigure the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]
- [FDD –If the HS-DSCH Preconfiguration Setup IE includes the E-DCH Indicator IE for a secondary cell, the DRNS shall include in the Additional E-DCH Preconfiguration Information IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE in the RADIO LINK SETUP RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK SETUP FAILURE message the E-DCH FDD DL Control Channel Information containing the preconfigured configuration

of the Additional E-DCH serving cell, corresponding to the cell indicated with the *E-DCH Indicator* IE, according to the rules defined for Serving Additional E-DCH Radio Link Change as follows:]

- [FDD The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving Additional E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE. ]
- [FDD The DRNS may preconfigure the Serving Grant Value IE and Primary/Secondary Grant Selector IE for the initial grant for the serving Additional E-DCH RL and include these values in the E-DCH FDD DL Control Channel Information IE.]
- [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where HS-DSCH / secondary HS-DSCH is preconfigured, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH Preconfiguration Info* IE or in the *Sets of HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Info* IE for each preconfigured cell in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *Multiflow Information* IE, then the DRNC shall allocate resources for the preconfigured Multiflow.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *F-TPICH Information* IE, then the DRNC shall allocate resources for the preconfigured F-TPICH channel and include *F-TPICH Information Response* IE in the *HS-DSCH Preconfiguration Info* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL CLTD Information* IE, then the DRNC shall allocate resources for the preconfigured UL CLTD.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL MIMO Information* IE, then the DRNC shall allocate resources for the preconfigured UL MIMO.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixteenQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixteen QAM.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixtyfourQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixtyfour QAM.]

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

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

- [FDD –If the *F-TPICH Information* IE is included, the DRNC shall use this information to allocate resources for the preconfigured F-TPICH channel for this RL in the serving RLS according to TS 25.211 [8], and include *F-TPICH Information Response* IE in the *Non-Serving RL Preconfiguration Info* IE.]

#### General:

If the RADIO LINK SETUP REQUEST message includes the *RL Specific DCH Information* IE, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs [FDD – for every DCH being established for which the *Transport Bearer Not Requested Indicator* IE was not included].

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### [FDD – Radio Link Set Handling:]

[FDD – The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The DRNS shall use the *First RLS Indicator* IE to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in TS 25.214 [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context. In case of E-DCH, the generation of E-HICH related information for RLs in different RL Set(s) shall not be common.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies these RLs as members of the same RL Set within the UE Context. In case of E-DCH, the generation of E-HICH information for all RLs in a RL Set shall be common.]

[FDD –The UL oout-of-sync algorithm defined in TS 25.214 [10] shall, for each of the established RL Set(s), use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in TS 25.214 [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

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

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

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

- [TDD The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *E-DCH Serving RL* IE.]
- [TDD If the *TNL QoS* IE is included in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flows Information TDD* IE, the DRNS shall use this information for the related resource allocation operation.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Non-scheduled" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants are configured for that E-DCH MAC-d flow.]
- [TDD If in the RADIO LINK SETUP REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Scheduled" the DRNS shall assume that it may issue scheduled grants for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions for the related queue.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *MAC-es Maximum Bit Rate LCR* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [3.84Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate* IE in the *E-DCH TDD Information* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

- [7.68Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE in the *E-DCH TDD Information 7.68Mcps* IE for an E-DCH, the Node B shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information 7.68Mcps* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information LCR* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [TDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.]
- [TDD If the RADIO LINK SETUP REQUEST message includes the [3.84Mcps TDD *E-DCH TDD Information* IE][1.28Mcps TDD *E-DCH TDD Information LCR* IE] in the *E-DCH MAC-d Flows Information TDD* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE in the *E-DCH TDD Information LCR* IE, then the DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [3.84Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [3.84Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the *E-DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier, the E-AGCH(s) and E-HICH(s) assigned in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK SETUP RESPONSE message.]
- [7.68Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps TDD IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK SETUP RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK SETUP REQUEST message includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the *UE TSO Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE is not present and if the RADIO LINK SETUP REQUEST message includes the *UE TSO Capability LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

## Response Message:

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

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

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

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

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

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

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface.
- if the Delayed Activation IE indicates "CFN":
  - [FDD start transmission on the DL DPDCH(s) of the new RL as specified in TS 25.427 [4], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in TS 25.427 [4].]

## 8.3.1.3 Unsuccessful Operation

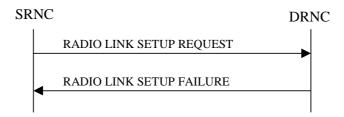


Figure 6: Radio Link Setup procedure: Unsuccessful Operation

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

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

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

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

[FDD – If the RL identified by the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE is a radio link in the DRNS and this RL is successfully established, then the DRNC shall allocate a HS-DSCH-RNTI to the UE

Context and include the *HS-DSCH-RNTI* IE, the *HS-DSCH FDD Secondary Serving Information Response* IE and the *SixtyfourQAM DL Support Indicator* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK SETUP FAILURE message. If the establishment of the RL identified by the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE, i.e secondary serving HS-DSCH Radio Link is unsuccessful but the establishment of the RL identified by the *HS-PDSCH RL ID* IE for the serving HS-DSCH Radio Link is successful, then the DRNC shall indicate the unsuccessful secondary serving HS-DSCH Radio Link in the *Unsuccessful RL Information Response* IE in the RADIO LINK SETUP FAILURE message by setting the *RL ID* IE to the same value as the unsuccessful *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Setup* IE.]

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

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

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

[FDD – If the RL identified by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE is a radio link in the DRNS and this RL is successfully established, then the DRNS shall include the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. If the establishment of the RL identified by the *E-DCH Additional RL ID* IE is unsuccessful, then the DRNS shall indicate the unsuccessful setup of the Additional E-DCH Radio Link in the *Unsuccessful RL Information Response* IE in the RADIO LINK SETUP FAILURE message by setting the *RL ID* IE to the same value as the unsuccessful *E-DCH Additional RL ID* IE in the *Additional E-DCH Cell Information Setup* IE.]

Typical cause values are:

## **Radio Network Layer Causes:**

[FDD – UL Scrambling Code Already in Use;]

DL Radio Resources not Available;

UL Radio Resources not Available;

[FDD - Combining Resources not available;]

Combining not Supported

Requested Configuration not Supported;

Cell not Available;

[FDD – Requested Tx Diversity Mode not Supported;]

Power Level not Supported;

Number of DL codes not supported;

Number of UL codes not supported;

Dedicated Transport Channel Type not Supported;

DL Shared Channel Type not Supported;

[TDD – UL Shared Channel Type not Supported;]

[FDD – UL Spreading Factor not Supported;]

[FDD – DL Spreading Factor not Supported;]

CM not Supported;

[FDD – DPC mode change not Supported;]

Cell reserved for operator use;

Delayed Activation not supported;

E-DCH not supported;

 $[FDD-F\text{-}DPCH\ not\ supported;]$ 

[FDD – Continuous Packet Connectivity DTX-DRX operation not Supported;]

- [FDD Continuous Packet Connectivity HS-SCCH less operation not Supported;]
- [FDD MIMO not supported;]
- [FDD E-DCH TTI2ms not supported;]
- [FDD Continuous Packet Connectivity DTX-DRX operation not available;]
- [FDD Continuous Packet Connectivity UE DTX Cycle not available;]
- [FDD MIMO not available;]
- [FDD SixteenQAM UL not Supported;]
- HS-DSCH MAC-d PDU Size Format not supported;
- [FDD F-DPCH Slot Format operation not supported;]
- E-DCH MAC-d PDU Size Format not available;
- [FDD E-DPCCH Power Boosting not supported;]
- [FDD SixtyfourQAM DL and MIMO Combined not available;]
- [FDD Multi Cell operation not available;]
- [FDD Multi Cell operation not supported;]
- [FDD Multi Cell operation with MIMO not available;]
- [FDD Multi Cell operation with MIMO not supported;]
- [FDD Single Stream MIMO not supported;]
- [FDD Single Stream MIMO not available;]
- [FDD TX diversity for MIMO UE on DL Control Channels not available;]
- [FDD Multi Cell E-DCH Operation not supported;]
- [FDD Multi Cell E-DCH Operation not available;]
- [FDD Multi Cell operation with Single Stream MIMO not available;]
- [FDD Multi Cell operation with Single Stream MIMO not supported;]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;]
- [FDD Frequency Specific Compressed Mode Not Available;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Available;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Supported;]
- [FDD MIMO with four transmit antennas not supported;]
- [FDD MIMO with four transmit antennas not available;]
- [FDD Dual Stream MIMO with four transmit antennas not supported;]
- [FDD Dual Stream MIMO with four transmit antennas not available;]
- [FDD Multiflow Operation Not Available;]
- [FDD Multiflow Operation Not Supported;]
- [FDD SixtyfourQAM UL not Available;]
- [FDD SixtyfourQAM UL not Supported;]
- [FDD UL MIMO Operation Not Available;] [FDD – UL MIMO Operation Not Supported;]
- [FDD UL MIMO and SixteenOAM Operation Not Available;]
- [FDD UL MIMO and SixteenQAM Operation Not Supported;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Available;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Supported.]

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

Transport Resource Unavailable.

#### Miscellaneous Causes:

Control Processing Overload;

HW Failure;

Not enough User Plane Processing Resources.

#### 8.3.1.4 **Abnormal Conditions**

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

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

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

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

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

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

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

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

If ALCAP is not used, if the RADIO LINK SETUP REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE nor *RL Specific E-DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the DRNC shall reject the Radio Link Setup procedure and respond with the RADIO LINK SETUP FAILURE message.

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

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

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

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

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

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

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

If the RADIO LINK SETUP REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, and the *HS-DSCH MAC-d PDU* 

*Size Format* IE in the *HS-DSCH Information* IE has the value "Indexed MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

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

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

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

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

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

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

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

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

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Serving Cell Change CFN* IE, but neither the *Serving E-DCH RL* IE nor *HS-DSCH Information* IE is included, then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH, but does not contain the *Unidirectional DCH indicator* IE set to "Uplink DCH only" in the *DCH Specific Info* IE for the DCH, the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Synchronisation Indicator* IE for a RL, but does not contain the *D-RNTI* IE which already has the RL, the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "4" but does not contain the *F-DPCH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains the *UL DPCCH Slot Format* set to "0" or "2" and the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the *UL DPCH Information* IE in the RADIO LINK SETUP REQUEST message contains *Diversity Mode* IE set to "Closed loop mode 1" and *UL DPCCH Slot Format* not set to "2" or "3", then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the MIMO Activation Indicator IE, Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed", the Additional HS Cell Information RL Setup IE, the MIMO with four transmit antennas Activation Indicator IE, the Dual Stream MIMO with four transmit antennas Activation Indicator IE and/or the Single Stream MIMO Activation Indicator IE, but does not contain the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size", then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE in the RL Specific E-DCH Information for the new Serving E-DCH RL, the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Additional HS Cell Information RL Setup* IE indicating a secondary serving cell that is not in the same Node B as the new serving HS-DSCH cell, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message]

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

If the RADIO LINK SETUP REQUEST message includes the *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE set to "Flexible RLC PDU Size", and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE has the value "Indexed MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

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

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

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

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Additional E-DCH Cell Information RL Setup Req* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Additional E-DCH Cell Information RL Setup Req* IE and the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Setup* IE the *Diversity Mode* IE not set to "None" but not the *Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

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

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

[FDD - If the RADIO LINK SETUP REQUEST message contains the *UL CLTD Information* IE but does not contain the *F-TPICH Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL CLTD Information* IE but without *F-TPICH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message contains the *UL MIMO Information* IE in E-DCH FDD Information IE but does not contain the *UL CLTD Information* IE, or if it contains HS-DSCH Preconfiguration Setup IE with *UL MIMO Information* IE but without *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

## 8.3.2 Radio Link Addition

## 8.3.2.1 General

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

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

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

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

## 8.3.2.2 Successful Operation

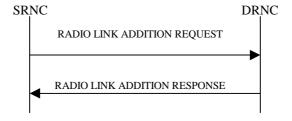


Figure 7: Radio Link Addition procedure: Successful Operation

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

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

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

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

### **Transport Channel Handling:**

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

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

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

## [TDD - DSCH:]

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

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

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

#### [TDD - USCH:]

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

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

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

## **Physical Channels Handling:**

## [FDD -Compressed Mode:]

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Active Pattern Sequence Information* IE and the concerned UE Context is configured to use F-DPCH in the downlink, the DRNS shall

ignore, when activating the Transmission Gap Pattern Sequence(s), the downlink compressed mode method information, if existing, for the concerned Transmission Gap Pattern Sequence(s) in the Compressed Mode Configuration.]

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

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

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

#### [FDD – DL Code Information:]

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to TS 25.211 [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]

#### [TDD - CCTrCH Handling:]

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

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

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

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

#### [FDD - UL CLTD Handling]:

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

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

### [FDD – UL MIMO Setup]:

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

#### General:

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

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

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

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

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

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

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the DRNC shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that no combining is done. In this case the DRNC shall:

- include in the *DCH Information Response* IE both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message [FDD for which the *Transport Bearer Not Requested Indicator* IE was not included].
- [FDD include in the RADIO LINK ADDITION RESPONSE the *Transport Bearer Not Setup Indicator* IE for every DCH or set of co-ordinated DCHs for which establishment of a transport bearer has not taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK ADDITION REQUEST message.]

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

[FDD – In case of not combining E-DCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE the *Transport Bearer Not Setup Indicator* IE for every E-DCH MAC-d flow for which establishment of a transport bearer has not taken place as a result of information in the *Transport Bearer Not Requested Indicator* IE in the RADIO LINK ADDITION REQUEST message.]

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the DRNC shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined. In this case, the *RL ID* IE indicates (one of) the previously established RL(s) or a RL previously listed in this RADIO LINK ADDITION RESPONSE message with which the new RL is combined and if the ALCAP is not used [FDD – and the transport bearer for this DCH is already established], the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL in the RADIO LINK ADDITION REQUEST message, shall not be used.

[FDD – In the case of combining with an E-DCH RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, one of the previously established RLs or a RL previously listed in this RADIO LINK ADDITION RESPONSE message including the *E-DCH FDD Information Response* IE and part of the same Radio Link Set shall be regarded as the RL with which the concerned E-DCH RL is combined and if the ALCAP is not used, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific E-DCH Information* IE included in the *RL Information* IE for a specific RL in the RADIO LINK ADDITION REQUEST message, shall not be used. In case E-DCH RL is established for the first time, the DRNC shall include *E-DCH FDD Information Response* IE instead of using the Diversity Indication of DCH RL in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. It shall include in the *E-DCH FDD* 

Information Response IE the Binding ID IE and Transport Layer Address IE for the transport bearers to be established for each E-DCH MAC-d flow of this E-DCH RL for which the Transport Bearer Not Requested Indicator IE was not included.]

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

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

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

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

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

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

## [FDD – Transmit Diversity:]

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

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

[FDD – When the Transmit Diversity Indicator IE and/or Transmit Diversity Indicator IE in the HS-DSCH FDD Secondary Serving Information IE in the Additional HS Cell Information RL Addition IE is present the

DRNS shall activate/deactivate the Transmit Diversity for each new Radio Link and/or secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE and/or *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE using the diversity mode of the existing Radio Link(s) and/or existing secondary serving HS-DSCH Radio Link.]

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

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

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

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use it in the calculation of the Initial DL TX Power.]

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

[FDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see TS 25.214 [10] subclause 5.2.1.2) and the power control procedure (see 8.3.7).]

[TDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see TS 25.224 [22] subclause 4.2.3.3).]

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

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

[FDD – If the *DPC Mode* IE is present in the RADIO LINK ADDITION REQUEST message, the DRNC shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the lifetime of the RL. If the *DPC Mode* IE is not present in the RADIO LINK ADDITION REQUEST message, DPC mode 0 shall be applied (see TS 25.214 [10]).]

The DRNC shall provide the configured *Maximum DL TX Power* IE and *Minimum DL TX Power* IE for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. The DRNS shall not transmit with a power higher than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH [FDD – or on the F-DPCH] of the RL [FDD – except, if the

UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IE, the DRNS shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported by the DRNS, according to subclause 8.3.15. In this case, the DRNC shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the DRNS starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e.  $P_{init}$  shall be set to the power level which is calculated based on the *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE (if received), or to the power level which is calculated based on the power relative to the Primary CPICH power used by the existing RLs.]

## **UL Power Control:**

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

## **Neighbouring Cell Handling:**

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

- The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the Neighbouring FDD Cell Information IE and/or Neighbouring TDD Cell Information IE in the Neighbouring UMTS Cell Information IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the Frame Offset IE, Primary CPICH Power IE, Cell Individual Offset IE, STTD Support Indicator IE, Closed Loop Model Support Indicator IE, Coverage Indicator IE, Antenna Co-location Indicator IE and HCS Prio IE in the Neighbouring FDD Cell Information IE, and the Frame Offset IE, Cell Individual Offset IE, DPCH Constant Value IE and the PCCPCH Power IE, Coverage Indicator IE, Antenna Co-location Indicator IE and HCS Prio IE in the Neighbouring TDD Cell Information IE or the Neighbouring TDD Cell Information IE includes the Sync Case IE set to "Case1", the DRNC shall include the Time SlotFor SCH IE in the Neighbouring TDD Cell Information IE. If the Neighbouring TDD Cell Information IE includes the Sync Case IE set to "Case2", the DRNC shall include the SCH Time Slot IE in the Neighbouring TDD Cell Information IE.
- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include in the RADIO LINK ADDITION RESPONSE message the *CN PS Domain Identifier* IE and/or *CN CS Domain Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.
- [FDD The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *DPC Mode Change Support Indicator* IE for each neighbour cell in the *Neighbouring FDD Cell Information* IE if this information is available.]
- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE, *Cell Capability Container 7.68Mcps TDD* IE, the *Cell Capability Container TDD LCR* IE and/or the *Cell Capability Container Extension FDD* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a, 9.2.3.1b and 9.2.2.123.
- [FDD The DRNC shall, if supported, include the *Cell List Validity Indicator* IE if the neighbouring cell is multi cell capable and/or dual band capable but the cell can not be the serving HS-DSCH in a multicell and/or dual band configuration. Hence the cell can only serve as the secondary serving HS-DSCH cell. When *Cell List Validity Indicator* IE is included the SRNC should ignore the indicated cell list(s).]
- [FDD For each cell in the *Secondary Serving Cell List* IE that is Multi Cell E-DCH capable, indicated in the *Cell Capability Container Extension FDD* IE by the "Multi Cell E-DCH Support Indicator" bit = "1", and is restricted for use as an Additional E-DCH on the secondary uplink frequency with the cell

identified by the *C-ID* IE as the corresponding cell of the Primary uplink frequency, the DRNS shall, if supported, include the *Multicell E-DCH Restriction* IE set to "TRUE".]

- For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK ADDITION RESPONSE message the restriction state of those cells, otherwise *Restriction State Indicator* IE may be absent. The DRNC shall include the *Restriction State Indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If MOCN or GWCN network sharing configuration is used then the DRNC shall include the broadcasted PLMN identities of concerned neighbouring cells in the *Multiple PLMN List* IE in the *Neighbouring FDD* Cell Information IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell* Information LCR IE.
- If available, the DRNC shall include the *Frequency Band Indicator* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE.
- If the number of neighbouring UMTS RNCs is beyond the predefined maximum number, the DRNC shall, if supported, include the remaining neighbouring information in the *Neighbouring UMTS Cell Information Extension* IE. The IE filling rules in the Neighbouring UMTS Cell Information shall also apply to the *Neighbouring UMTS Cell Information Extension* IE.

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

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

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

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

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

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

## [1.28Mcps TDD – Shared physical channels Synchronisation Detection:]

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

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

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

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

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

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

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

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

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

## **MBMS Handling:**

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

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE for a Radio Link not indicated by the *HS-PDSCH RL ID* IE in the *HS-DSCH Serving Cell Change Information* IE the DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:]

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

- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in TS 25.214 [10].]
- [FDD The DRNS shall return these codes in the Sets of HS-SCCH Codes IE along with the corresponding per- cell HS-DSCH-RNTI IE in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE of the RADIO LINK ADDITION RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK ADDITION FAILURE message.]
- [FDD The DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16]].
- [FDD The DRNS shall include, in the HS-DSCH Preconfiguration Info IE in the RL Information Response IE in the RADIO LINK ADDITION RESPONSE message or in the Successful RL Information Response IE of the RADIO LINK ADDITION FAILURE message, IEs according to the rules defined for HS-DSCH Setup at Serving HS-DSCH Radio Link Change and:]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *HARQ Preamble Mode Activation Indicator* IE.]
  - [FDD if *MIMO Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE.]
  - [FDD if *Ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE]
  - [FDD if *MIMO* with four transmit antennas Activation Indicator IE is included in the *HS-DSCH* Preconfiguration Setup IE or in the Secondary Cells IE in the *HS-DSCH* Preconfiguration Setup IE the Pilot Configuration and MIMO N/M Ratio in *MIMO* Information Response IE]
  - [FDD if *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE the Pilot Configuration and MIMO N/M Ratio in *MIMO Information Response* IE]
  - [FDD if Multiflow ordinal number of frequency IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfiguration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
  - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell.]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE.]
  - [FDD if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS shall store this information in the preconfigured configuration.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH Preconfiguration Info* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD the SixtyfourQAM DL Support Indicator IE may be included.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]

- [FDD the DRNS shall, if supported, include in the *Sets of HS-SCCH Codes* IE the *Measurement Power Offset* IE for each preconfigured cell.]
- [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where HS-DSCH / secondary HS-DSCH is preconfigured, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH Preconfiguration Info* IE or in the *Sets of HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Info* IE for each preconfigured cell in the RADIO LINK ADDITION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *Multiflow Information* IE, then the DRNC shall allocate resources for the preconfigured Multiflow.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *F-TPICH Information* IE, then the DRNC shall allocate resources for the preconfigured F-TPICH channel and include *F-TPICH Information Response* IE in the *HS-DSCH Preconfiguration Info* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL CLTD Information* IE, then the DRNC shall allocate resources for the preconfigured UL CLTD.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL MIMO Information* IE, then the DRNC shall allocate resources for the preconfigured UL MIMO.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixteenQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixteen QAM.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixtyfourQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixtyfour QAM.]

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

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

[FDD – If the *HS-DSCH Preconfiguration Setup* IE includes the *E-DCH Indicator* IE for a secondary cell, the DRNS shall include in the *Additional E-DCH Preconfiguration Information* IE in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK ADDITION FAILURE message the *E-DCH FDD DL Control Channel Information* IE containing the preconfigured configuration of the Additional E-DCH serving cell, corresponding to the cell indicated with the *E-DCH Indicator* IE, according to the rules defined for Serving Additional E-DCH Radio Link Change as follows:]

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

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

- [FDD if the choice of *new Serving RL* is "New Serving RL in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK ADDITION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK ADDITION RESPONSE message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the DRNS or New Serving RL Not in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving E-DCH FDD DL Control Channel Information C* for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC may include the New non-serving RL E-DCH FDD DL Control Channel Information A IE, the New non-serving RL E-DCH FDD DL Control Channel Information B IE and/or the New non-serving RL E-DCH FDD DL Control Channel Information C IE according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH RL in the Non-Serving RL Preconfiguration Info IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD –If the *F-TPICH Information* IE is included, the DRNC shall use this information to allocate resources for the preconfigured F-TPICH channel for this RL in the serving RLS according to TS 25.211 [8], and include *F-TPICH Information Response* IE in the *Non-Serving RL Preconfiguration Info* IE.]

#### General:

If the RADIO LINK ADDITION REQUEST message includes the *RL Specific DCH Information* IE, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included].

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

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

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

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

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

[3.84Mcps TDD – The DRNC shall include the Secondary CCPCH Info TDD IE in the RADIO LINK ADDITION RESPONSE message if at least one DSCH Information Response IE or USCH Information

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

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

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

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

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

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

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Synchronisation Indicator* IE, set to "Timing Maintained Synchronisation", the DRNS shall use synchronisation procedure B according to subclause 4.3.2.4 in TS 25.214 [10]. The DRNS shall select the TPC pattern as if "first RLS indicator" is set to "first RLS" according to subclause 5.1.2.2.1.2 in TS 25.214 [10].]

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

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

## [FDD - Radio Link Set Handling:]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context. In case of E-DCH, the generation of E-HICH information for RLs in different RL Sets shall not be common.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies these RLs as members of the same RL Set within the UE Context. In case of E-DCH, the generation of E-HICH related information for all RLs in a RL Set shall be common.]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in TS 25.214 [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in TS 25.214 [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE, then the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the DRNS shall allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.]
- [FDD The DRNS may include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information* Response IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.]
- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [FDD If the *HS-DSCH Serving Cell Change Information* IE includes the *Continuous Packet Connectivity HS-SCCH less Information* IE, then:]
  - [FDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectivity HS-SCCH less operation according to TS 25.214 [10].]
  - [FDD The DRNS shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the DRNC shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the HS-DSCH Serving Cell Change Information IE includes the Continuous Packet Connectivity DTX-DRX Information IE, then:]

- [FDD The DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DTX operation according to TS 25.214 [10].]
- [FDD If *DRX Information* IE is included in the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNS shall configure the concerned UE Context for Continuous Packet Connectivity DRX operation according to TS 25.214 [10].]
- [FDD If the UE Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM in the new configuration, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]

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

[FDD – If the *HS-DSCH Information* IE is present in the *HS-DSCH Serving Cell Change Information* IE, then:]

- [FDD The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE.]
- [FDD the *HS-DSCH Information* IE defines the new HS-DSCH configuration in the DRNS to be used on the new HS-DSCH Radio Link.]
- [FDD The DRNC shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE. If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the Maximum MAC-d PDU Size
   Extended IE for a Priority Queue in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH
   Information IE, then the DRNS shall ignore the SID IE and MAC-d PDU Size IE in the MAC-d PDU Size
   Index IE and use Maximum MAC-d PDU Size Extended IE to optimise capacity allocation for the related
   HSDPA Priority Queue.]
- [FDD The DRNC shall include the HS-DSCH Initial Capacity Allocation IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK ADDITION REQUEST message includes HS-DSCH MAC-d PDU Size Format IE in the HS-DSCH

Information IE set to "Flexible MAC-d PDU Size", then DRNC shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer I in RADIO LINK ADDITION REQUEST in the HS-DSCH MAC-d Flows Information IE in the HS-DSCH Information IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).]
- [FDD If the MIMO Activation Indicator IE, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Information IE, then ]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
  - [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]

- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE.]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the DRNS may use the supported HSDPA functions for this UE.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the D shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall, if supported, consider the data of the HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Information IE in the HS-DSCH Serving Cell Change Information IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [FDD The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the Serving Cell Change CFN IE is not included then the DRNS shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the requested Serving HS-DSCH Radio Link Change was successful or unsucessful, the DRNS shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Information Response* IE in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Additional HS Cell Information RL Addition* IE, then the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD In the new configuration the DRNS shall allocate the HS-PDSCH resources for the new secondary serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]

- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the UE Context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM in the new secondary serving HS-DSCH Radio Link, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for the secondary serving HS-DSCH Transport Block Size signalling.]

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

- [FDD The DRNS shall setup the requested HS-PDSCH resources on the Secondary Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [FDD The *HS-DSCH FDD Secondary Serving Information* IE defines the new secondary serving HS-DSCH configuration in the DRNS to be used on the new secondary serving HS-DSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the MIMO Activation Indicator IE, or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the Node B shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the MIMO Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]

- [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If Sixtyfour QAM will not be used for the secondary serving cell, the DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE in the RADIO LINK ADDITION REQUEST message the DRNS shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the DRNS shall activate/deactivate the Transmit Diversity for the secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE.]
- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new secondary serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the HS-PDSCH resources of the old secondary serving HS-PDSCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the Serving Cell Change CFN IE is not included then the DRNS shall activate immediately the resources that are allocated for the new secondary serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous secondary serving HS-PDSCH Radio Link.]
- [FDD If the requested secondary serving HS-DSCH Radio Link Change was successful or unsuccessful, the DRNS shall indicate this in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *HS-DSCH Secondary Serving Cell Change Information Response* IE in the *Additional HS Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

## [FDD - Multiflow Setup]:

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Additional E-DCH Cell Information Addition* IE in the *Additional E-DCH Cell Information RL Add Req* IE and the *HS-PDSCH RL ID* IE in the

Additional HS Cell Information RL Addition IE, the HS-PDSCH RL ID IE indicates the new Additional Serving E-DCH Radio Link:]

- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNS may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for any of the other E-DCH Radio Links in the DRNS Communication Context that have not been included in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE.]
- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new additional serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD- If the *Serving Cell Change CFN* IE is not included then the DRNS shall activate immediately the resources that are allocated for the new additional serving E-DCH Radio Link, and shall keep active the resources that are allocated for the previous additional serving E-DCH Radio Link.]
- [FDD If the addition of the requested Additional Serving E-DCH Radio Link was successful but the Additional Serving E-DCH Radio Link change was unsuccessful, the DRNS shall indicate this in the *Additional E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

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

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

- [FDD The DRNS shall setup the E-DCH resources as configured in the UE context.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH Information* IE for an E-DCH MAC-d flow, then if the *Transport Bearer Not Requested Indicator* IE is not included for this E-DCH MAC-d flow, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [FDD The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for every E-DCH MAC-d flow being established for which the *Transport Bearer Not Requested Indicator* IE was not included.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer Shall not be Established" for an E-DCH MAC-d flow, then the DRNC shall not establish a transport bearer for the concerned E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for an E-DCH MAC-d flow and:]
  - [FDD if the DRNC establishes a transport bearer for the concerned E-DCH MAC-d flow, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the E-DCH MAC-d flow being established.]
  - [FDD if the DRNC does not establish a transport bearer for the concerned E-DCH MAC-d flow, the DRNC shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding E-DCH MAC-d flow in the RADIO LINK ADDITION RESPONSE message.]
- [FDD The DRNC may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the DRNC may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK ADDITION RESPONSE message, for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK ADDITION RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

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

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

- [FDD If the new Serving E-DCH RL is in this DRNS:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both and include these E-RNTI identifiers and the Channelisation Code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE for the indicated RL in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The DRNS may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD If a serving cell change is performed the RADIO LINK ADDITION RESPONSE message may contain invalid data (see 9.2.2.4C).]
  - [FDD The DRNS may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the new serving E-DCH RL.]
- [FDD The DRNS may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Release*

Indicator IE in the E-DCH FDD DL Control Channel Information IE in the E-DCH Serving Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message for any of the other E-DCH Radio Link in the DRNS Communication Context that have not been included in the E-DCH FDD DL Control Channel Information IE in RL Information Response IE.]

- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD- If the *Serving Cell Change CFN* IE is not included then the DRNS shall activate immediately the resources that are allocated for the new serving E-DCH Radio Link, and shall keep active the resources that are allocated for the previous serving E-DCH Radio Link.]
- [FDD If the addition of the requested Serving E-DCH Radio Link was successful but the Serving E-DCH Radio Link change was unsuccessful, the DRNS shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

#### [FDD - E-DPCH Handling:]

[FDD – If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE it defines the new E-DPCH configuration in the DRNS to be used on the new E-DCH Radio Link and the DRNS shall use the new parameters for the related resource allocation operations.]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10].]

[FDD – If the *E-DPCH Information* IE includes the *E-TFCS Information* IE, the DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS shall use the value for the related resource allocation operation.]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10].]

[FDD – If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE, which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16].

## [FDD - E-DCH Setup on a new Radio Link:]

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

- [FDD the *E-DCH FDD Information* IE defines the new E-DCH FDD configuration in the DRNS to be used on the new E-DCH Radio Link.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size* Extended IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD*

*Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK ADDITION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *Bundling Mode Indicator* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Reference Power Offset* IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]

- [FDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK ADDITION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

#### [FDD – Additional E-DCH Setup:]

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

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the secondary uplink frequency and setup the requested Additional E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the Additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Initial DL Tx Power* IE, the *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE, is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the Enhanced Primary CPICH Ec/No IE is included in the Multicell E-DCH RL Specific Information IE in the Additional E-DCH Secondary RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell

*Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message. If the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE includes the *F-DPCH Slot Format* IE, the DRNS may use the *F-DPCH Slot Format* IE to determine the F-DPCH slot format.]

- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK ADDITION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* RL Add IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* RL Add IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE the DRNS may include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE and shall include the E-RGCH/E-HICH Channelisation Code IE and the corresponding E-HICH Signature Sequence IE and the DRNS may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RL Add IE in the RADIO LINK ADDITION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* RL Add IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message the the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the Additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant E-DCH FDD Information Response* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

- [FDD If the Serving Cell Change CFN IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new additional serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC. If the Serving Cell Change CFN IE is not included then the DRNS shall activate immediately the resources that are allocated for the new additional serving E-DCH Radio Link]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE RADIO LINK ADDITION RESPONSE message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

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

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

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

- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set the same value for the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* RL Add IE in the RADIO LINK ADDITION RESPONSE message.]
  - [FDD For every additional E-DCH RL indicated in the *Additional E-DCH RL Specific Information To Add* IE the DRNS may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the DRNS may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RL Add* IE in the RADIO LINK ADDITION RESPONSE message and if DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE, then it shall insert the *E-RGCH and E-HICH Channelisation Code* IE contains invalid data.]
- [FDD If in the Additional E-DCH RL Specific Information To Add IE the Primary CPICH Ec/No IE or the Primary CPICH Ec/No IE and the Enhanced Primary CPICH Ec/No IE in the Multicell E-DCH RL Specific Information IE measured by the UE are included for an RL in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this additional RL. If the Primary CPICH Ec/No IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

# [TDD – HS-DSCH Setup:]

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

- [TDD The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.]
- [TDD The DRNC shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]). ]
- [TDD The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [TDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow. If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.]

- [TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNC shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].]
- [TDD The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK ADDITION REQUEST message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer I in RADIO LINK ADDITION REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD *HS-SCCH Specific Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
  - [1.28 Mcps TDD *If the MIMO Activation Indicator* IE is included in the *HS-DSCH TDD Information* IE, then, The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link. The DRNS shall decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD If the *UE TS0 Capability LCR* IE is included in the *HS-DSCH TDD Information* IE, then the DRNC may include the *TS0 HS-PDSCH Indication LCR* IE in the RADIO LINK ADDITION RESPONSE message if HS-PDSCH resources could be allocated on TS0 for the UE.]

# [TDD – Intra-Node B Serving HS-DSCH Radio Link Change:]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:]

- [TDD The DRNC shall include the *HARQ Memory Partitioning* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD *HS-SCCH Specific Information Response 7.68Mcps* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

### [TDD - E-DCH:]

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

- [TDD – The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *E-DCH Serving RL* IE.]

- [TDD If the *TNL QoS* IE is included in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH MAC-d Flows Information TDD* IE for an E-DCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flows Information TDD* IE, the DRNS shall use this information for the related resource allocation operation.]
- [TDD If in the RADIO LINK ADDITION REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Non-scheduled" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants are configured for that E-DCH MAC-d flow.]
- [TDD If in the RADIO LINK ADDITION REQUEST message the *E-DCH Grant Type* IE in the *E-DCH MAC-d Flows Information TDD* IE is set to "Scheduled" the DRNS shall assume that it may issue scheduled grants for the concerned E-DCH MAC-d flow.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions for the related queue.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *MAC-es Maximum Bit Rate LCR* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows Information TDD* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [3.84Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH TDD Maximum Bitrate* IE in the *E-DCH TDD Information* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE in the *E-DCH TDD Information 7.68Mcps* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information 7.68Mcps* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Processing Overload Level* IE in the *E-DCH TDD Information LCR* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]

- [TDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.]
- [TDD If the RADIO LINK ADDITION REQUEST message includes the [3.84Mcps TDD *E-DCH TDD Information* IE][1.28Mcps TDD *E-DCH TDD Information LCR* IE] in the *E-DCH MAC-d Flows Information TDD* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE in the *E-DCH TDD Information LCR* IE, then the DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [3.84Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [3.84Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the E-DCH Information Response IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier, the E-AGCH(s) and E-HICH(s) assigned in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK ADDITION RESPONSE message.]
- [7.684Mcps TDD The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps *TDD* IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate an E-RNTI identifier and include the E-RNTI identifier and the E-AGCH(s) assigned in the E-DCH Information Response 7.68Mcps IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28Mcps TDD If the RADIO LINK ADDITION REQUEST message includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the *UE TS0 Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE is not present and if the RADIO LINK ADDITION REQUEST message includes the *UE TS0 Capability LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

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

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

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

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

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

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

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

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

- [7.68Mcps TDD – The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* 7.68Mcps TDD IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK ADDITION RESPONSE message.]

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

[1.28 Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the Continuous Packet *Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]

[1.28 Mcps TDD - If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK ADDITON RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK ADDITION RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]

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

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

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

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

- [1.28Mcps TDD - The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the the *Multi-Carrier E-DCH Information LCR* IE.]

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

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

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

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

# Response message:

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

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

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

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

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

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerning RL on the Uu interface.
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD start transmission on the DL DPDCH(s) of the new RL as specified in TS 25.427 [4], however never before the CFN indicated in the *Activation CFN* IE.]

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

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

# 8.3.2.3 Unsuccessful Operation

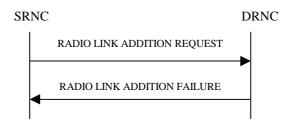


Figure 8: Radio Link Addition procedure: Unsuccessful Operation

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

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

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

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

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

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

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

[FDD – If the requested additional serving E-DCH Radio Link Change was successful, or if the addition of the requested additional serving E-DCH Radio Link was successful or existed already but the additional serving E-DCH Radio Link change was unsucessful, the DRNS shall indicate this in the *Additional E-DCH Secondary Serving Cell* 

Change Information Response IE in the Additional E-DCH Cell Change Information Response IE in the RADIO LINK ADDITION FAILURE message.]

Typical cause values are:

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

DL Radio Resources not Available;

UL Radio Resources not Available;

Combining Resources not Available;

Combining not Supported

Cell not Available:

[FDD – Requested Tx Diversity Mode not Supported;]

Power Level not Supported;

CM not Supported;

Reconfiguration CFN not Elapsed;

Number of DL Codes not Supported;

Number of UL codes not Supported;

[FDD – DPC mode change not Supported;]

Cell reserved for operator use;

Delayed Activation not supported;

[FDD – F-DPCH not supported;]

E-DCH not supported;

[FDD – MIMO not supported;]

[FDD – E-DCH TTI2ms not supported;]

[FDD – Continuous Packet Connectivity DTX-DRX operation not available;]

[FDD – Continuous Packet Connectivity UE DTX Cycle not available;]

[FDD – MIMO not available;]

[FDD – F-DPCH Slot Format operation not supported;]

[FDD – E-DPCCH Power Boosting not supported;]

[FDD – SixtyfourQAM DL and MIMO Combined not available;]

[FDD – Multi Cell operation not available;]

[FDD – Multi Cell operation not supported;]

[1.28Mcps TDD – MIMO not supported;]

[1.28Mcps TDD – MIMO not available;]

[1.28Mcps TDD – SixtyfourQAM DL and MIMO Combined not available;]

[FDD – TX diversity for MIMO UE on DL Control Channels not available;]

[FDD – Single Stream MIMO not available;]

[FDD – Multi Cell operation with MIMO not available;]

[FDD – Multi Cell operation with MIMO not supported;]

[FDD – Multi Cell E-DCH Operation not supported;]

[FDD – Multi Cell E-DCH Operation not available;]

[FDD – Multi Cell operation with Single Stream MIMO not available;]

[FDD – Multi Cell operation with Single Stream MIMO not supported;]

[FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;]

[FDD – Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;]

[FDD – Frequency Specific Compressed Mode Not Available;]

[FDD – Uplink Closed Loop Transmit Diversity Operation Not Available;]

[FDD – Uplink Closed Loop Transmit Diversity Operation Not Supported;]

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

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

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

[FDD – Dual Stream MIMO with four transmit antennas not available;]

[FDD – Multiflow Operation Not Available;]

[FDD – Multiflow Operation Not Supported;]

[FDD – SixtyfourOAM UL not Available;]

[FDD – SixtyfourQAM UL not Supported;]

[FDD – UL MIMO Operation Not Available;]

[FDD – UL MIMO Operation Not Supported;]

[FDD – UL MIMO and SixteenQAM Operation Not Available;]

[FDD – UL MIMO and SixteenQAM Operation Not Supported;]

[FDD – UL MIMO and SixtyfourQAM Operation Not Available;]

[FDD – UL MIMO and SixtyfourQAM Operation Not Supported.]

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

Transport Resource Unavailable.

#### **Miscellaneous Causes:**

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

# 8.3.2.4 Abnormal Conditions

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

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

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

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

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

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

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE [FDD – or for an E-DCH MAC-d flow in *RL Specific E-DCH Information* IE] included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must" [FDD – or the RL is combined with existing E-DCH RL which transport bearer is not established in the DRNS], the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE nor *RL Specific E-DCH Information* IE in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "May", the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

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

If ALCAP is not used, if the RADIO LINK ADDITION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE in [FDD – the *RL Specific E-DCH Information* IE in the *RL Information* IE for the

first E-DCH RL][TDD – the *E-DCH MAC-d Flows Information TDD* IE], the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-DSCH Serving Cell Change Information* IE but not the *HS-DSCH FDD Information* IE and the UE Context is not configured for HS-DSCH, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Serving Cell Change CFN* IE but neither the *Serving E-DCH RL* IE nor the *HS-DSCH Serving Cell Change Information* IE, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Serving E-DCH RL* IE but the UE Context is not configured for E-DCH, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK ADDITION REQUEST message, but the *E-DPCH Information* IE is not present, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the UE Context is not configured for E-DCH, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *HS-PDSCH RL-ID* IE not equal to the *RL ID* IE, the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[TDD – If the RADIO LINK ADDITION REQUEST message includes the *E-DCH Serving RL* IE not equal to the *RL ID* IE, the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message contains the *HS-PDSCH RL ID* IE [FDD – in the *HS-DSCH Serving Cell Change Information* IE] and/or *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the DRNS but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *HS-DSCH Serving Cell Change Information* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as "HS-DSCH not configured" then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Information*] and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Serving Cell Change Information*] has the value "Indexed MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Information* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Serving Cell Change Information*] has the value "Flexible MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

[FDD – If the RADIO LINK ADDITION REQUEST message contains, for at least one logical channel, the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE and

there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH but the DCH is configured to be included as a part of the downlink CCTrCH, the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the MIMO Activation Indicator IE, Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed", the Additional HS Cell Information RL Addition IE, the MIMO with four transmit antennas Activation Indicator IE, the Dual Stream MIMO with four transmit antennas Activation Indicator IE and/or the Single Stream MIMO Activation Indicator IE, but does not contain the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size", then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Serving E-DCH RL ID* IE but contains the *Transport Bearer Not Requested Indicator* IE in the RL Specific E-DCH Information for the new Serving E-DCH RL or there is at least one E-DCH MAC-d flow which transport bearer was not configured in the existing E-DCH RL to be combined with the Serving E-DCH RL, the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with the existing RL which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in DRNS, the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional HS Cell Information RL Addition* IE indicating a seconadry serving cell that is not in the same Node B as the new serving HS-DSCH cell, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional HS Cell Information RL Addition* IE and if the HS-DSCH is not configured in the DRNS Communication Context and the *HS-DSCH Information* IE is not present, then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK ADDITION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Serving Cell Change Information* IE] set to "Flexible RLC PDU Size", *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Serving Cell Change Information* IE] has the value "Indexed MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message does not include the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Information* IE] and the *DL RLC PDU Size Format* IE in the *HS-DSCH Information* IE [FDD – in the *HS-DSCH Serving Cell Change Information* IE] has the value "Flexible RLC PDU Size", the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

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

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

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Additional E-DCH Cell Information RL Add Req* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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

[FDD – If the RADIO LINK ADDITION REQUEST message contains the *Diversity Mode* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE and the secondary serving HS-DSCH is already configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD – If the secondary serving HS-DSCH is not configured in the UE Context and if the RADIO LINK ADDITION REQUEST message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Addition* IE the *Diversity Mode* IE not set to "None" but not the *Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the DRNS shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

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

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

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *UL CLTD Information* IE but does not contain the *F-TPICH Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL CLTD Information* IE but without *F-TPICH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *UL MIMO Information* IE in *E-DCH FDD Information* IE but does not contain the *UL CLTD Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL MIMO Information* IE but without *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

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

# 8.3.3 Radio Link Deletion

# 8.3.3.1 General

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

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

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

# 8.3.3.2 Successful Operation

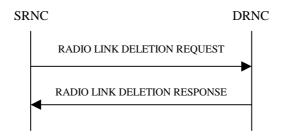


Figure 9: Radio Link Deletion procedure, Successful Operation

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

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

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

[FDD – After deletion of the RL(s), the UL out-of-sync algorithm defined in TS 25.214 [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in TS 25.214 [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

[FDD – If the RL indicated by the *RL ID* IE in the RADIO LINK DELETION REQUEST message is the serving HS-DSCH Radio link and a related secondary serving HS-DSCH Radio Link exists in the DRNS, the DRNC shall delete the secondary serving HS-DSCH Radio Link.]

[FDD – If the RL indicated by the *RL ID* IE in the RADIO LINK DELETION REQUEST message is the secondary serving HS-DSCH Radio link, the DRNC shall delete the secondary serving HS-DSCH Radio Link.]

# 8.3.3.3 Unsuccessful Operation

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# 8.3.3.4 Abnormal Conditions

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

# 8.3.4 Synchronised Radio Link Reconfiguration Preparation

# 8.3.4.1 General

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

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

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

# 8.3.4.2 Successful Operation

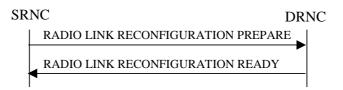


Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

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

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

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

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

# **DCH Modification:**

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

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Traffic Class* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this DCH indicates the value "RRC".
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.]

- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the DRNS may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

### **DCH Addition:**

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

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCH Information* IE includes a *DCHs To Add* IE with multiple *DCH Specific Info* IEs, the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.

- [FDD For each DCH which do not belong to a set of co-ordinated DCHs and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, TS 25.427 [4].]
- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, TS 25.427 [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4].] [TDD If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, TS 25.427 [4].]
- The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the DRNS once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- The DRNS should store the *Traffic Class* IE received for a DCH to be added in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- The DRNS shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The DRNS shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The DRNS shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [3.84Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [1.28Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [7.68Mcps TDD The DRNC shall include the *Secondary CCPCH Info TDD* 7.68Mcps IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- If the *DCHs To Add* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs To Add* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below

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

- [TDD The DRNS shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD The DRNS shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

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

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

# **Physical Channel Modification:**

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

- [FDD If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the DRNS shall apply the new Min UL Channelisation Code Length in the new configuration. The DRNS shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *TFCS* IE, the DRNS shall use the *TFCS* IE for the UL when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPCCH Slot Format* IE, the DRNS shall apply the new Uplink DPCCH *Slot Format* to the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the DRNS shall use the value for the UL inner loop power control when the new configuration is being used.]
- [FDD If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the DRNS shall apply the value in the uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the DRNS shall apply diversity according to the given value.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE and it is set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE and the concerned UE Context is configured to use F-DPCH in the downlink in the old configuration, the DRNS shall configure the concerned UE Context to use DPCH in the downlink in the new configuration. In this case, if at least one Transmission Gap Pattern Sequence is configured with an SF/2 downlink compressed mode method in the new configuration, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not.]

- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *DL DPCH Power Information* IE, the DRNS shall use the information contained in it for the power settings of the DL DPCH. In particular, if the received *Inner Loop DL PC Status* IE is set to "Active", the DRNS shall activate the inner loop DL power control for all RLs. If *Inner Loop DL PC Status* IE is set to "Inactive", the DRNS shall deactivate the inner loop DL power control for all RLs according to TS 25.214 [10]. Furthermore, the DRNC shall include the *DL Code Information* IE in the RADIO LINK RECONFIGURATION READY.]

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

- [FDD If the *DL DPCH Information* IE includes the *Number of DL Channelisation Codes* IE, the DRNS shall allocate given number of Downlink Channelisation Codes per Radio Link and apply the new Downlink Channelisation Code(s) to the new configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included in the RADIO LINK RECONFIGURATION READY message within the *DL Code Information* IE as a *FDD DL Channelisation Code Number* IE when sent to the SRNC. If some Transmission Gap Pattern sequences using "SF/2" method are already initialised in the DRNS, DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message in case the DRNS selects to change the Scrambling code change method for one or more DL Channelisation Code.]
- [FDD When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to TS 25.211 [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *p*th to "*PhCH number p*".]
- [FDD If the *DL DPCH Information* IE includes the *TFCS* IE, the DRNS shall use the *TFCS* IE for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the DRNS shall apply the new slot format used in DPCH in DL.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the DRNS shall apply the new signalling mode of the TFCI.]
- [FDD If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the DRNS shall apply the new parameter to define whether fixed or flexible positions of transport channels shall be used in the physical channel.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the DRNS shall, if supported, use Limited Power Increase according to TS 25.214 [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the F-DPCH Information IE, then:]

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

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE and the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to "SF/2" and the UE Context is configured to use DPCH in the downlink in the new configuration, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not.]

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

- [FDD If the *E-DPCH Information* IE includes the *Maximum Set of E-DPDCHs* IE, the DRNS shall apply the contents of the Maximum Set in the new configuration.]
- [FDD If the *E-DPCH Information* IE includes the *Puncture Limit* IE, the DRNS shall apply the value in the uplink of the new configuration.]
- [FDD If the *E-DPCH Information* IE includes the *E-TFCS Information* IE, the DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS shall use the value for the related resource allocation operation.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-DPCH Information* IE includes the *E-TTI* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-DPCCH Power Offset* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 2-Index-Step* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-RGCH 3-Index-Step* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *E-DCH HARQ Info* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *HS-DSCH Configured Indicator* IE, the DRNS shall use the value when the new configuration is being used.]
- [FDD If the *E-DPCH Information* IE includes the *Minimum Reduced E-DPDCH Gain Factor* IE, then the DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16].]

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

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

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

- [FDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.214 [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

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

- [FDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectivity HS-SCCH less operation according to TS 25.214 [10].]
- [FDD The DRNS shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the
   Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK
   RECONFIGURATION READY message.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the DRNC shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK RECONFIGURATION READY message.]

[FDD- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the DRNS shall deactive the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

# [FDD - UL CLTD Setup:]

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

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

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

# [FDD - UL CLTD Modification:]

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

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

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

#### [FDD - UL CLTD Removal:]

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

#### [FDD – UL MIMO Setup:]

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

### [FDD – UL MIMO Modification:]

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

### [FDD – UL MIMO Removal:]

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

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD – If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then:]

- [1.28 Mcps TDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [1.28 Mcps TDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.224 [22].]
- [1.28 Mcps TDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION READY message.]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall include *Allocated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then:]

- [1.28 Mcps TDD If the Transport Block Size List IE or/and Repetition Period list IE is/are included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, the DRNS shall modify the configuration of Serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, then the DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the buffer size for HS-DSCH Semi-Persistent scheduling needs to be modified, then the DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28 Mcps TDD If the number of processes for HS-DSCH Semi-Persistent scheduling needs to be modified, then the DRNS shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION READY message.]

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

- [1.28 Mcps TDD If the *Repetition Period list* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, the DRNS shall modify the configuration of Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall include *Allocated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION READY message.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the DRNS shall deactivate the HS-DSCH Semi-Persistent scheduling operation for the HS-DSCH Radio Link.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the DRNS shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

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

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

### [TDD – UL/DL CCTrCH Modification]

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

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

#### [TDD - UL/DL CCTrCH Addition]

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

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the DPCH information in [3.84Mcps TDD – *UL DPCH to be Added* IE/*DL DPCH to be Added* IEs] [1.28Mcps TDD – *UL DPCH to be Added LCR* IE/*DL DPCH to be Added LCR* IEs] [7.68 Mcps TDD – *UL DPCH to be Added 7.68 Mcps* IE/*DL DPCH to be Added 7.68 Mcps* IEs]. [3.84Mcps TDD – If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation 1.84 Mcps Extended* IE if the cell containing the radio link is configured for extended timing advance) in the RADIO LINK RECONFIGURATION READY message]. [7.68 Mcps TDD – If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation 7.68 Mcps* IE in the RADIO LINK RECONFIGURATION READY message].]

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

[1.28Mcps TDD – The DRNS shall use the *UL SIR Target* IE in the *UL CCTrCH To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according to TS 25.221 [12] and TS 25.224 [22] in the new configuration.]

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

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

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

# [TDD – UL/DL CCTrCH Deletion]

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

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

[FDD – If the *RL Information* IE includes the *DL Reference Power* IEs and power balancing is active, DRNS shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, when the new configuration has been activated, according to subclause 8.3.15, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

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

# [TDD – DSCH Addition/Modification/Deletion:]

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

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

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

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

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TNL QoS* IE in the *DSCH TDD Information* IE and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related DSCH.]

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

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

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

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

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

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

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

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

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Modify*, *USCH To Add* or *USCH To Delete* IEs, then the DRNS shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]

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

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

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

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

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

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

# **RL Information:**

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

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

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

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

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

# **HS-DSCH Setup:**

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

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

- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE, or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD– The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32] If RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer I in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD If the MIMO Activation Indicator IE, or the MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Information IE, then:]
  - [FDD The DRNS shall activate the MIMO mode, or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
  - [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If the Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a non-zero power offset where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up on the cell with a non-zero power offset where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then:]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS shall decide the SF mode for HS-PDSCH dual stream and include the MIMO SF Mode for HS-PDSCH dual stream IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Information* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the *UE TS0 Capability LCR* IE is included in the *HS-DSCH TDD Information* IE, then the DRNC may include the *TS0 HS-PDSCH Indication LCR* IE in the RADIO LINK RECONFIGURATION READY message if HS-PDSCH resources could be allocated on TS0 for the UE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

- [FDD The DRNS shall setup the requested HS-PDSCH resources on the secondary serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS may use this value to determine the

HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]

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

- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

# **Intra-DRNS Serving HS-DSCH Radio Link Change:**

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

The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.

The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message. [FDD – The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.] [1.28Mcps TDD – The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]

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

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

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

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

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

[TDD – The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD – *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD – *HS-SCCH Specific Information Response TDD – HS-SCCH Specific Information Response 7.68 Mcps* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE and the value is set to "allowed" or if HS-DSCH Information To Modify IE is not included and the UE Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM in the new configuration, then it shall include the

SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE and the value is set to "allowed" or if HS-DSCH FDD Secondary Serving Information To Modify IE is not included and the UE Context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM for the new secondary serving HS-DSCH Radio Link, then it shall include the SixtyfourQAM DL Usage Indicator IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the old and/or new configuration contains more than one Secondary Serving HS-DSCH Radio Link the *HS-DSCH FDD Secondary Serving Information* IE defines the new secondary serving HS-DSCH configuration in the DRNS to be used on the new secondary serving HS-DSCH Radio Link, and then:]
  - [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
  - [FDD If the MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas mode and include the MIMO Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
  - [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
  - [FDD If the *Diversity Mode* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, the DRNS shall apply cell specific transmit diversity configuration and if the *Diversity Mode* IE is not set to "None" the DRNS shall activate/deactivate the Transmit Diversity for the secondary serving HS-DSCH Radio Link in accordance with the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information* IE.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured for the secondary serving HS-DSCH radio link in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the Power Offset For S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator or Dual Stream MIMO with four transmit antennas activation

indicator have been configured for the secondary serving HS-DSCH radio link in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]

- [FDD – The DRNC may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

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

[FDD – If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]

- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE for each HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the DRNS allows the SRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information To Modify* IE set to "Flexible MAC-d PDU Size", then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer I in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH Information To Modify* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Traffic Class* IE in the *HS-DSCH Information To Modify* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific HS-DSCH MAC-d flow indicates the value "RRC".
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size* IE or *T1* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated values in the new configuration for the related HSDPA Priority Queue.

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-d PDU Size Index* IE in the *Modify Priority Queue* choice, the DRNS shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the *MAC-d PDU Size Index* IE in the new configuration.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the DRNS may modify the HS-SCCH codes corresponding to the HS-DSCH. The DRNC shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the HS-DSCH Information To Modify IE includes the HS-PDSCH Code Change Grant IE, then the DRNS may modify the HS-PDSCH codes corresponding to the HS-DSCH. The DRNC shall then report the codes which are used in the new configuration specified in the Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK RECONFIGURATION READY message. If the concerned DRNS is not in Continuous Packet Connectivity HS-SCCH less mode, the SRNC shall not include the HS-PDSCH Code Change Grant IE in the HS-DSCH Information To Modify IE.]
- [TDD If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the DRNS may modify the HS-SCCH parameters corresponding to the HS-DSCH. The DRNC shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD *HS-SCCH Specific Information Response LCR* IE] [7.68 Mcps TDD *HS-SCCH Specific Information Response 7.68 Mcps* IE] in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated HARQ Preamble Mode in the new configuration as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use, in the new configuration, the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Physical Layer Category* IE in the *HS-DSCH Information To Modify* IE, the DRNS shall use this information in the new configuration.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH Information To Modify IE, then:]
  - [FDD The DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link in the new configuration in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE.]

- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the MIMO Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
- [FDD If the MIMO with four transmit antennas Mode Indicator IE is set to "Activate" or the Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD The DRNC may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [1.28Mcps TDD If the *MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then:]
  - [1.28Mcps TDD The DRNS shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the MIMO Mode Indicator IE is set to "Activate", then the DRNS shall decide the SF mode for HS-PDSCH dual stream and include the MIMO SF Mode for HS-PDSCH dual stream IE in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD The DRNC may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD Any secondary serving HS-DSCH that was applied in the old configuration shall remain in the new configuration unless it is explicitly removed.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]

- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH Information To Modify* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify* IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify* IE, then the DRNS shall activate/deactivate the Single Stream MIMO for the HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH FDD Secondary Serving Information To Modify* IE, then:]

- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the HS-DSCH FDD Secondary Serving Information To Modify IE includes the HS-SCCH Code
   Change Grant IE, then the DRNS may modify the HS-SCCH codes corresponding to the secondary serving HS DSCH. The DRNC shall then report the codes which are used in the new configuration specified in the HS SCCH Specific Secondary Serving Information Response IE in the HS-DSCH FDD Secondary Serving
   Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK
   RECONFIGURATION READY message.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE, is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas or Dual Stream MIMO with four transmit antennas and include the MIMO Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
- [FDD If the MIMO with four transmit antennas Mode Indicator IE is set to "Activate" or the Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional

HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]

- [FDD If the Single Stream MIMO Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the DRNS shall activate/deactivate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link in accordance with the Single Stream MIMO Mode Indicator IE.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondaery serving HS-DSCH, then the DRNC shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the *Diversity Mode* IE is included, then:]
  - [FDD the DRNS shall apply cell specific transmit diversity configuration for the secondary serving HS-DSCH radio link according to *Diversity Mode* IE and *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information To Modify* IE,]
  - [FDD If the *Diversity Mode* IE is not set to "None", the DRNS shall apply diversity for the secondary serving HS-DSCH radio link according to the value given in the *Transmit Diversity Indicator* IE in the *HS-DSCH FDD Secondary Serving Information To Modify* IE.]
- [FDD If the *Non Cell Specific Tx Diversity* IE equals "Tx Diversity" is included, the DRNS shall apply non cell specific transmit diversity configuration and reconfigure the transmit diversity setting for the secondary serving HS-DSCH radio link to the same value as defined for the serving HS-DSCH radio link in the new configuration.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

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

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

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

- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If the UE context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer in RADIO LINK RECONFIGURATION PREPARE message in the *HS-DSCH MAC-d Flows To Add* IE for a *Priority Queue including Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the DRNC shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The DRNC may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, the *DL RLC PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:]

- [FDD The DRNS shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION PREPARE message. The list of secondary serving HS-DSCH cells is designated by the list of *Secondary C-ID* IEsin the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]
  - [FDD by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell.]
  - [FDD by the *Num Secondary HS-SCCH Codes* IE in *the Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells.]

- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in TS 25.214 [10].]
- [FDD The DRNS shall return these codes in the *Sets of HS-SCCH Codes* IE along with the corresponding percell *HS-DSCH-RNTI* IE in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE of the RADIO LINK RECONFIGURATION READY.]
- [FDD The DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the *HS-SCCH Preconfigured Codes* IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION READY message, IEs according to the rules defined for HS-DSCH Setup at Serving HS-DSCH Radio Link Change and:]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the HARQ Preamble Mode Activation Indicator IE.]
  - [FDD if MIMO Activation Indicator IE is included in the HS-DSCH Preconfiguration Setup IE the MIMO N/M Ratio IE.]
  - [FDD if *Ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE]
  - [FDD if *MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
  - [FDD if *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
  - [FDD if *Multiflow ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfiguration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
  - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell.]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE.]
  - [FDD if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS shall store this information in the preconfigured configuration.]
  - [FDD the SixtyfourQAM DL Support Indicator IE may be included.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH Preconfiguration Info* IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD the DRNS shall, if supported, include in the *Sets of HS-SCCH Codes* IE the *Measurement Power Offset* IE for each preconfigured cell.]
- [FDD The DRNS shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION READY message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows:]

- [FDD The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
- [FDD The DRNS may preconfigure the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]
- FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells IE* in the *HS-DSCH Preconfiguration Setup* IE, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a non-zero power offset where HS-DSCH / secondary HS-DSCH is preconfigured, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH Preconfiguration Info* IE or in the *Sets of HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Info* IE for each preconfigured cell in the RADIO LINK RECONFIGURATION READY message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *Multiflow Information* IE, then the DRNC shall allocate resources for the preconfigured Multiflow.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *F-TPICH Information* IE, then the DRNC shall allocate resources for the preconfigured F-TPICH channel and include *F-TPICH Information Response* IE in the *HS-DSCH Preconfiguration Info* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL CLTD Information* IE, then the DRNC shall allocate resources for the preconfigured UL CLTD.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL MIMO Information* IE, then the DRNC shall allocate resources for the preconfigured UL MIMO.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixteenQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixteen QAM.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixtyfourQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixtyfour QAM.]

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

- [FDD if the choice of *new Serving RL* is "New Serving RL in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE and/or *New non-serving RL E-DCH FDD DL Control Channel Information B* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION READY message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL Not in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information C* IE in the *Non-Serving RL Preconfiguration Info* IE for the RL in the RADIO LINK RECONFIGURATION READY message.]
- [FDD if the choice of *new Serving RL* is "New Serving RL in the DRNS or New Serving RL Not in the DRNS", the DRNC may include the *New non-serving RL E-DCH FDD DL Control Channel Information A* IE, the *New non-serving RL E-DCH FDD DL Control Channel Information B* IE and/or the *New non-serving RL E-DCH FDD DL Control Channel Information C* for the RL in the *Non-Serving RL Preconfiguration Info* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC may include the New non-serving RL E-DCH FDD DL Control Channel Information A IE, the New non-serving RL E-DCH FDD DL Control Channel Information B IE and/or the New non-serving RL E-DCH FDD DL Control Channel Information C IE according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH RL in the Non-Serving RL Preconfiguration Info IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD –If the *F-TPICH Information* IE is included, the DRNC shall use this information to allocate resources for the preconfigured F-TPICH channel for this RL in the serving RLS according to TS 25.211 [8], and include *F-TPICH Information Response* IE in the *Non-Serving RL Preconfiguration Info* IE.]

# [FDD – Enhanced HS Serving Cell Change:]

[FDD — Upon receipt of the RADIO LINK RECONFIGURATION PREPARE message, if the Enhanced HS Serving Cell Change is preconfigured in the DRNS for the UE context, the DRNS may execute the Enhanced HS Serving Cell Change procedure according to [63].]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify* IE or the *HS-DSCH FDD Information* IE then the DRNS shall not execute the synchronized Enhanced HS Serving Cell Change procedure when performing the Serving HS-DSCH Radio Link Change or the HS-DSCH Setup.]

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

# [FDD - Multiflow Setup:]

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

#### [FDD - Multiflow Modification:]

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

#### [FDD - Multiflow Removal:]

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

# [FDD – E-DCH Setup:]

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

- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ

*Process Allocation For 2ms Non-Scheduled Transmission Grant* IE, if included, for the related resource allocation operation.]

- [FDD If in the RADIO LINK RECONFIGURATION PREPARE message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Processing
   Overload Level IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number
   of TTIs, indicated in the E-DCH Processing Overload Level IE, because of processing issue, the DRNS shall
   notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH ReferencePower
   Offset IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the
   MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

### [FDD – E-DCH Radio Link Handling:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The DRNC shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the DRNC may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* IE set to "Non E-DCH", in the *RL Information* IE.]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the DRNS would contain the E-DCH serving RL, the DRNS shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION READY message. The value of the *E-DCH RL Set ID* IE shall allow the SRNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

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

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

- [FDD If the old Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD If the new Serving E-DCH RL is within this DRNS:]
  - [FDD the DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code
    of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *RL Information Response* IE for the indicated RL in the RADIO LINK RECONFIGURATION READY
    message.]
  - [FDD The DRNS may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
  - [FDD If a serving cell change is performed the RADIO LINK RECONFIGURATION READY message may contain invalid data (see 9.2.2.4C).]
  - [FDD The DRNS may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION READY message for the new serving E-DCH RL.]
- [FDD The DRNS may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every E-DCH Radio Links in the DRNS.]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

#### [FDD – E-DCH Modification:]

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

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH FDD Information To Modify* IE, then the DRNS shall use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD –If the *Traffic Class* IE is included for an E-DCH MAC-d flow then the DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific E-DCH MAC-d flow indicates the value "RRC".]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Data Description Indicator* IE, the DRNC shall use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH FDD Information To Modify* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information To Modify* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow in the *E-DCH FDD Information To Modify* IE, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the DRNS shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in TS 25.214 [10].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels:]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]

- [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
- [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNS shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH Processing
   Overload Level IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number
   of TTIs, indicated in the E-DCH Processing Overload Level IE, because of processing issue, the DRNS shall
   notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH ReferencePower Offset* IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-e Reset Indicator* IE in the *E-DCH FDD Information To Modify* IE, then the DRNS shall use this value to determine whether MAC-e(or MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE]
  - [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the DRNS may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The DRNC shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION READY message.]

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

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

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

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

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

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

# [FDD – Additional E-DCH Setup:]

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

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the Additional E-DCH on the secondary uplink frequency and setup the requested Additional E-DCH resources on the Radio Links and in the cells indicated by the *E-DCH Additional RL ID* IE and the *C-ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the Additional E-DCH shall be setup.]

- [FDD The DRNS shall setup the additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Initial DL Tx Power* IE, the *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the Enhanced Primary CPICH Ec/No IE is included in the Multicell E-DCH RL Specific Information IE in the Additional E-DCH Secondary RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RL Reconf IE in the RADIO RECONFIGURATION READY message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes the F-DPCH Slot Format IE, the DRNS may use the F-DPCH Slot Format IE to determine the F-DPCH slot format.]
- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK RECONFIGURATION PREPARE message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the

Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE the DRNS may include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE and shall include the E-RGCH/E-HICH Channelisation Code IE and the corresponding E-HICH Signature Sequence IE and the DRNS may include the corresponding E-RGCH Signature Sequence IE for each Additional E-DCH RL in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the AdditionalE-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding
    E-AGCH in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD
    Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO
    LINK RECONFIGURATION READY message.]
  - [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the Additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE RADIO LINK RECONFIGURATION READY message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

# [FDD – Additional E-DCH Configuration Change]

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

- [FDD If the *UL Scrambling Code* IE and/or the *UL SIR Target* IE are present in the *UL DPCH Information* IE in the *Additional E-DCH Configuration Change Information* IE and/or id the *Minimum Reduced E-DPDCH Gain Factor* IE is present in the *Multicell E-DCH Information* IE in the *Additional E-DCH Configuration Change Information* IE, the DRNS shall use the information in the same way as for the information that is used on the Primary uplink frequency.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *F-DPCH Information* IE in the *Additional E-DCH Configuration Change Information* IE, then:]
  - [FDD The DRNS shall configure the concerned UE Context to use F-DPCH in the downlink in the new configuration.]

- [FDD – If the *F-DPCH Information* IE includes the *F-DPCH Slot Format Support Request* IE, then the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the *F-DPCH Slot Format* IE in the *Additional E-DCH FDD Information Response* IE for new RLs on the secondary UL frequency or in the *Additional Modified E-DCH FDD Information Response* IE for modified RLs in the RADIO LINK RECONFIGURATION READY message. If the *Multicell E-DCH Information* IE in the *Additional E-DCH Configuration Change Information* IE includes the *F-DPCH Slot Format* IE, the DRNS may use the *F-DPCH Slot Format* IE to determine the F-DPCH slot format.]

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

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

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

Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH/E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]

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

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

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

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

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

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

- [FDD If the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the *E-DCH Minimum Set E-TFC*I IE and/or the *E-DCH Maximum Bitrate* IE is included, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the *E-DCH Processing Overload Level* IE is included, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the DRNS shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the DL TX power upper or lower limit has been re-configured for the secondary UL frequency, the DRNS shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional*

*E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNS shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each Radio Link when these values are changed.]
- [FDD If the Additional E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]

### [FDD – Additional E-DCH Removal]

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

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

[1.28Mcps TDD –If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

## [1.28Mcps TDD – Shared physical channels Synchronisation Detection:]

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

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

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

# [1.28Mcps TDD – PowerControl GAP:]

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

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

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Need for Idle Interval* IE set to "TRUE", if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK RECONFIGURATION READY message. If the *Need for Idle Interval* IE is set to "FALSE", the DRNC shall delete the configuration related to E-UTRAN Inter-RAT measurement ]

# [1.28Mcps TDD – RNTI Allocation Indicator:]

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

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

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

### [TDD - DSCH RNTI Addition/Deletion:]

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

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

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

### [FDD – Phase Reference Handling:]

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

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

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

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

# [FDD – Fast Reconfiguration:]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Fast Reconfiguration Mode* IE, the DRNS shall, if supported, and if it is possible to base the synchronization of the reconfiguration on the detection of the change in the uplink scrambling code for this reconfiguration, include the *Fast ReconfigurationPermission* IE in the RADIO LINK RECONFIGURATION READY message.]

# [TDD – Intra- DRNS Serving E-DCH Radio Link Change:]

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

- [TDD In the new configuration the DRNS shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [3.84Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [1.28Mcps TDD The DRNS shall allocate E-AGCH parameters and E-HICH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE and the *E-HICH Specific Information Response* IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK RECONFIGURATION READY message.]
- [7.68Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* 7.68Mcps IE in the *E-DCH TDD Information Response* 7.68Mcps IE in the RADIO LINK RECONFIGURATION READY message.]

- [TDD – If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]

# [TDD – E-PUCH Handling:]

[3.84Mcps TDD and 7.68Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information* IE, the DRNS shall apply the parameters to the new configuration.]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-PUCH Information LCR* IE, the DRNS shall apply the parameters to the new configuration.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-TFCS Information* IE, the DRNS shall apply the beta parameters to the new configuration.]

# [3.84Mcps TDD – E-DCH Setup:]

[3.84Mcps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information* IE.]

# [1.28Mcps TDD – E-DCH Setup:]

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

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

# [7.68Mcps TDD – E-DCH Setup:]

[7.68Mcps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information* 7.68Mcps IE.]

# [TDD- E-DCH MAC-d Flow Addition/Deletion:]

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

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information TDD* IE in the *E-DCH MAC-d Flows To Add* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD- If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNS shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

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

- [TDD- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION PREPARE message includes the MAC-es
   Maximum Bit Rate LCR IE in the E-DCH Logical Channel Information IE in the E-DCH MAC-d Flows To Add
   IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

# [3.84Mcps TDD – E-DCH Non-scheduled allocations:]

[3.84Mcps TDD – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

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

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH TDD Information To Modify* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d PDU Size Format* IE in the *E-DCH TDD Information To Modify* IE, then the DRNS shall use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]

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

[3.84Mcps TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH TDD Information* IE, then:]

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

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

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

- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Processing Overload Level* IE for an E-DCH, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the *UE TS0 Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify* IE is not present, or if the *UE TS0 Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE is not present, and if the RADIO LINK RECONFIGURATION PREPARE message includes the *UE TS0 Capability LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

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

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

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

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

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
  - [TDD- If the *E-DCH TDD Information To Modify* IE contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD– If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS shall use this new power offset value.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]

- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the DRNS shall apply the values in the new configuration.]
  - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LC*R IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNS shall apply the value in the new configuration.]
- [TDD– If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE, then the DRNS shall use this value to determine whether MAC-e (or MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]

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

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

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

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

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

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

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

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

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

*UL Multi-Carrier info* IE is included, then the DRNS shall remove the corresponding E-DCH configuration on the uplink frequencies indicated by the *UARFCN* IE in the *Removal UL Multi-Carrier info* IE.]

#### General

If the requested modifications are allowed by the DRNC and the DRNC has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

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

The DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow being added or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] being added, or any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included], HS-DSCH MAC-d flow or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included [FDD – if the *Transport Bearer Not Requested Indicator* IE is not included for the corresponding DCH,] for only one of the DCHs in the set of co-ordinated DCHs.

[FDD – If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer Shall not be Established" for a DCH or an E-DCH MAC-d flow, then the DRNC shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the RADIO LINK RECONDIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow and:]

- [FDD if the DRNC establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]
- [FDD if the DRNC does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION READY message.]

In the case of a Radio Link being combined with another Radio Link within the DRNS, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the combined Radio Links [FDD – if the *Transport Bearer Not Requested Indicator* IE is not included for this DCH of the Radio Link].

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

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

- [FDD – if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]

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

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

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

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall

include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

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

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

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

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

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

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

[TDD – If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS shall use the indicated values when deciding the Initial DL TX Power.]

# 8.3.4.3 Unsuccessful Operation

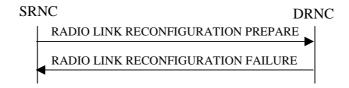


Figure 11: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

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

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure for each failed radio link in a *Cause* IE.

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

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

Typical cause values are:

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

UL Scrambling Code Already in Use;

DL Radio Resources not Available;

UL Radio Resources not Available;

Requested Configuration not Supported;

Number of DL Codes not Supported;

Number of UL Codes not Supported;

Dedicated Transport Channel Type not Supported;

DL Shared Channel Type not Supported;

[TDD – UL Shared Channel Type not Supported;]

[FDD – UL Spreading Factor not Supported;]

[FDD – DL Spreading Factor not Supported;]

CM not Supported;

RL Timing Adjustment not Supported;

E-DCH not supported;

[FDD – F-DPCH not supported;]

[FDD – Continuous Packet Connectivity DTX-DRX operation not Supported;]

[FDD – Continuous Packet Connectivity HS-SCCH less operation not Supported;]

[FDD – MIMO not supported;]

[FDD – E-DCH TTI2ms not supported;]

[FDD - Continuous Packet Connectivity DTX-DRX operation not available;]

[FDD – Continuous Packet Connectivity UE DTX Cycle not available;]

[FDD – MIMO not available;]

[FDD – SixteenQAM UL not Supported;]

HS-DSCH MAC-d PDU Size Format not supported;

[FDD – F-DPCH Slot Format operation not supported;]

E-DCH MAC-d PDU Size Format not available;

[FDD – E-DPCCH Power Boosting not supported;]

[FDD – SixtyfourQAM DL and MIMO Combined not available;]

[FDD – Multi Cell operation not available;]

[FDD – Multi Cell operation not supported;]

[FDD – SixtyfourQAM DL and MIMO Combined not supported;]

[1.28Mcps TDD- MIMO not supported;]

[1.28Mcps TDD – MIMO not available;]

[1.28Mcps TDD – SixtyfourQAM DL and MIMO Combined not available;]

[FDD – TX diversity for MIMO UE on DL Control Channels not available;]

[FDD – Single Stream MIMO not supported;]

[FDD – Single Stream MIMO not available;]

[FDD – Multi Cell operation with MIMO not available;]

[FDD – Multi Cell operation with MIMO not supported;]

[FDD – Multi Cell E-DCH Operation not supported;]

[FDD – Multi Cell E-DCH Operation not available;]

- [FDD Multi Cell operation with Single Stream MIMO not available;]
- [FDD Multi Cell operation with Single Stream MIMO not supported;]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available;]
- [FDD Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Available;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Supported;]
- [FDD MIMO with four transmit antennas not supported;]
- [FDD MIMO with four transmit antennas not available;]
- [FDD Dual Stream MIMO with four transmit antennas not supported;]
- [FDD Dual Stream MIMO with four transmit antennas not available;]
- [FDD SixtyfourQAM UL not Available;]
- [FDD SixtyfourQAM UL not Supported;]
- [FDD UL MIMO Operation Not Available;]
- [FDD UL MIMO Operation Not Supported;]
- [FDD UL MIMO and SixteenQAM Operation Not Available;]
- [FDD UL MIMO and SixteenQAM Operation Not Supported;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Available;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Supported;]
- [FDD Multiflow Operation Not Available;]
- [FDD Multiflow Operation Not Supported.]

#### **Miscellaneous Causes:**

Control Processing Overload;

Not enough User Plane Processing Resources.

# 8.3.4.4 Abnormal Conditions

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

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

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message includes more than one *DL Reference Power* IE, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE., and not both are present for a transport bearer intended to be established, the DRNC shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH* 

*Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use *MAC-d PDU Size List*, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

If the RADIO LINK RECONFIGURATION PREPARE message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

[FDD – If the concerned UE Context is configured to use F-DPCH in the downlink in the old configuration and the RADIO LINK RECONFIGURATION PREPARE message includes at least one but not all of the *TFCS* IE, *DL DPCH Slot Format* IE, *TFCI Signalling Mode* IE, *Multiplexing Position* IE, *Limited Power Increase* IE and *DL DPCH Power Information* IE in the *DL DPCH Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message, but the *E-DPCH Information* IE is not present or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE, *E-DPCCH Power Offset* IE, *E-RGCH 2-Index-Step Threshold* IE, *E-RGCH 3-Index-Step Threshold* IE, *HARQ Info for E-DCH* IE or *HS-DSCH Configured Indicator* IE are not present in the *E-DPCH* 

*Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the UE Context is not configured for E-DCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as "HS-DSCH not configured" then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the UE Context is not configured for E-DCH, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the Fast Reconfiguration IE is included in the RADIO LINK RECONFIGURATION PREPARE message and the UL Scrambling Code IE does not indicate an uplink scrambling code different from the currently used uplink scrambling code the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn't configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn't configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration is not configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the DRNC had ignored the configuration of Transport Format Set for uplink, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the DRNC had ignored the configuration of Transport Format Set for downlink, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Bearer Not Requested Indicator* IE for a DCH or an E-DCH MAC-d flow but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE or does not contain the corresponding *E-DCH MAC-d Flow ID* IE in *E-DCH MAC-d Flows Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

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

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

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

[FDD – If the concerned UE Context is configured to apply MIMO, allowed to apply 64QAM, establish the secondary serving HS-DSCH Radio Link, apply MIMO with four transmit antennas, or apply Dual Stream MIMO with four transmit antennas, or apply Single Stream MIMO in the new configuration but is not configured to use flexible MAC-d PDU Size, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for an E-DCH MAC-d flow in the *RL Specific E-DCH Information* IE but does not include the *E-DCH MAC-d flow ID* IE for the E-DCH MAC-d flow in the *E-DCH MAC-d flows Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but does not contain the *F-DPCH Information* IE and the concerned UE Context is not previously configured to use F-DPCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the transport bearer is not configured for the Serving E-DCH Radio Link in DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Bearer Not Requested Indicator* IE for a DCH or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

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

If ALCAP is not used, if the concerned UE Context is configured to establish a DCH, an E-DCH MAC-d flow and/or an HS-DSCH MAC-d flow but the RADIO LINK RECONFIGURATION PREPARE message does not include the

*Transport Layer Address* IE and the *Binding ID* IE for the DCH, the E-DCH MAC-d flow and/or the HS-DSCH MAC-d flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD – If ALCAP is not used, if the concerned UE Context is configured to establish a DSCH and/or a USCH but the RADIO LINK RECONFIGURATION PREPARE message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the DSCH and/or the USCH, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If, in the new configuration, there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use "Flexible RLC PDU Size" for an HS-DSCH but is not configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use MAC-d PDU Size Index for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use "Flexible RLC PDU Size", the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

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

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

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional E-DCH Cell Information RL Reconf Prep* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

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

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Diversity Mode* IE in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE and the secondary serving HS-DSCH is already configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the secondary serving HS-DSCH is not configured in the UE Context and if the RADIO LINK RECONFIGURATION PREPARE message contains in the *HS-DSCH FDD Secondary Serving Information* IE in the *Additional HS Cell Information RL Reconf Prep* IE the *Diversity Mode* IE not set to "None" but not the *Transmit Diversity Indicator* or contains the *Transmit Diversity Indicator* but not the *Diversity Mode* IE not set to "None", then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message contains the *Diversity Mode* IE in the *Secondary Serving Information To Modify* IE in the *Additional HS Cell Information RL Reconf Prep* IE and the *Non Cell Specific Tx Diversity* IE, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional HS Cell Information RL Reconf Prep* IE and the new configuration contains more than one secondary serving HS-DSCH RL, and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting

with the value "1", which are previously assigned to the RL or received in the *Ordinal Number Of Frequency* IE in the *HS-DSCH FDD Secondary Serving Information* IE or the *HS-DSCH FDD Secondary Serving Information To Modify* IE, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

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

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *UL CLTD Information* IE but does not contain the *F-TPICH Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL CLTD Information* IE but without *F-TPICH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message contains the *UL MIMO Information* IE in *E-DCH FDD Information* IE but does not contain the *UL CLTD Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL MIMO Information* IE but without *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

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

# 8.3.5 Synchronised Radio Link Reconfiguration Commit

### 8.3.5.1 General

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

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

# 8.3.5.2 Successful Operation



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

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

- [TDD at the next coming CFN with a value equal to the value requested by the SRNC in the *CFN* IE (see TS 25.402 [17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.]
- [FDD if the *Fast Reconfiguration* IE is not included in the RADIO LINK RECONFIGURATION COMMIT message at the next coming CFN with a value equal to the value requested by the SRNC in the *CFN* IE (see TS 25.402 [17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.]
- [FDD if the *Fast Reconfiguration* IE is included in the RADIO LINK RECONFIGURATION COMMIT message as soon as the DRNS detects that the UE uses the new configuration in the uplink (e.g. the NodeB indicates that the UE uses the new scrambling code used for the uplink by sending the RADIO LINK RESTORATION message). In order to limit the period for the detection in the DRNS the CFN in the RADIO

LINK RECONFIGURATION COMMIT message indicates the earliest possible time instant at which the UE might use the new configuration.]

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

[FDD – If the Active Pattern Sequence Information IE is not included in the RADIO LINK RECONFIGURATION COMMIT message and a new Compressed Mode Configuration exists in the prepared configuration, the DRNS shall behave as if an Active Pattern Sequence Information IE with an empty Transmission Gap Pattern Sequence Status IE was included.]

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

In the case of a Transport Channel or MAC-d flow modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the configuration switching point (defined above) indicated CFN.

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

[FDD – If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the DRNS shall deactivate all the ongoing Transmission Gap Pattern Sequences at the configuration switching point (defined above). From that moment on all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

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

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

# 8.3.5.3 Abnormal Conditions

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

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

[FDD - If the RADIO LINK RECONFIGURATION COMMIT message contains the *Affected HS-DSCH serving cell List* IE in the *Active Pattern Sequence Information* IE and the Transmission Gap Pattern Sequence for affected HS-DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall initiate the Radio Link Failure procedure with the cause value "Invalid CM Settings".]

# 8.3.6 Synchronised Radio Link Reconfiguration Cancellation

# 8.3.6.1 General

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

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

# 8.3.6.2 Successful Operation



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

Upon receipt of the RADIO LINK RECONFIGURATION CANCEL message from the SRNC, the DRNS shall release the new configuration ([FDD – including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised RL Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

#### 8.3.6.3 Abnormal Conditions

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# 8.3.7 Unsynchronised Radio Link Reconfiguration

# 8.3.7.1 General

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

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

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

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

# 8.3.7.2 Successful Operation

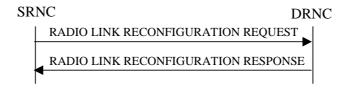


Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

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

Upon receipt, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

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

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

#### **DCH Modification:**

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

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the DRNS shall treat the DCHs as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.
- If the *DCH Specific Info* IE includes the *Traffic Class* IE, the DRNC may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this DCH indicates the value "RRC".
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.]
- [FDD If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [TDD If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:

- If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
- If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

#### **DCH Addition:**

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

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCHs To Add* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if all of them can be in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.
- [FDD For each DCH which does not belong to a set of co-ordinated DCHs, and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, TS 25.427 [4].]
- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, TS 25.427 [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, TS 25.427 [4].] [TDD If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, TS 25.427 [4].]
- The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the DRNS once the new configuration has been activated.
- The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- The DRNS shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- The DRNS shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The DRNS shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCH Specific Info* IE includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Delete* IEs, the DRNS shall not include the referenced DCHs in the new configuration.

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

# [FDD – Physical Channel Modification:]

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

- [FDD If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD If the *UL DPCH Information* IE includes the *UL DPDCH Indicator For E-DCH Operation* IE set to "UL DPDCH not present", the UL DPDCH resources shall be removed from the configuration.]

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

- [FDD If the *DL DPCH Information* IE includes the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE for the DL, the DRNS shall apply the new TFCI Signalling Mode in the Downlink of the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Used", the DRNS shall, if supported, use Limited Power Increase according to TS 25.214 [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Not Used", the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, and if the *Downlink Compressed Mode Method* in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to "SF/2", the DRNC shall include the *DL Code Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message, without changing any of the DL Channelisation Codes or DL Scrambling Codes, indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS Information* IE, the DRNS shall use the *E-TFCS Information* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration. If the *E-TFCS Information* IE contains the *E-DCH Minimum Set E-TFCI Validity Indicator* IE the DRNS shall ignore the value in *E-DCH Minimum Set E-TFCI* IE. If the *E-DCH Minimum Set E-TFCI validity indicator* IE is absent DRNS shall use the value for the related resource allocation operation.]

[FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-DPDCH Power Interpolation* IE, the DRNS shall use the value to determine the applicable E-DPDCH power formula defined in TS 25.214 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

FDD – If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to TS 25.214 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in TS 25.214 [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-DPCCH Power Offset* IE, the DRNS shall use the value when the new configuration is being used.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-RGCH 2-Index-Step* IE, the DRNS shall use the value when the new configuration is being used.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *E-RGCH 3-Index-Step* IE, the DRNS shall use the value when the new configuration is being used.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *HARQ Info for E-DCH* IE, the DRNS shall use the value when the new configuration is being used.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST includes an *E-DPCH Information* IE which contains the *Minimum Reduced E-DPDCH Gain Factor* IE, then the DRNS shall use the value to determine the applicable minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10]. For the case the *Minimum Reduced E-DPDCH Gain Factor* IE is not available for the UE Context, the DRNS may use the default value defined in TS 25.331 [16].

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

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

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

- [FDD – If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]

- [FDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.214 [10].]
- [FDD If the *DTX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this information to modify the indicated DTX Information parameter in the new configuration. If the choice of *DTX Information To Modify* IE is "Deactivate", then DRX should be deactived together with DTX.]
- [FDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE, then the DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

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

- [FDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for Continuous Packet Connectivity HS-SCCH less operation according to TS 25.214 [10].]
- [FDD The DRNS shall allocate the HS-PDSCH codes needed for HS-SCCH less operation and include the
   Continuous Packet Connectivity HS-SCCH less Information Response IE in the RADIO LINK
   RECONFIGURATION RESPONSE message.]
- [FDD If at least one of *HS-PDSCH Second Code Support* IE is set to "True", then the DRNC shall include *HS-PDSCH Second Code Index* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[FDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE, then the DRNS shall deactive the Continuous Packet Connectivity HS-SCCH less operation for the HS-DSCH Radio Link.]

# [FDD - UL CLTD Setup:]

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

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

#### [FDD - UL CLTD Modification:]

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

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall configure this cell to determine the precoding weights for the concerned UE Context. Otherwise the DRNS shall configure the serving E-DCH cell or the HS\_DSCH serving cell to determine the precoding weights as specified in TS 25.319[38]. The UL CLTD configuration is only valid for the cell to determine the precoding weights.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *S-DPCCH Power Offset Information* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall use this value to determine the S-DPCCH power.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UL CLTD State Activation Information* IE in the *UL CLTD Information To Modify* IE, then the DRNS shall use this value to update the local state of UL CLTD for the concerned UE Context. If the *UL CLTD Activation Information* IE is set to "De-activated", the DRNS should release the F-TPICH resource configured for the concerned UE Context.]

#### [FDD - UL CLTD Removal:]

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

### [FDD – UL MIMO Setup:]

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

#### [FDD - UL MIMO Modification:]

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

# [FDD - UL MIMO Removal:]

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

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS shall take account into these parameters to decide the DRX operation related parameters and configure the concerned UE Context for DRX operation according to TS 25.224 [22] and include the parameter(s) in the *Continuous Packet Connectivity DRX Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD - If the *Inactivity Threshold for UE DRX Cycle Ext* IE is included in the *Continuous Packet Connectivity DRX Information LCR* IE, then the DRNS may use this value to determine the Inactivity Threshold for UE DRX Cycle according to TS 25.224 [22].]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then:]

- [1.28 Mcps TDD If the *UE DTX DRX Offset* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall apply the indicated Offset in *UE DTX DRX Cycle* IE in the new configuration.]
- [1.28 Mcps TDD If the *Enabling Delay* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall use this value to determine the beginning of uplink transmission in the new configuration according to TS 25.224 [22].]
- [1.28 Mcps TDD If the *DRX Information To Modify* IE is included in the *Continuous Packet Connectivity DRX Information To Modify LCR* IE, then the DRNS shall use this information to modify the indicated DRX Information in the new configuration.]

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

- [1.28 Mcps TDD The DRNS shall configure the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information LCR IE, then the DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

- [1.28 Mcps TDD – The DRNS shall configure the Serving E-DCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].]

- [1.28 Mcps TDD - If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall include *Allocated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

- [1.28 Mcps TDD If the Transport Block Size List IE or/and Repetition Period list IE is/are included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, the DRNS shall modify the configuration of Serving HS-DSCH Radio Link indicated by the HS-PDSCH RL ID IE for HS-DSCH Semi-Persistent scheduling operation according to TS 25.224 [22].
- [1.28 Mcps TDD The DRNS shall allocate the HS-SICH information needed for HS-DSCH Semi-Persistent scheduling operation and include the *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the HS-DSCH Semi-Persistent Resource Reservation Indicator IE is included in the HS-DSCH Semi-Persistent scheduling Information to modify LCR IE, then the DRNS shall include Allcoated HS-PDSCH Semi-persistent resource IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the *HS-DSCH Semi-Persistent scheduling operation Indicator* IE is included in the *HS-DSCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall apply this information for HS-DSCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the buffer size for HS-DSCH Semi-Persistent scheduling needs to be modified, then the DRNS shall include the *Buffer Size for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the number of processes for HS-DSCH Semi-Persistent scheduling needs to be modified, then the DRNS shall include the *Number of Processes for HS-DSCH Semi-Persistent scheduling* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

- [1.28 Mcps TDD If the *Repetition Period list* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, the DRNS shall modify the configuration of Serving HS-DSCH Radio Link indicated by the *E-DCH Serving RL* IE for E-DCH Semi-Persistent scheduling operation according to TS 25.224 [22].]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent scheduling Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall apply this information for E-DCH Semi-Persistent scheduling operation.]
- [1.28 Mcps TDD If the *E-DCH Semi-Persistent Resource Reservation Indicator* IE is included in the *E-DCH Semi-Persistent scheduling Information to modify LCR* IE, then the DRNS shall include *Allocated E-DCH Semi-persistent resource* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the DRNS shall deactivate the HS-DSCH Semi-Persistent scheduling operation for the HS-DSCH Radio Link.]

[1.28 Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE, then the DRNS shall deactivate the E-DCH Semi-Persistent scheduling operation for the E-DCH Radio Link.]

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

- [1.28 Mcps TDD –the DRNS may use the MU-MIMO for the radio link according to the *MU-MIMO Usage Indicator* IE and shall include the *MU-MIMO Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28 Mcps TDD If the *Standalone Midamble Channel Indicator* IE is set to "Used", then the DRNS shall include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION RESPONSE

message. Else, the DRNS shall not include Standalone Midamble Channel information in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [TDD - UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Modify* IEs or *DL CCTrCH Information To Modify* IEs which contain a *TFCS* IE, the DRNS shall apply the included *TFCS* IE as the new value(s) to the referenced CCTrCH. Otherwise the DRNS shall continue to apply the previous value(s) specified for this CCTrCH.]

[1.28Mcps TDD – If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the DRNS shall apply this value as the new configuration and use it for the UL inner loop power control according to TS 25.221 [12] and TS 25.224 [22].]

### [TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Delete* IEs or *DL CCTrCH Information To Delete* IEs, the DRNS shall not include the referenced CCTrCH in the new configuration.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE and the power balancing is active, the DRNS shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power Information* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNC shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

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

[1.28Mcps TDD – If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

# [1.28Mcps TDD – Shared physical channels Synchronisation Detection:]

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

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

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

# [1.28Mcps TDD – PowerControl GAP:]

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

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

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Need for Idle Interval* IE set to "TRUE", if supported, the DRNC shall include the *Idle Interval Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *Need for Idle Interval* IE is set to "FALSE", the DRNC shall delete the configuration related to E-UTRAN Inter-RAT measurement.]

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

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

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

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

#### **RL Information:**

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

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

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

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

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

# **HS-DSCH Setup:**

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

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE is included in the *HS-DSCH Information* IE.] [1.28Mcps TDD– The *HARQ Memory Partitioning* IE shall either contain the *HARQ Memory Partitioning Information Extension For MIMO* IE or the *Number of Processes* IE set to a value higher than "8", if the *MIMO Activation Indicator* IE or *MIMO with four transmit antennas Activation Indicator* IE, or *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Information* IE.]
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *HS-DSCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall ignore the *SID* IE and *MAC-d PDU Size* IE in the *MAC-d PDU Size Index* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If RADIO LINK RECONFIGURATION REQUESTmessage includes *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE set to "Flexible MAC-d PDU Size", then DRNC shall only set in the *HS-DSCH Initial Capacity Allocation* IE the values for the peer of *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE to the values of the corresponding peer I in RADIO LINK RECONFIGURATION REQUEST in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response TDD HS-SCCH Specific Information Response 7.68Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *HARQ Preamble Mode* IE is not included or if the mode 0 is applied, then the DRNC shall not include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated format in user plane frame structure for HS-DSCH channels (TS 25.425 [32]) and MAC-hs (TS 25.321 [41]).
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Information IE, then]

- [FDD The DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link.]
- [FDD The DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [1.28 Mcps TDD If the MIMO Activation Indicator IE is included in the HS-DSCH TDD Information IE, then:]
  - [1.28 Mcps TDD The DRNS shall activate the MIMO mode for the HS-DSCH Radio Link.]
  - [1.28 Mcps TDD The DRNS shall decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Information IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the HS-DSCH MAC-d PDU Size Format IE set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used, the DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use:]
  - [FDD a different HS-SCCH in consecutive TTIs for this UE.]
  - [FDD HS-SCCH orders for the case of HS-SCCH-less operation to this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH FDD Information* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- If the RADIO LINK RECONFIGURATION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the *DL RLC*

*PDU Size Format* IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *Priority Queue Information* IE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the *Single Stream MIMO Activation Indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS shall activate the Single Stream MIMO for the HS-DSCH Radio Link.]
- [1.28 Mcps TDD If the *UE TSO Capability LCR* IE is included in the *HS-DSCH TDD Information* IE, then the DRNC may include the *TSO HS-PDSCH Indication LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message if HS-PDSCH resources could be allocated on TS0 for the UE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the *C-ID* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, no secondary serving HS-DSCH Radio Link(s) has been configured in the DRNS or if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE or in the *HS-DSCH FDD Secondary Serving Information To ModifyUnsynchronised* IE for each instance of the *Additional HS Cell Information RL Reconf Req* IE, indicate that new secondary serving HS-DSCH Radio Link(s) shall be setup, then:]

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

offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]

- [FDD If the *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]

[FDD – The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

# Intra-DRNS Serving HS-DSCH Radio Link Change:

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

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.] [1.28Mcps TDD– The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD *HS-PDSCH Timeslot Specific Information LCR* IE] [7.68 Mcps TDD *HS-PDSCH Timeslot Specific Information 7.68 Mcps* IE]in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE and the value is set to "allowed" or if HS-DSCH Information To Modify Unsynchronized IE is not included and the UE Context is configured with Sixtyfour QAM allowed for the serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM in the new configuration, then it shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the power offset for S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator, or Dual Stream MIMO with four transmit antennas Activation Indicator have been configured in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *C-ID* IE in the *Additional HS Cell Information RL Reconf Req* IE, one or more secondary serving HS-DSCH Radio Link(s) has been configured in the

DRNS and if the new configuration contains more than one secondary serving HS-DSCH Radio Link, then if the *Ordinal Number Of Frequency* IEs, in the *HS-DSCH FDD Secondary Serving Information* IE for each instance of the *Additional HS Cell Information RL Reconf Req* IE, indicate that existing secondary serving HS-DSCH Radio Links shall be subject to intra-DRNS secondary serving HS-DSCH Radio Link change, then the *HS-PDSCH RL ID* IE indicates the new Serving HS-DSCH Radio Link:]

- [FDD The DRNS shall release the HS-PDSCH resources on the old secondary serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new secondary serving HS-DSCH Radio Link. The DRNS shall remove the old secondary serving HS-PDSCH Radio Link if no E-DCH resources are allocated to the RL. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the secondary serving HS-DSCH and the DRNC shall include the *HS-SCCH Specific Secondary Serving Information Response* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE and the value is set to "allowed" or if HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE is not included and the UE context is configured with Sixtyfour QAM allowed for the secondary serving HS-DSCH Radio Link and not used in the current configuration and then if the DRNS decides to use 64 QAM for the new secondary serving HS-DSCH Radio Link, then it shall include the SixtyfourQAM DL Usage Indicator IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If, in the new configuration, the UE context is configured not to use Sixtyfour QAM for the secondary serving HS-DSCH, the DRNS shall include the *HS-DSCH TB Size Table Indicator* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD If the old and/or new configuration contains more than one Secondary Serving HS-DSCH Radio Link the HS-DSCH FDD Secondary Serving Information IE defines the new secondary serving HS-DSCH configuration in the DRNS to be used on the new secondary serving HS-DSCH Radio Link, and then:]
  - [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH FDD Secondary Serving Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
  - [FDD If the MIMO Activation Indicator IE or MIMO with four transmit antennas Activation Indicator IE, or Dual Stream MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link and the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas mode and include the MIMO Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the HS-DSCH Secondary Serving Cell Change

Information Response IE in the Additional HS Cell Change Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD If the Single Stream MIMO Activation Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS shall activate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If the power offset for S-CPICH for MIMO Request indicator and MIMO activation indicator have been configured in the new configuration and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the power offset for S-CPICH for MIMO with four transmit antennas Request indicator and MIMO with four transmit antennas activation indicator, or Dual Stream MIMO with four transmit antennas activation indicator have been configured in the new configuration and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, the DRNC shall include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

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

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS may include the Serving Grant Value IE and Primary/Secondary Grant Selector IE in the E-DCH FDD DL Control Channel Information IE in the Additional Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message for the initial grant for the Additional serving E-DCH RL and may include the Default Serving Grant in DTX Cycle 2 IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional*

Modified E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD – The DRNS may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every E-DCH Radio Link on secondary UL frequency in the DRNS. If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

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

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

- [FDD If the old Additional Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Additional Serving E-DCH Radio Link at the activation of the new configuration.]
- [FDD In the new configuration the DRNS shall allocate the E-DCH resources for the new additional serving E-DCH Radio Link on the secondary UL frequency. Non cell specific E-DCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Additional Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle* 2 IE.]
- [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# **HS-DSCH Modification:**

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

- The DRNC shall include the HS-DSCH Initial Capacity Allocation IE for each HS-DSCH MAC-d flow being modified for which the establishment of one or several new Priority Queues was requested, if the DRNS allows the SRNC to start the transmission of MAC-d PDUs for the Priority Queue(s) being established before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If UE context is configured to use "Flexible MAC-d PDU Size", then DRNC shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer for the Priority Queue of UE context.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Traffic Class* IE in the *HS-DSCH Information To Modify Unsynchronised* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC

- should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific HS-DSCH MAC-d flow indicates the value "RRC".
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the DRNS shall use the indicated HARQ Preamble Mode in the new configuration as described in TS 25.214 [10], if HS-DPCCH ACK/NACK preamble and postamble is supported. Then, in this case, if the mode 1 is applied, the DRNC shall include the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the *HARQ Preamble Mode Activation Indicator* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then:]
  - [FDD The DRNS shall activate/deactivate the MIMO mode or MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the HS-DSCH Radio Link in the new configuration in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE.]
  - [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO and include the MIMO Information Response IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD If the MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
  - [FDD If the MIMO with four transmit antennas Mode Indicator IE or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with

four transmit antennas IE in the HS-DSCH FDD Information Response IE. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]

- [FDD The DRNC may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the HS-DSCH Radio Link.]
- [FDD If MAC-ehs is applied in the new configuration, and if Sixtyfour QAM will not be used, the DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for HS-DSCH Transport Block Size signalling.]
- [1.28Mcps TDD- If the MIMO Mode Indicator IE is included in the HS-DSCH Information To Modify Unsynchronised IE, then:]
  - [1.28Mcps TDD- The DRNS shall activate/deactivate the MIMO mode for the HS-DSCH Radio Link in the new configuration in accordance with the *MIMO Mode Indicator* IE.]
  - [1.28 Mcps TDD If the *MIMO Mode Indicator* IE is set to "Activate", then the DRNS shall decide the SF mode for HS-PDSCH dual stream and include the *MIMO SF Mode for HS-PDSCH dual stream* IE in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD Any secondary serving HS-DSCH that was applied in the old configuration shall remain in the new configuration unless it is explicitly removed.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE the DRNS may use the supported HSDPA functions for this UE.]
- [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Information To Modify* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *HS-DSCH FDD Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Single Stream MIMO Mode Indicator* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall activate/deactivate the Single Stream MIMO for the HS-DSCH Radio Link in accordance with the *Single Stream MIMO Mode Indicator* IE.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE in the *Additional HS Cell Information RL Reconf Req* IE, then:]

- [FDD If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any secondary serving HS-SCCH transmission to this UE.]
- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE or Dual Stream MIMO with four transmit antennas Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the DRNS shall activate/deactivate the MIMO mode or

MIMO with four transmit antennas mode, or Dual Stream MIMO with four transmit antennas mode for the secondary serving HS-DSCH Radio Link in accordance with the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE.]

- [FDD If the MIMO Mode Indicator IE or MIMO with four transmit antennas Mode Indicator IE, or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate", then the DRNS shall decide the pilot configuration and the UE reporting configuration (N/M ratio) according to TS 25.214 [10] for MIMO or MIMO with four transmit antennas, or Dual Stream MIMO with four transmit antennas and include the MIMO Information Response IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the MIMO Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO Request Indicator IE is included, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO IE.]
- FDD If the MIMO with four transmit antennas Mode Indicator IE is set to "Activate" or Dual Stream MIMO with four transmit antennas Mode Indicator IE is set to "Activate" and Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is included, the DRNC shall, if supported and MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Secondary Serving HS-DSCH Radio Link is established, include the Power Offset For S-CPICH for MIMO with four transmit antennas IE in the HS-DSCH FDD Secondary Serving Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the Power Offset For S-CPICH for MIMO with four transmit antennas IE.]
- [FDD If the Single Stream MIMO Mode Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the Node B shall activate/deactivate the Single Stream MIMO mode for the secondary serving HS-DSCH Radio Link in accordance with the Single Stream MIMO Mode Indicator IE.]
- [FDD If the *Ordinal Number Of Frequency* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE, and the new configuration contains more than one secondary serving HS-DSCH Radio Link, then the DRNS shall use this value in the physical layer.]
- [FDD If the Sixtyfour QAM Usage Allowed Indicator IE is included in the HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised IE, then the DRNS may if the value is set to "allowed" use 64 QAM for the secondary serving HS-DSCH Radio Link, and the DRNS shall include the SixtyfourQAM DL Usage Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the *Sixtyfour QAM Usage Allowed Indicator* IE is included in the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE with value set to "not allowed", then the DRNS shall not use 64 QAM for the secondary serving HS-DSCH Radio Link.]
- [FDD If, in the new configuration, the UE context is configured to use the "Flexible MAC-d PDU Size" format and if Sixtyfour QAM will not be used for the secondaery serving HS-DSCH, then the DRNS shall include the HS-DSCH TB Size Table Indicator IE in the HS-DSCH FDD Secondary Serving Information Response IE in the Additional HS Cell Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in TS 25.321 [41] for secondary serving HS-DSCH Transport Block Size signalling.]
- [FDD The DRNS may include the *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Information Response* IE in the *Additional HS Cell Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Req* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

### **HS-DSCH MAC-d Flow Addition/Deletion:**

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

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

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

- The DRNS may use the Traffic Class IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If TrCH Source Statistics Descriptor IE is present with the value "RRC" in the HS-DSCH MAC-d Flows Information IE, then the DRNC should ignore the Traffic Class IE.
- If the TNL QoS IE is included for a MAC-d flow and if ALCAP is not used, the TNL QoS IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- The DRNC shall include the HS-DSCH Initial Capacity Allocation IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in TS 25.425 [32]. If the UE context is configured to use the "Flexible MAC-d PDU Size" format for the HS-DSCH, then DRNC shall only set in the HS-DSCH Initial Capacity Allocation IE the values for the peer of Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE to the values of the corresponding peer I in RADIO LINK RECONFIGURATION REQUEST message in the HS-DSCH MAC-d Flows To Add IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the MAC-hs Guaranteed Bit Rate IE in the HS-DSCH MAC-d Flows To Add IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the Maximum MAC-d PDU Size Extended IE for a Priority Queue in the HS-DSCH MAC-d Flows To Add IE, then the DRNC shall ignore the SID IE and MAC-d PDU Size IE in the MAC-d PDU Size Index IE and use Maximum MAC-d PDU Size Extended IE to optimise capacity allocation for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes DL RLC PDU Size Format IE for a Priority Queue in the HS-DSCH MAC-d Flows To Add IE, the DL RLC PDU Size Format IE may be used by the DRNS to determine the allocated capacity on user plane as described in TS 25.425 [32].
- [FDD FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related HSDPA Priority Queue for UE Aggregate Maximum Bit Rate Enforcement.]

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows To Add* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Preconfiguration Setup* IE in the *RL Information* IE the DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to TS 25.308 [63]:]

[FDD – The DRNS shall preconfigure sets of HS-SCCH codes on the cells preconfigured for HS-DSCH, primary serving HS-DSCH cell, as well as on the secondary serving HS-DSCH cells. The primary serving HS-DSCH cell is designated through the *C-ID* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION REQUEST message. The list of secondary serving HS-DSCH cells is designated by the

list of *Secondary C-ID* IEsin the *HS-DSCH Preconfiguration Setup* IE part of the *RL Information* IE in the RADIO LINK RECONFIGURATION REQUEST message.]

- [FDD The number of HS-SCCH codes to preconfigure for each cell may be optionally specified: ]
  - [FDD by the *Num Primary HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Setup* IE, for the primary serving HS-DSCH cell.]
  - [FDD by the *Num Secondary HS-SCCH Codes* IE in *the Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE for each of the secondary serving HS-DSCH cells.]
- [FDD If *Num Primary HS-SCCH Codes* IE or *Num Secondary HS-SCCH Codes* IE is not included in the message the number and distribution of codes on primary and any secondary cells shall be preconfigured to satisfy any limitations in TS 25.214 [10].]
- [FDD The DRNS shall return these codes in the *Sets of HS-SCCH Codes* IE along with the corresponding percell *HS-DSCH-RNTI* IE in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE of the RADIO LINK RECONFIGURATION RESPONSE.]
- [FDD The DRNS shall use the first in the numbered list the primary serving HS-DSCH cell's of HS-SCCH codes in the HS-SCCH Preconfigured Codes IE sent to the SRNC to signal the Target Cell HS-SCCH Order defined in TS 25.331 [16].]
- [FDD The DRNS shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message, IEs according to the rules defined for HS-DSCH Setup at Serving HS-DSCH Radio Link Change and:]
  - [FDD if *HARQ Preamble Mode* IE is included in the *HS-DSCH Preconfiguration Setup* IE the HARQ Preamble Mode Activation Indicator IE.]
  - [FDD if MIMO Activation Indicator IE is included in the HS-DSCH Preconfiguration Setup IE the MIMO N/M Ratio IE.]
  - [FDD if *Ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE]
  - [FDD if MIMO with four transmit antennas Activation Indicator IE is included in the HS-DSCH Preconfiguration Setup IE the MIMO N/M Ratio IE.]
  - [FDD if *Dual Stream MIMO with four transmit antennas Activation Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE the *MIMO N/M Ratio* IE.]
  - [FDD if *Multiflow ordinal number of frequency* IE is included in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE]
  - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfiguration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
  - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell.]
  - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE.]
  - [FDD if the *UE with enhanced HS-SCCH support indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS shall store this information in the preconfigured configuration.]
  - [FDD the *SixtyfourQAM DL Support Indicator* IE may be included.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE, then the DRNS may store this information in the preconfigured configuration.]
  - [FDD If the *UE Support Indicator Extension* IE is included in the *HS-DSCH Preconfiguration Setup* IE with the bit *UE DTXDRX related HS-SCCH orders uniform behavior indicator* set to 0, then the DRNS shall, if

- supported, include the *Support of dynamic DTXDRX related HS-SCCH order* IE in the *Preconfiguration Info* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD the DRNS shall, if supported, include in the *Sets of HS-SCCH Codes* IE the *Measurement Power Offset* IE for each preconfigured cell.]
- [FDD The DRNS shall include in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message the *E-DCH FDD DL Control Channel Information* containing the preconfigured configuration of the E-DCH serving cell according to the rules defined for Serving E-DCH Radio Link Change as follows:]
  - [FDD The DRNS shall allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
  - [FDD The DRNS may preconfigure the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the serving E-DCH RL and include these values in the *E-DCH FDD DL Control Channel Information* IE.]
- [FDD If the *Power Offset For S-CPICH for MIMO Request Indicator* IE is included in the *HS-DSCH Preconfiguration Setup* IE or in the *Secondary Cells* IE in the *HS-DSCH Preconfiguration Setup* IE, the DRNC shall, if supported and MIMO pilot configuration with Primary and Secondary CPICH is set up on the cell with a non-zero power offset where HS-DSCH / secondary HS-DSCH is preconfigured, include the *Power Offset For S-CPICH for MIMO* IE in the *HS-DSCH Preconfiguration Info* IE or in the *Sets of HS-SCCH Codes* IE in the *HS-DSCH Preconfiguration Info* IE for each preconfigured cell in the RADIO LINK RECONFIGURATION RESPONSE message. If zero power offset the DRNC may include the *Power Offset For S-CPICH for MIMO* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *Multiflow Information* IE, then the DRNC shall allocate resources for the preconfigured Multiflow.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *F-TPICH Information* IE, then the DRNC shall allocate resources for the preconfigured F-TPICH channel and include *F-TPICH Information Response* IE in the *HS-DSCH Preconfiguration Info* IE.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL CLTD Information* IE, then the DRNC shall allocate resources for the preconfigured UL CLTD.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *UL MIMO Information* IE, then the DRNC shall allocate resources for the preconfigured UL MIMO.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixteenQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixteen QAM.]
- [FDD If the *HS-DSCH Preconfiguration Setup* IE includes the *SixtyfourQAM UL Operation Indicator* IE, then the DRNC shall allocate resources for the preconfigured UL Sixtyfour QAM.]

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

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

- [FDD if the Additional E-DCH Non-Serving RL Preconfiguration Setup IE is included, the DRNC may include the New non-serving RL E-DCH FDD DL Control Channel Information A IE, the New non-serving RL E-DCH FDD DL Control Channel Information B IE and/or the New non-serving RL E-DCH FDD DL Control Channel Information C IE according to the choice of new Serving RL in Additional E-DCH New non-serving RL E-DCH FDD DL Control Channel Information IE for the additional non serving E-DCH RL in the Non-Serving RL Preconfiguration Info IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD –If the F-TPICH Information IE is included, the DRNC shall use this information to allocate resources for the preconfigured F-TPICH channel for this RL in the serving RLS according to TS 25.211 [8], and include F-TPICH Information Response IE in the Non-Serving RL Preconfiguration Info IE.]

#### [FDD – Enhanced HS Serving Cell Change:]

[FDD — Upon receipt of the RADIO LINK RECONFIGURATION REQUEST message, if the Enhanced HS Serving Cell Change is preconfigured in the DRNS for the UE context, the DRNS may execute the Enhanced HS Serving Cell Change procedure according to TS 25.308 [63].]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Enhanced HS Serving CC Abort* IE in the *HS-DSCH Information To Modify Unsynchronised* IE or the *HS-DSCH FDD Information* IE then the DRNS shall not execute the unsynchronized Enhanced HS Serving Cell Change procedure when performing the Serving HS-DSCH Radio Link Change or the HS-DSCH Setup.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *No of Target Cell HS-SCCH Order* IE then the DRNS shall repeat the Target Cell HS-SCCH Order on the HS-SCCH the number of times defined in the IE.]

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

#### [FDD - Multiflow Setup:]

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

#### [FDD - Multiflow Modification:]

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

# [FDD - Multiflow Removal:]

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

# [FDD – E-DCH Setup:]

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

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel information* IE in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information* IE in the *E-DCH FDD Information* IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH Information* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use

*Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel and use the indicated format in user plane frame structure for E-DCH channels (TS 25.425 [32]) and MAC (TS 25.321 [41]).]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant IE, if included, for the related resource allocation operation.]
- [FDD If in the RADIO LINK RECONFIGURATION REQUEST message the E-DCH Grant Type is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related Mac-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related Mac-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH Processing
   Overload Level IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number
   of TTIs, indicated in the E-DCH Processing Overload Level IE, because of processing issue, the DRNS shall
   notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *HS-DSCH Configured Indicator* IE and/or the *Maximum Set of E-DPDCHs* IE, and/or the *Puncture Limit* IE and/or the *E-TTI* IE, the DRNS shall use and apply the value(s) in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]
  - [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]

#### [FDD – E-DCH Radio Link Handling:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE in the *RL Information* IE:]

- [FDD The DRNC shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC may include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-HICH Signature Sequence* IE and the DRNC may include the corresponding *E-RGCH Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE, set to "E-DCH", in the *RL Information* IE.]
- [FDD The DRNC shall remove the E-DCH resources, if any, on the Radio Links, that are indicated by the *E-DCH RL Indication* set to "Non E-DCH".]
- [FDD For each RL for which the *E-DCH RL Indication* IE is set to "E-DCH", and which has or can have a common generation of E-RGCH information with another RL (current or future) when the DRNS would contain the E-DCH serving RL, the DRNS shall include the *E-DCH RL Set ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The value of the *E-DCH RL Set ID* IE shall allow the SRNC to identify the E-DCH RLs that have or can have a common generation of E-RGCH information.]

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

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [FDD If the old Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.]
- [FDD If the new Serving E-DCH RL is within this DRNS:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code
    of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *RL Information Response* IE for the indicated RL in the RADIO LINK RECONFIGURATION RESPONSE
    message.]
  - [FDD The DRNS may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the initial grant for the new serving E-DCH RL.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
  - [FDD If a serving cell change is performed the RADIO LINK RECONFIGURATION RESPONSE message may contain invalid data (see 9.2.2.4C).]

- [FDD The DRNS may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK RECONFIGURATION RESPONSE message for the new serving E-DCH RL.]
- [FDD The DRNS may include the *E-RGCH/E-HICH Channelisation Code* IE and/or the *E-HICH Signature Sequence* IE and/or the *E-RGCH Signature Sequence* IE or may alternatively include the *E-RGCH Release Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every E-DCH Radio Links in the DRNS.]
- [FDD If the DRNS has no valid data for the *E-RGCH/E-HICH Channelisation Code* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message, then it shall insert the *E-RGCH and E-HICH Channelisation Code Validity Indicator* IE in the *E-DCH FDD DL Control Channel Information* IE, to indicate that the *E-RGCH/E-HICH Channelisation Code* IE contains invalid data.]

#### [FDD - E-DCH Modification:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE, then:]

- [FDD If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [FDD If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD If *Traffic Class* IE is included for an E-DCH MAC-d flow the DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE for this specific E-DCH MAC-d flow indicates the value "RRC".]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Data Description Indicator* IE, the DRNC shall use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH FDD Information To Modify* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow in the *E-DCH FDD Information To Modify* IE, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH HARQ Power Offset FDD* IE in the *E-DCH FDD Information To Modify* IE for an E-DCH MAC-d flow the DRNS shall use this information for calculating the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in TS 25.214 [10].]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH Grant Type and it is indicated as being "E-DCH Non-Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume non-scheduled grants being configured for that E-DCH MAC-d flow and shall use the information within the *HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant* IE, if included, for the related resource allocation operation.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the E-DCH Grant Type and it is indicated as being "E-DCH Scheduled Transmission Grant" for an E-DCH MAC-d flow the DRNS shall assume scheduled grants being configured for that E-DCH MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION RE QUEST message includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete

the indicated logical channels. When an logical channel is deleted, all its associated configuration data shall also removed.

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
  - [FDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNC shall apply the value in the new configuration.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Bundling Mode Indicator* IE for an E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information To Modify* IE and the *Bundling Mode Indicator* IE is set to "Bundling" and the *E-TTI* IE is set to "2ms", then the DRNS shall use the bundling mode for the E-DCH UL data frames for the related MAC-d flow, otherwise the DRNS shall use the non-bundling mode for the E-DCH UL data frames for the related MAC-d flow.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Maximum Bitrate* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH ReferencePower Offset* IE, then the DRNS may use this value as a default HARQ power offset if it is not able to decode the MAC-e PDU and to determine the value of the actual HARQ power offset.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-AGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-AGCH power. The E-AGCH Power Offset should be applied for any E-AGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-RGCH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-RGCH power for the RL. The E-RGCH Power Offset should be applied for any E-RGCH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-HICH Power Offset* IE in the *RL Specific E-DCH Information* IE, then the DRNS may use this value to determine the E-HICH power for the RL. The E-HICH Power Offset should be applied for any E-HICH transmission to this UE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *SixteenQAM UL Operation Indicator* IE in the *E-DCH FDD Information To Modify* IE, the DRNS shall activate/deactivate SixteenQAM UL Operation for the RL in accordance with the *SixteenQAM UL Operation Indicator* IE.]

- [FDD If SixteenQAM UL Operation is activated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 2 according to TS 25.321 [41]. If SixteenQAM UL Operation is deactivated, then the DRNS shall base the handling of the Relative Grant signalling on Scheduling Grant Table 1 according to TS 25.321 [41].]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH DL Control Channel Grant Information* IE in the *E-DCH FDD Information To Modify* IE, the DRNS may modify E-AGCH Channelisation Code, E-RGCH/E-HICH Channelisation Code, E-RGCH Signature Sequence and/or E-HICH Signature Sequence for the E-DCH RL indicated by the *E-DCH RL ID* IE. The DRNC shall then report the modified configuration which is used in the new configuration specified in the *E-DCH FDD DL Control Channel Information* IE for each E-DCH RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD – E-DCH MAC-d Flow Addition:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Add* IE, then the DRNS shall use this information to add the indicated E-DCH MAC-d flows.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH MAC-d Flows To Add* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [FDD The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B. If *TrCH Source Statistics Descriptor* IE is present with the value "RRC" in the *E-DCH MAC-d Flows Information* IE, then the DRNC should ignore the *Traffic Class* IE.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH Logical Channel Information IE* in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Aggregate Maximum Bit Rate Enforcement Indicator* IE in the *E-DCH Logical Channel Information IE* in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall, if supported, consider the data of the related E-DCH Logical Channel for UE Aggregate Maximum Bit Rate Enforcement.]

# [FDD – E-DCH MAC-d Flow Deletion:]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IEs, then the DRNS shall use this information to delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration shall also be removed.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

#### [FDD – Additional E-DCH Setup:]

[FDD – If the *Additional E-DCH Cell Information RL Reconf Req* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency* is "Setup", then the *Additional E-DCH Cell Information Setup* IE defines the new configuration and then:]

- [FDD If the *C-ID* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *C-ID* IE indicates the cell in which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the E-DCH on the secondary uplink frequency and setup the requested E-DCH resources on the Radio Links and in the cells indicated by the E-DCH Additional RL ID IE and the C-ID IE in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE.]

- [FDD If the *C-ID* IE is not included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE the *E-DCH Additional RL ID* IE indicates the existing RL on which the additional E-DCH shall be setup.]
  - [FDD The DRNS shall setup the additional E-DCH on the Radio Links indicated by the *E-DCH Additional RL ID* IE in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE.]
- [FDD The DRNS shall use for the non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *UL SIR Target* IE in the *UL DPCH Information* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE and/or the *DL Power Balancing Information* IE and/or the *Minimum Reduced E-DPDCH Gain Factor* IE in the *Multicell E-DCH Information* IE in the *Additional E-DCH FDD Setup Information* IE are present, the DRNS shall use the information in the same same way as for the information used on Primary uplink frequency.]
- [FDD If the Secondary UL Frequency Activation State IE is present in the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE, the DRNS shall use the information as initial activation state of the Radio Links on the secondary uplink frequency.]
- [FDD If the *Initial DL Tx Power* IE, the *Primary CPICH Ec/No* IE, the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE and/or the *E-HICH Power Offset* IE is included in the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the Enhanced Primary CPICH Ec/No IE is included in the Multicell E-DCH RL Specific Information IE in the Additional E-DCH Secondary RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If the F-DPCH Slot Format Support Request IE in the F-DPCH Information IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE is included, the DRNS shall configure the concerned UE Context for F-DPCH Slot Format operation according to TS 25.211 [8] and include the F-DPCH Slot Format IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconfIE in the RADIO LINK RECONFIGURATION RESPONSE message. If the Multicell E-DCH Information IE in the Additional E-DCH FDD Setup Information IE includes the F-DPCH Slot Format IE, the DRNS may use the F-DPCH Slot Format IE to determine the F-DPCH slot format.]
- [FDD If the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE, the E-DCH Maximum Bitrate IE, the E-DCH Minimum Set E-TFCI IE and/or the E-DCH Processing Overload Level IE are present in the Additional E-DCH FDD Information IE in the Additional E-DCH Cell Information Setup IE, the DRNS shall use the information in the same way as for the information used on Primary uplink frequency.]
- [FDD If activation of power balancing for the Additional E-DCH RL by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs

as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]

- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE the DRNS may include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE and shall include the E-RGCH/E-HICH Channelisation Code IE and the corresponding E-HICH Signature Sequence IE and the DRNS may include the corresponding E-RGCH Signature Sequence IE for each Additional E-DCH RL in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-HICH Channelisation Code IE, then it shall insert the E-RGCH and E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]
- [FDD If the Additional Serving E-DCH Radio Link is configured in the DRNS, then:]
  - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both for
    the corresponding RL and include these E-RNTI identifiers and the channelisation code of the corresponding
    E-AGCH in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD
    Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO
    LINK RECONFIGURATION RESPONSE message.]
  - [FDD The DRNS may include in the *E-DCH FDD DL Control Channel Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE for the initial grant for the Additional serving E-DCH RL and may include the *Default Serving Grant in DTX Cycle 2* IE.]
  - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If Primary CPICH is not to be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If Secondary CPICH may be used as a Phase Reference for this Radio Link on the secondary UL frequency, the DRNS shall include the *Secondary CPICH Information* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the DRNS doesn't include the *Secondary CPICH Information* IE, it shall not include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used".]

# [FDD – Additional E-DCH Configuration Change]

[FDD – If the *Additional E-DCH Cell Information RL Reconf Req* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency* is "Configuration Change", then the *Additional E-DCH Cell Information Configuration Change* IE defines the new configuration and then:]

- [FDD – If the *Minimum Reduced E-DPDCH Gain Factor* IE and/or the *Common DL Reference Power* IE is present in the *Multicell E-DCH Information* IE in the *Additional E-DCH Configuration Change Information* IE IE the DRNS shall use the information in the same way as for the information that is used on the Primary uplink frequency.]

- [FDD. If the UE Context is configured for F-DPCH Slot Format operation, the DRNS shall include the *F-DPCH Slot Format* IE in the *Additional E-DCH FDD Information Response* IE for new RLs on the secondary UL frequency or in the *Additional Modified E-DCH FDD Information Response* IE for modified RLs in the RADIO LINK RECONFIGURATION RESPONSE message.]

### [FDD - Additional E-DCH RL Addition:]

[FDD – If the Additional E-DCH RL Specific Information To Add IE is present in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Configuration Change Information IE, then:]

- [FDD The DRNS shall setup the E-DCH resources, as requested or as configured in the UE context, on the Radio Links indicated by the *E-DCH Additional RL ID* IE. Non cell specific Radio Link related parameters and non cell specific E-DPCH, UL DPCH, E-DCH and F-DPCH parameters shall take the same values as for the corresponding cell of the Primary uplink frequency.]
- [FDD If the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE, the *E-HICH Power Offset* IE is included, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing Additional E-DCH RL(s) and the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power* IE in the *Multicell E-DCH RL Specific Information* IE, the DRNS shall activate the power balancing and use the *DL Reference Power* IE for the power balancing procedure in the new Additional RL(s), if activation of power balancing by the RADIO LINK RECONFIGURATION REQUEST message at RL addition on secondary UL frequency is supported, according to subclause 8.3.15. In this case, the DRNS shall include the *DL Power Balancing Activation Indicator* IE in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the DRNS starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e. *P<sub>init</sub>* shall be set to the power level which is calculated based on the following IEs (if received): *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL Specific Information* IE or to the power level which is calculated based on the power relative to the Primary CPICH power used by the existing Additional RLs.]
- [FDD For each Additional E-DCH RL not having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall set the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message to a value that uniquely identifies the RL as a RL Set within the UE Context. The generation of E-HICH related information for Additional E-DCH RLs in different RL Sets shall not be common.]
- [FDD For all Additional E-DCH RLs having a common generation of the TPC commands in the DL with another Additional E-DCH RL, the DRNS shall assign to each Additional E-DCH RL the same value for the *RL Set ID* IE included in the *Additional E-DCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message. This value shall uniquely identify these Additional E-DCH RLs as members of the same RL Set within the UE Context. The generation of E-HICH information for all Additional E-DCH RLs in a RL Set shall be common.]
- [FDD For each Additional E-DCH RL which has or can have a common generation of E-RGCH information with another Additional E-DCH RL (current or future) when the DRNS would contain the Additional E-DCH serving RL, the DRNS shall set a same value to the *E-DCH RL Set ID* IE for the Additional E-DCH RL in the *Additional E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message]
- [FDD For every additional E-DCH RL indicated in the Additional E-DCH RL Specific Information To Add IE, the DRNS may include the E-AGCH And E-RGCH/E-HICH FDD Scrambling Code IE and shall include the E-RGCH/E-HICH Channelisation Code IE and the corresponding E-HICH Signature Sequence IE and the DRNS may include the corresponding E-RGCH Signature Sequence IE in the E-DCH FDD DL Control Channel Information IE in the Additional E-DCH FDD Information Response IE in the Additional E-DCH Cell Information Response RLReconf IE in the RADIO LINK RECONFIGURATION RESPONSE message and if DRNS has no valid data for the E-RGCH/E-

HICH Channelisation Code IE, then it shall insert the E-RGCH/E-HICH Channelisation Code Validity Indicator IE to indicate that the E-RGCH/E-HICH Channelisation Code IE contains invalid data.]

- [FDD – If the *Primary CPICH Ec/No* IE or the *Primary CPICH Ec/No* IE and the *Enhanced Primary CPICH Ec/No* IE in the *Multicell E-DCH RL Specific Information* IE measured by the UE are included for a RL in the RADIO LINK RECONFIGURATION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this additional RL. If the *Primary CPICH Ec/No* IE is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

# [FDD - Additional E-DCH RL Modification:]

[FDD – If the *Additional E-DCH RL Specific Information To Modify* IE is present in the *Additional E-DCH Configuration Change Information* IE, then the additional E-DCH RL indicated by the *E-DCH Additional RL ID* IE indicates the RL on which E-DCH resources shall be modified:]

- [FDD If the *E-AGCH Power Offset* IE, the *E-RGCH Power Offset* IE, the *E-HICH Power Offset* IE, and/or the *E-DCH DL Control Channel Grant* IE in the *Multicell E-DCH RL Specific Information* IE is included, the DRNS shall use the information in the same way as for the information used on the Primary uplink frequency.]
- [FDD If the *DL Reference Power* IEs is included in the *Multicell E-DCH RL Specific Information* IE and power balancing is active, DRNS shall apply DL power Control in the same way as defined for the Primary uplink frequency.]
- [FDD If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNS shall include the *DL Power Balancing Updated Indicator* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION RESPONSE message includes the *Primary CPICH Usage For Channel Estimation* IE and/or the *Secondary CPICH Information Change* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE, the DRNS shall avoid the new configuration in which neither the Primary CPICH nor the Secondary CPICH is used as a Phase Reference for this Radio Link.]

#### [FDD – Additional E-DCH Modification:]

[FDD – If the *Additional E-DCH FDD Information To Modify* IE is present in the *Additional E-DCH Configuration Change Information* IE, then:]

- [FDD If the *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE, the *E-DCH Minimum Set E-TFC*I IE and/or the *E-DCH Maximum Bitrate* IE is included, the DRNS shall use this information for the related resource allocation operation.]
- [FDD If the *E-DCH Processing Overload Level* IE is included, then if the DRNS could not decode the E-DPCCH/E-DPDCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of processing issue, the DRNS shall notify the RNC by initiating the Radio Link Failure procedure.]
- [FDD If the DL TX power upper or lower limit has been re-configured for the secondary UL frequency, the DRNS shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNS shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE in the *Additional Modified E-DCH FDD Information Response* IE in the *Additional E-DCH Cell Information Response RLReconf* IE for each Radio Link when these values are changed.]

- [FDD – If the Additional E-DCH serving RL is in this DRNS, the DRNS may choose to change the E-DCH HARQ process allocation for 2ms TTI for scheduled transmission. In this case the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the HARQ Process Allocation For 2ms Scheduled Transmission Grant IE in the Additional Modified E-DCH FDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### [FDD – Additional E-DCH Removal]

[FDD – If the *Additional E-DCH Cell Information RL Reconf Req* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency* is "Removal", then the additional E-DCH on the secondary uplink frequency shall be removed.]

#### [TDD - Intra- DRNS Serving E-DCH Radio Link Change:]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH Serving RL* IE, this indicates the new Serving E-DCH Radio Link:]

- [TDD In the new configuration the DRNS shall de-allocate the E-DCH resources of the old Serving E-DCH Radio Link and allocate the E-DCH resources for the new Serving E-DCH Radio Link.]
- [3.84Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE in the *E-DCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [1.28Mcps TDD The DRNS shall allocate E-AGCH parameters and E-HICH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* IE and the *E-HICH Specific Information* Response IE in the *E-DCH Information Response* 1.28Mcps IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [7.68Mcps TDD The DRNS shall allocate E-AGCH parameters corresponding to the E-DCH and include the *E-AGCH Specific Information Response* 7.68Mcps IE in the *E-DCH TDD Information Response* 7.68Mcps IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]

# [TDD - E-PUCH Handling:]

[3.84Mcps TDD and 7.68Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-PUCH Information* IE, the DRNS shall apply the parameters to the new configuration.]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-PUCH Information LCR* IE, the DRNS shall apply the parameters to the new configuration.]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-TFCS Information* IE, the DRNS shall apply the beta parameters to the new configuration.]

# [3.84Mcps TDD – E-DCH Setup:]

[3.84Mcps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information* IE.]

#### [1.28Mcps TDD – E-DCH Setup:]

[1.28cps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information LCR* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information LCR* IE.]

[1.28Mcps TDD - If the *UE TSO Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify* IE is not present, or if the *UE TSO Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE is not present, and if the RADIO LINK RECONFIGURATION REQUEST message includes the *UE* 

TSO Capability LCR IE in the E-DCH TDD Information LCR IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

#### [7.68Mcps TDD – E-DCH Setup:]

[7.68Mcps TDD – the radio link may be reconfigured to support E-DCH by including the appropriate E-DCH information elements: *E-DCH Serving RL* IE, *E-PUCH Information* IE, *E-TFCS Information TDD* IE, *E-DCH MAC-d Flows to Add* IE and *E-DCH TDD Information* 7.68Mcps IE.]

# [TDD- E-DCH MAC-d Flow Addition/Deletion:]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or E-DCH *MAC-d Flows To Delete* IEs, then the DRNS shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum MAC-d PDU Size Extended* IE for a E-DCH Logical Channel in the *E-DCH MAC-d Flows Information* IE in the *E-DCH TDD Information To Add* IE, then the DRNS shall ignore the *MAC-d PDU Size* IE in the *MAC-d PDU Size List* IE and use *Maximum MAC-d PDU Size Extended* IE to optimise capacity allocation for the related E-DCH Logical Channel.]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNS shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add* IE, then:]

- [TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]
- [1.28Mcps TDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Maximum Bit Rate LC*R IE in the *E-DCH Logical Channel Information* IE in the *E-DCH MAC-d Flows To Add* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]

# [3.84Mcps TDD – E-DCH Non-scheduled allocations:]

[3.84Mcps TDD – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information TDD* IE in the *E-DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [1.28Mcps TDD – E-DCH Non-scheduled allocations:]

[1.28Mcps – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information LCR TDD* IE in the *E-DCH Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [7.68Mcps TDD – E-DCH Non-scheduled allocations:]

[7.68Mcps TDD – The DRNS shall determine any non-scheduled resource to be granted for the radio link, and return this in the *E-DCH Non-scheduled Grant Information* 7.68Mcps *TDD* IE in the *E-DCH Information Response* 7.68Mcps IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

# [3.84Mcps TDD – E-DCH Modification:]

[3.84Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information* IE, then:]

- [3.84Mcps TDD If the E-DCH TDD Information IE includes the E-DCH TDD Maximum Bitrate IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [3.84Mcps TDD If the *E-DCH TDD Information* IE includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH*

*Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]

- [3.84Mcps TDD – If the *E-DCH TDD Information* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

### [1.28Mcps TDD – E-DCH Modification:]

[1.28Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information LCR* IE, then:]

- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Physical Layer Category LCR* IE or *Extended E-DCH Physical Layer Category LCR* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Maximum Number of Retransmission for Scheduling Info LCR* IE and the *E-DCH Retransmission timer for Scheduling Info LCR* IE, then the DRNS shall use these parameters for the transmission of scheduling information without any MAC-d PDUs.]
- [1.28Mcps TDD If the *E-DCH TDD Information LCR* IE includes the *Multi-Carrier E-DCH Physical Layer Category LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for multi-carrier E-DCH scheduling.]
- [1.28Mcps TDD If the *UE TSO Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information To Modify* IE is not present, or if the *UE TSO Capability LCR* IE in the *UE Capabilities Information* IE in the *HS-DSCH Information* IE is not present, and if the RADIO LINK RECONFIGURATION REQUEST message includes the *UE TSO Capability LCR* IE in the *E-DCH TDD Information LCR* IE, the DRNS can use this information to allocate the downlink resources for the UE according to TS 25.306 [42].]

#### [7.68Mcps TDD – E-DCH Modification:]

[7.68Mcps TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information 7.68Mcps* IE, then:]

- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH TDD Maximum Bitrate 7.68Mcps* IE for an E-DCH, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH Processing Overload Level* IE, then if the DRNS could not decode the E-PUCH for the last consecutive number of TTIs, indicated in the *E-DCH Processing Overload Level* IE, because of a processing issue, the DRNS shall notify the SRNC by initiating the Radio Link Failure procedure.]
- [7.68Mcps TDD If the *E-DCH TDD Information 7.68Mcps* IE includes the *E-DCH Power Offset for Scheduling Info* IE, then the DRNS shall use this value as a power offset for the transmission of scheduling information without any MAC-d PDUs.]

[TDD- If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH TDD Information To Modify* IE, then:]

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD– If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS shall use this new power offset value.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels:]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the DRNS shall apply the values in the new configuration.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the DRNS shall apply the values in the new configuration.]
  - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LC*R IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
  - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNC shall apply the value in the new configuration.]
- [TDD– If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE, then the DRNS shall use this value to determine whether MAC-e (or MAC-i) Reset is performed in the UE for sending the HARQ Failure Indication.]

### [1.28Mcps TDD –Multi-Carrier E-DCH Continue:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue*, *Setup or Change* is "Continue", then the current Multi-Carrier E-DCH configuration shall not be changed.]

#### [1.28Mcps TDD – Multi-Carrier E-DCH Setup:]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Setup", then the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]

- [1.28Mcps TDD The DRNS shall use the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE to decide the transport bearer mode in the new configuration.]
- [1.28Mcps TDD The DRNS shall setup the requested E-DCH resource on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]

## [1.28Mcps TDD – Multi-Carrier E-DCH Change:]

- [1.28Mcps TDD If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue*, *Setup or Change* is "Change", then the *Multi-Carrier E-DCH Information LCR* IE defines the new configuration and then:]
  - [1.28Mcps TDD If the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE is different from current configured frequencies, then the DRNS shall setup the E-DCH resources, as requested in the DRNS Communication Context, on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]
  - [1.28Mcps TDD If the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE is the same as any current configured frequency, then the DRNS shall reconfigure the E-DCH resources, as requested or as configured in the DRNS Communication Context, on the uplink frequecies indicated by the *UARFCN* IE in the *Multi-Carrier E-DCH Information LCR* IE.]

[1.28Mcps TDD - If the *Multi-Carrier E-DCH Information Reconf* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the choice of *Continue, Setup or Change* is "Change" and the *Removal UL Multi-Carrier info* IE is included, then the DRNS shall remove the corresponding E-DCH configuration on the uplink frequencies indicated by the *UARFCN* IE in the *Removal UL Multi-Carrier info* IE.]

#### General:

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD – *RL Specific E-DCH Information* IE] [TDD – *E-DCH MAC-d Flows to Add* IE], the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow being added or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] being added, or any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included] or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

The DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message for any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow being added or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] being added, or any Transport Channel [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included], HS-DSCH MAC-d flow or E-DCH MAC-d flow [FDD – for which the *Transport Bearer Not Requested Indicator* IE was not included] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in TS 25.427 [4], subclause 5.10.1, and in TS 25.425 [32], subclause 5.3.2.

- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer Shall not be Established" for a DCH or an E-DCH MAC-d flow being added, then the DRNC shall not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow and shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE set to "Transport Bearer may not be Established" for a DCH or an E-DCH MAC-d flow being added and:]

- [FDD if the DRNC establishes a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of a transport bearer for the DCH or E-DCH MAC-d flow being established.]
- [FDD if the DRNC does not establish a transport bearer for the concerned DCH or E-DCH MAC-d flow, the DRNC shall include the *Transport Bearer Not Setup Indicator* IE for the corresponding DCH or E-DCH MAC-d flow in the RADIO LINK RECONFIGURATION RESPONSE message.]

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE only for one of the DCHs [FDD – for which the *Transport Bearer Not Requested Indicator* IE is not included] in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE [FDD for the concerned DCH for which the *Transport Bearer Not Requested Indicator* IE is not included]in the *DCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message for only one of the combined Radio Links.

[FDD – In the case of an E-DCH RL being combined with another E-DCH RL within the DRNS, the *E-DCH FDD Information Response* IE shall be included only for one of the combined E-DCH RLs.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Additional E-DCH Cell Information RL Reconf Req* IE, then:]

- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]
- [FDD if the *Multicell E-DCH Transport Bearer Mode* IE for an Additional E-DCH to be Setup is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex MAC-d flows on the transport bearers.]
- [FDD if Separate Iur Transport Bearer Mode is used in the new configuration, then:]
  - [FDD the DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Not Requested Indicator* IE in the *RL Specific E-DCH Information* IE in the *RL Information* IE and/or the *Transport Bearer Request Indicator* IE in the *E-DCH FDD Information To Modify* IE received for the corresponding Radio Link(s) of the Primary Uplink Frequency to determine the transport bearer configuration in the new configuration for the radio links of the Secondary Uplink Frequency.]
  - [FDD If the Transport Layer Address IE and Binding ID IE is included for an E-DCH MAC-d flow in the Additional E-DCH MAC-d Flows Specific Information IE in the Additional E-DCH RL Specific Information To Setup IE in the Additional E-DCH FDD Setup Information IE in the Additional E-DCH Cell Information Setup IE or in the Additional E-DCH RL Specific Information To Add IE and/or the Additional E-DCH RL Specific Information To Modify IE in the Additional E-DCH Configuration Change Information IE in the Additional E-DCH Cell Information Configuration Change IE, then the DRNS may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow. If the DRNS establishes a transport bearer for the concerned E-DCH MAC-d flow the DRNS shall, for establishment of the transport bearer, include in the RADIO LINK RECONFIGURATION RESPONSE message in the Additional E-DCH Cell Information Response RLReconf IE the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE in the Additional E-DCH FDD Information Response IE for new E-DCH radio links on the Secondary UL frequency and/or include the Binding ID IE and Transport Layer Address IE in the Additional E-DCH MAC-d Flow Specific Information Response IE in the Additional Modified E-DCH FDD Information Response IE for radio links on the Secondary UL frequency that has been modified.]

[1.28Mcps TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Multi-Carrier E-DCH Information Reconf* IE, then:]

- [1.28Mcps TDD - If the *Multi-carrier E-DCH Transport Bearer Mode LCR* IE is set to "Separate Iur Transport Bearer Mode" the DRNS shall use this mode in the new configuration and apply separate transport bearers for the MAC-d flows.]

- [1.28Mcps TDD If the *Multi-Carrier E-DCH Transport Bearer Mode LCR* IE is set to "UL Flow Multiplexing Mode" the DRNS shall use this mode in the new configuration and multiplex each MAC-d flow on one transport bearer.]
- [1.28Mcps TDD If the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Setup" and the Separate Iur transport bearer mode is used in the new configuration, or if the choice of *Continue, Setup or Change* in the the *Multi-Carrier E-DCH Information Reconf* IE is "Change" and the Transport Bearer Mode is changed to "Separate Iur Transport Bearer Mode" indicated by *Multi-carrier E-DCH Transport Bearer Mode LCR* IE, then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *Multi-Carrier E-DCH Information Response LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]
- [1.28Mcps TDD The DRNS shall follow the rules defined in this procedure for single carrier mode of operation for establishment of the transport bearer for a MAC-d flow, use the *Transport Bearer Request Indicator* IE in the *E-DCH TDD Information to Modify* IE received for the corresponding Radio Link to determine the transport bearer configuration in the new configuration for the all Uplink Frequencies.]
- [1.28Mcps TDD If the E-DCH UL flow multiplexing mode is used in the new configuration and if the *Transport Bearer Request Indicator* IE is set to "Bearer Requested", then the DRNS shall include the *Binding ID* IE and *Transport Layer Address* IE in the *E-DCH TDD Information Response 1.28Mcps* IE in the RADIO LINK RECONFIGURATION RESPONSE message for establishment of a transport bearer for every E-DCH MAC-d flow being established.]

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH or on the F-DPCH of the RL except, if the UE Context is configured to use DPCH in the downlink, during compressed mode, when the  $\delta P_{curr}$ , as described in TS 25.214 [10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD and 7.68 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/CCTrCH Maximum DL TX Power IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/CCTrCH Minimum DL TX Power IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD – If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

## 8.3.7.3 Unsuccessful Operation

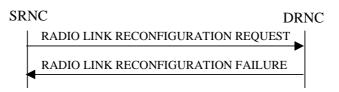


Figure 15: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the DRNS cannot allocate the necessary resources for all the new DCHs in a set of co-ordinated DCHs requested to be added, it shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure.

[FDD – If the MIMO Activation Indicator IE is included and the Power Offset For S-CPICH for MIMO Request Indicator IE is not included in the HS-DSCH FDD Information IE in the HS-DSCH Serving Cell Change Information IE in the RADIO LINK RECONFIGURATION REQUEST message or MIMO is activated and the power offset for S-CPICH for MIMO Request indicator has not been configured in the UE Context but MIMO pilot configuration with Primary and Secondary CPICH is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the Cause IE.]

[FDD – If the MIMO with four transmit antennas Activation Indicator IE or the Dual Stream MIMO with four transmit antennas Activation Indicator IE is included and the Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator IE is not included in the HS-DSCH FDD Information IE in the HS-DSCH Serving Cell Change Information IE in the RADIO LINK RECONFIGURATION REQUEST message or MIMO with four transmit antennas is activated and the power offset for S-CPICH for MIMO with four transmit antennas Request indicator has not been configured in the UE Context but MIMO with four transmit antennas Pilot Configuration is set up with a non-zero power offset on the cell where the Serving HS-DSCH Radio Link is established, the setup of the serving HS-DSCH Radio Link, and/or activation of MIMO with four transmit antennas, shall be reported as failed and the DRNC shall include in the RADIO LINK RECONFIGURATION FAILURE message the Cause IE.]

Typical cause values are:

#### Radio Network Layer Causes:

UL Scrambling Code Already in Use;

DL Radio Resources not Available;

UL Radio Resources not Available;

Requested Configuration not Supported;

CM not Supported;

E-DCH not supported;

[FDD – Continuous Packet Connectivity DTX-DRX operation not Supported;]

[FDD – Continuous Packet Connectivity HS-SCCH less operation not Supported;]

[FDD – MIMO not supported;]

[FDD – E-DCH TTI2ms not supported;]

[FDD – Continuous Packet Connectivity DTX-DRX operation not available;]

[FDD - Continuous Packet Connectivity UE DTX Cycle not available;]

[FDD – MIMO not available;]

[FDD – SixteenQAM UL not Supported;]

HS-DSCH MAC-d PDU Size Format not supported;

E-DCH MAC-d PDU Size Format not available;

[FDD – E-DPCCH Power Boosting not supported;]

[FDD - SixtyfourQAM DL and MIMO Combined not available;]

[FDD – Multi Cell operation not available;]

[FDD – Multi Cell operation not supported;]

[FDD – SixtyfourQAM DL and MIMO Combined not supported;]

[1.28Mcps TDD – MIMO not available;]

[1.28Mcps TDD- SixteenQAM UL not Supported;]

[1.28Mcps TDD – SixtyfourQAM DL and MIMO Combined not available;]

- [FDD Single Stream MIMO not supported;]
- [FDD Single Stream MIMO not available;]
- [FDD Multi Cell operation with MIMO not available;]
- [FDD Multi Cell operation with MIMO not supported;]
- [FDD Multi Cell E-DCH Operation not supported;]
- [FDD Multi Cell E-DCH Operation not available;]
- [FDD Multi Cell operation with Single Stream MIMO not available;]
- [FDD Multi Cell operation with Single Stream MIMO not supported;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Available;]
- [FDD Uplink Closed Loop Transmit Diversity Operation Not Supported;]
- [FDD MIMO with four transmit antennas not supported;]
- [FDD MIMO with four transmit antennas not available;]
- [FDD Dual Stream MIMO with four transmit antennas not supported;]
- [FDD Dual Stream MIMO with four transmit antennas not available;]
- [FDD Multiflow Operation Not Available;]
- [FDD Multiflow Operation Not Supported;]
- [FDD SixtyfourQAM UL not Available;]
- [FDD SixtyfourOAM UL not Supported;]
- [FDD UL MIMO Operation Not Available;]
- [FDD UL MIMO Operation Not Supported;]
- [FDD UL MIMO and SixteenQAM Operation Not Available;]
- [FDD UL MIMO and SixteenQAM Operation Not Supported;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Available;]
- [FDD UL MIMO and SixtyfourQAM Operation Not Supported.]

#### **Miscellaneous Causes:**

Control Processing Overload;

Not enough User Plane Processing Resources.

#### 8.3.7.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed, and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Individual DL Reference Power Information* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Common DL Reference Power* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE., and not both are present for a transport bearer intended to be established, the DRNC shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the UE Context, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Indexed MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Flexible MAC-d PDU Size" for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use MAC-d PDU Size Index, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the UE Context is configured to use "Fixed MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use "Flexible MAC-d PDU Size" for an E-DCH and there exist a Logical Channel of the MAC-d flows of the E-DCH that is configured to use MAC-d PDU Size List, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes *HS-DSCH Information* IE and the HS-DSCH is already configured in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, but the *E-DPCH Information* IE is not present or if any of the *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE, *E-TFCS Information* IE, *E-TTI* IE, *E-DPCCH Power Offset* IE, *E-RGCH 2-Index-Step Threshold* IE, *E-RGCH 3-Index-Step Threshold* IE, *HARQ Info for E-DCH* IE or *HS-DSCH Configured Indicator* IE are not present in the *E-DPCH Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If any of the *HS-DSCH Configured Indicator* IE, *Maximum Set of E-DPDCHs* IE, *Puncture Limit* IE or *E-TTI* IE are present in the *E-DPCH Information* IE and the *E-DCH FDD Information* IE is not present in the RADIO LINK RECONFIGURATION REQUEST message, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH RL Indication* IE set to "E-DCH", but no *E-DCH FDD Information* IE, and the UE Context is not configured for E-DCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information* IE but no *E-DCH RL Indication* IE set to "E-DCH", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and/or the *Serving E-DCH RL* IE and if both HS-DSCH and E-DCH are configured in the new configuration but the Serving HS-DSCH Radio Link and the Serving E-DCH Radio Link are not in the same cell then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *HS-PDSCH RL ID* IE and the *E-DPCH Information* IE which includes the *HS-DSCH Configured Indicator* IE set as "HS-DSCH not configured" then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE or *E-DCH MAC-d Flows To Delete* IE in addition to the *E-DCH FDD Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *E-DCH FDD Information To Modify* IE, *E-DCH MAC-d Flows To Add* IE, *E-DCH MAC-d Flows To Delete* IE and the UE Context is not configured for E-DCH, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE deleting the last remaining E-DCH Logical Channel of an E-DCH MAC-d Flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes *E-DCH FDD Information* IE and the E-DCH is already configured in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE in addition to the *Continuous Packet Connectivity DTX-DRX Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE in addition to the *Continuous Packet Connectivity HS-SCCH less Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message. ]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity HS-SCCH less Deactivate Indicator* IE while the Continuous Packet Connectivity HS-SCCH less configuration isn't configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity *DTX-DRX* configuration isn't configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DRX Information To Modify* IE in *Continuous Packet Connectivity DTX-DRX Information To Modify* IE while the Continuous Packet Connectivity DRX configuration is not configured in the DRNC, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only" but no *Transport Format Set* IE for the uplink for this DCH and the DRNC had ignored the configuration of Transport Format Set for uplink, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only" but no *Transport Format Set* IE for the downlink for this DCH and the DRNC had ignored the

configuration of Transport Format Set for downlink, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Bearer Not Requested Indicator* IE for a DCH or an E-DCH MAC-d flow but does not contain the corresponding *DCH ID* IE and the *Unidirectional DCH indicator* IE set to "Uplink DCH only" for the DCH in *DCH Information To Add* IE or does not contain the corresponding *E-DCH MAC-d Flow ID* IE in *E-DCH MAC-d Flows Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply UL DPCCH Slot Format 0 or 2 and execute Continuous Packet Connectivity DTX-DRX operation, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply MIMO, allowed to apply 64QAM, establish the secondary serving HS-DSCH Radio Link, apply MIMO with four transmit antennas or apply Dual Stream MIMO with four transmit antennas or apply Single Stream MIMO in the new configuration but is not configured to use flexible MAC-d PDU Size, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional HS Cell Information RL Reconf Req* IE indicating a new seconadry serving cell that is not in the same Node B as the serving HS-DSCH cell (or new serving in case of simultaneous serving HS-DSCH cell change), then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH in the *RL Specific DCH Information* IE but does not include the *DCH ID* IE for the DCH in the *DCHs to Add* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for an E-DCH MAC-d flow in the *RL Specific E-DCH Information* IE but does not include the *E-DCH MAC-d flow ID* IE for the E-DCH MAC-d flow in the *E-DCH MAC-d flows Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Continuous Packet Connectivity DTX-DRX Information* IE but the concerned UE Context is not previously configured to use F-DPCH, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to have the Serving E-DCH Radio Link but there is at least one E-DCH MAC-d flow which the transport bearer is not configured for the Serving E-DCH Radio Link in DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Bearer Not Requested Indicator* IE for a DCH or an E-DCH MAC-d Flow for a specific RL and the specific RL is combined with existing RL which the transport bearer is established for the DCH or the E-DCH MAC-d Flow in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If ALCAP is not used, if the concerned UE Context is configured to establish a DCH, an E-DCH MAC-d flow and/or an HS-DSCH MAC-d flow but the RADIO LINK RECONFIGURATION REQUEST message does not include the *Transport Layer Address* IE and the *Binding ID* IE for the DCH, the E-DCH MAC-d flow and/or HS-DSCH MAC-d flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use "Flexible RLC PDU Size" for an HS-DSCH but is not configured to use Maximum MAC-d PDU Size Extended, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If, in the new configuration, the concerned UE Context is configured to use MAC-d PDU Size Index for an HS-DSCH but there exist a priority queue of the MAC-d flows of the HS-DSCH that is configured to use "Flexible RLC PDU Size", the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains more than one of a MIMO Activation Indicator IE, a MIMO with four transmit antennas Activation Indicator IE, a Dual Stream MIMO with four transmit antennas Activation Indicator IE and a Single Stream MIMO Activation Indicator IE in the HS-DSCH FDD Information IE or in the HS-DSCH FDD Secondary Serving Information IE in the Additional HS Cell Information RL

*Reconf Req* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the concerned UE Context is configured to apply more than one of MIMO, MIMO with four transmit antennas, Dual Stream MIMO with four transmit antennas and Single Stream MIMO for the HS-DSCH Radio Link or the Secondary Serving Radio link, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional E-DCH Cell Information RL Reconf Req* IE and if the *E-DPCH Information* IE is not present or the E-DPCH Information was not configured in the UE Context, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional E-DCH Cell Information RL Reconf Req* IE and there exist a logical channel for which the *Maximum MAC-d PDU Size Extended* IE in the *E-DCH MAC-d Flows Information* IE in the *E-DCH FDD Information* IE is not present, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional E-DCH RL Specific Information To Setup* IE in the *Additional E-DCH FDD Setup Information* IE in the *Additional E-DCH Cell Information Setup* IE in the *Additional E-DCH Cell Information RL Reconf Req* IE and the *C-ID* IE is not included but the RL indicated by the *E-DCH Additional RL ID* IE is not configured in the current UE context as a Secondary Serving HS-DSCH radio link without any configured Additional E-DCH, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional HS Cell Information RL Reconf Req* IE and the new configuration contains more than one secondary serving HS-DSCH RL, and all secondary serving HS-DSCH RLs in the new configuration will not be assigned consecutive ordinal numbers starting with the value "1"which are previously assigned to the RL or received in the *Ordinal Number Of Frequency* IE in the *HS-DSCH FDD Secondary Serving Information* IE or the *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *Additional HS Cell Information RL Reconf Req* IE and the new configuration contains more than one secondary serving HS-DSCH RL, the new configuration also contains an Additional E-DCH Serving Radio Link and the secondary serving HS-DSCH Radio link, which is configured in the same cell as the Additional E-DCH Serving Radio Link does not have Ordinal Number Of Frequency value "1", the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *UL CLTD Information* IE but does not contain the *F-TPICH Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL CLTD Information* IE but without *F-TPICH Information* IE, then the DRNC shall reject the procedure using the RADIO LINK REQUEST FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains the *UL MIMO Information* IE in *E-DCH FDD Information* IE but does not contain the *UL CLTD Information* IE, or if it contains *HS-DSCH Preconfiguration Setup* IE with *UL MIMO Information* IE but without *UL CLTD Information* IE, then the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains more than one of a MIMO Activation Indicator IE, a MIMO with four transmit antennas Activation Indicator IE, a Dual Stream MIMO with four transmit antennas Activation Indicator IE in HS-DSCH Preconfiguration Setup IE or in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

# 8.3.8 Physical Channel Reconfiguration

#### 8.3.8.1 General

The Physical Channel Reconfiguration procedure is used by the DRNS to request the SRNC to reconfigure one of the configured physical channels.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNS shall not initiate the Physical Channel Reconfiguration procedure if a Prepared Reconfiguration exists as defined in subclause 3.1, or if a Synchronised Radio Link Reconfiguration Preparation procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing for the relevant UE context.

# 8.3.8.2 Successful Operation

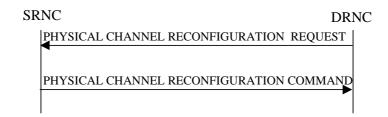


Figure 16: Physical Channel Reconfiguration procedure, Successful Operation

When the DRNC detects the need to modify one of its physical channels, it shall send a PHYSICAL CHANNEL RECONFIGURATION REQUEST to the SRNC.

The PHYSICAL CHANNEL RECONFIGURATION REQUEST message contains the new value(s) of the physical channel parameter(s) of the radio link for which the DRNC is requesting the reconfiguration.

[FDD – If compressed mode is prepared or active and at least one of the downlink compressed mode methods is "SF/2", the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the *DL Code Information* IE in the PHYSICAL CHANNEL RECONFIGURATION REQUEST message indicating for each DL Channelisation Code whether the alternative scrambling code will be used or not if the downlink compressed mode methods "SF/2" is activated.]

[TDD – The SRNC shall apply the new values for any of [3.84Mcps TDD – *UL Code Information* IE, *Midamble Shift And Burst Type* IE,] [1.28Mcps TDD – *UL Code Information LCR* IE, *Midamble Shift LCR* IE,] [7.68 Mcps TDD – *UL Code Information 7.68 Mcps* IE, *Midamble Shift And Burst Type 7.68 Mcps* IE,] *TDD DPCH Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI presence* IE included in the *UL DPCH Information* IE within the PHYSICAL CHANNEL RECONFIGURATION REQUEST message, otherwise the previous values specified for this DPCH shall still apply.]

[TDD – The SRNC shall apply the new values for any of [3.84Mcps TDD – *DL Code Information* IE, *Midamble Shift And Burst Type* IE,] [1.28Mcps TDD – *DL Code Information LCR* IE, *Midamble Shift LCR* IE,] [7.68 Mcps TDD – *DL Code Information 7.68 Mcps* IE, *Midamble Shift And Burst Type 7.68 Mcps* IE,] *TDD DPCH Offset* IE *Repetition Period* IE, *Repetition Length* IE, or *TFCI presence* IE included in the *DL DPCH Information* IE within the PHYSICAL CHANNEL RECONFIGURATION REQUEST message, otherwise the previous values specified for this DPCH shall still apply.]

[3.84 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information* IE the SRNC shall apply the values of the *Midamble Shift And Burst Type* IE for each HS-PDSCH timeslot.]

[1.28 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information LCR* IE the SRNC shall apply the values of the *Midamble Shift LCR* IE for each HS-PDSCH timeslot.]

[1.28 Mcps TDD – if the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *PLCCH Information* IE the SRNC shall modify, delete or grant a new PLCCH assignment to the indicated timeslot of the indicated UL DCH-type CCTrCH according to its content.]

[7.68 Mcps TDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *HS-PDSCH Timeslot Specific Information 7.68 Mcps* IE the SRNC shall apply the values of the *Midamble Shift And Burst Type 7.68 Mcps* IE for each HS-PDSCH timeslot.]

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes *F-DPCH Slot Format* IE the SRNC shall apply the values of the *F-DPCH Slot Formats* IE for F-DPCH Slot Format operation.]

Upon receipt of the PHYSICAL CHANNEL RECONFIGURATION REQUEST, the SRNC shall decide an appropriate execution time for the change. The SRNC shall respond with a PHYSICAL CHANNEL RECONFIGURATION COMMAND message to the DRNC that includes the *CFN* IE indicating the execution time.

At the CFN, the DRNS shall switch to the new configuration that has been requested, and release the resources related to the old physical channel configuration.

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *F-TPICH Slot Format* IE in *F-TPICH Reconfiguration Information* IE the SRNC shall apply the values of the *F-TPICH Slot Format* IE for F-TPICH Slot Format operation.]

[FDD – If the PHYSICAL CHANNEL RECONFIGURATION REQUEST includes the *F-TPICH Channelisation Code Number* IE in the *F-TPICH Reconfiguration Information* IE the SRNC shall use this information to configure the channelization code of F-TPICH.]

## 8.3.8.3 Unsuccessful Operation

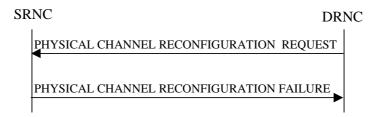


Figure 17: Physical Channel Reconfiguration procedure, Unsuccessful Operation

If the SRNC cannot accept the reconfiguration request it shall send the PHYSICAL CHANNEL RECONFIGURATION FAILURE message to the DRNC, including the reason for the failure in the *Cause* IE.

Typical cause values are:

#### Radio Network Layer Causes:

Reconfiguration not Allowed.

#### 8.3.8.4 Abnormal Conditions

While waiting for the PHYSICAL CHANNEL RECONFIGURATION COMMAND message, if the DRNC receives any of the RADIO LINK RECONFIGURATION PREPARE, RADIO LINK RECONFIGURATION REQUEST, or RADIO LINK DELETION REQUEST messages, the DRNC shall abort the Physical Channel Reconfiguration procedure. These messages thus override the DRNC request for physical channel reconfiguration.

When the SRNC receives a PHYSICAL CHANNEL RECONFIGURATION REQUEST message while a Synchronised Radio Link Reconfiguration procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing, the SRNC shall ignore the request message and assume that receipt of any of the messages RADIO LINK RECONFIGURATION PREPARE, RADIO LINK RECONFIGURATION REQUEST or RADIO LINK DELETION REQUEST by the DRNC has terminated the Physical Channel Reconfiguration procedure. In this case the SRNC shall not send a PHYSICAL CHANNEL RECONFIGURATION FAILURE message to the DRNC.

### 8.3.9 Radio Link Failure

#### 8.3.9.1 General

This procedure is started by the DRNS when one or more Radio Links [FDD – or Radio Link Sets][TDD – or CCTrCHs within a Radio Link] are no longer available.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNS may initiate the Radio Link Failure procedure at any time after establishing a Radio Link.

# 8.3.9.2 Successful Operation

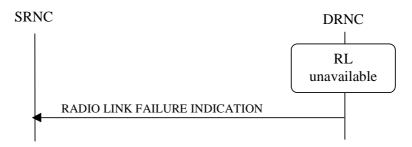


Figure 18: Radio Link Failure procedure, Successful Operation

When the DRNC detects that one or more Radio Link(s) [FDD – or Radio Link Set(s)] [TDD – or CCTrCHs within a Radio Link] are no longer available, it shall send the RADIO LINK FAILURE INDICATION message to the SRNC. The message indicates the failed Radio Link(s) [FDD – or Radio Link Set(s)] [TDD – or CCTrCHs] with the most appropriate cause values defined in the *Cause* IE. If the failure concerns one or more individual Radio Links the DRNC shall include the affected Radio Link(s) using the *RL Information* IE. [FDD – If the failure concerns one or more Radio Link Set(s) the DRNC shall include the affected Radio Link Set(s) using the *RL Set Information* IE.] [TDD – If the failure concerns only the failure of one or more CCTrCHs within in a radio link the DRNC shall include the affected CCTrCHs using the *CCTrCH ID* IE.]

When the RL Failure procedure is used to notify loss of UL synchronisation of a [FDD – Radio Link Set] [TDD – Radio Link or CCTrCHs within a Radio Link] on the Uu interface, the RADIO LINK FAILURE INDICATION message shall be sent with the *Cause* IE set to "Synchronisation Failure" when indicated by the UL synchronisation detection algorithm defined in TS 25.214 [10] subclause 4.3 and TS 25.224 [22] subclause 4.4.2.

[FDD – When the Radio Link Failure procedure is used to indicate permanent failure in one or more Radio Link(s)/Radio Link Set(s) due to the occurrence of an UL or DL frame with more than one transmission gap caused by one or more compressed mode pattern sequences, the DL transmission shall be stopped and the RADIO LINK FAILURE INDICATION message shall be sent with the *Cause Value* IE set to "Invalid CM Settings". After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the DRNS shall not remove the Radio Link(s)/Radio Link Set(s) from the UE Context, or remove the UE Context itself.]

[FDD – When the Radio Link Failure Procedure is used to indicate E-DCH non serving cell processing issue, the RADIO LINK FAILURE INDICATION shall be sent, with the *Cause* IE set to "Not enough user plane processing resources".]

In the other cases the Radio Link Failure procedure is used to indicate that one or more Radio Link(s) [FDD – or Radio Link Set(s)] are permanently unavailable and cannot be restored. After sending the RADIO LINK FAILURE INDICATION message to notify the permanent failure, the DRNS shall not remove the Radio Link from the UE Context, or remove the UE Context itself. When applicable, the allocation retention priorities associated with the transport channels shall be used by the DRNS to prioritise which Radio Links to indicate as unavailable to the SRNC.

Typical cause values are:

#### **Radio Network Layer Causes:**

Synchronisation Failure; Invalid CM Settings.

### **Transport Layer Causes:**

Transport Resources Unavailable.

#### **Miscellaneous Causes:**

Control Processing Overload; HW Failure; O&M Intervention; Not enough user plane processing resources.

#### 8.3.9.3 Abnormal Conditions

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## 8.3.10 Radio Link Restoration

### 8.3.10.1 General

This procedure is used to notify establishment and re-establishment of UL synchronisation of one or more [FDD – RL Set(s)] [TDD – Radio Links or CCTrCH(s) in a Radio Link] on the Uu interface.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Radio Link Restoration procedure at any time after establishing a Radio Link.

#### 8.3.10.2 Successful Operation



Figure 19: Radio Link Restoration procedure, Successful Operation

The DRNC shall send the RADIO LINK RESTORE INDICATION message to the SRNC when and as specified by the UL Uu synchronisation detection algorithm defined in TS 25.214 [10] subclause 4.3 and TS 25.224 [22] subclause 4.4.2 [FDD -, or when the *Fast Reconfiguration Mode* IE has been included in the RADIO LINK RECONFIGURATION COMMIT message and the DRNS has detected that the UE has changed to the new configuration. The algorithm in TS 25.214 [10] shall use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

[TDD – If the re-established UL Uu synchronisation concerns one or more individual Radio Links the DRNC shall include in the RADIO LINK RESTORE INDICATION message the *RL Information* IE to indicate the affected Radio Link(s). If the re-established synchronisation concerns one or more individual CCTrCHs within a radio link the DRNS shall include in the RADIO LINK RESTORE INDICATION message the *RL Information* IE to indicate the affected CCTrCHs.] [FDD – If the re-established UL Uu synchronisation concerns one or more Radio Link Sets the DRNC shall include in the RADIO LINK RESTORE INDICATION message the *RL Set Information* IE to indicate the affected Radio Link Set(s).]

[FDD – The DRNC shall send the RADIO LINK RESTORE INDICATION message when the E-DCH processing issue condition has ceased.]

#### 8.3.10.3 Abnormal Conditions

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# 8.3.11 Dedicated Measurement Initiation

#### 8.3.11.1 General

This procedure is used by an SRNS to request the initiation of dedicated measurements in a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Dedicated Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

# 8.3.11.2 Successful Operation

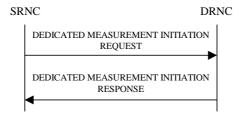


Figure 20: Dedicated Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the SRNC to the DRNC.

Upon receipt, the DRNC shall initiate the requested dedicated measurement according to the parameters given in the DEDICATED MEASUREMENT INITIATION REQUEST message.

If the Dedicated Measurement Object Type is indicated as being "RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all the indicated Radio Links.

[FDD – If the Dedicated Measurement Object Type is indicated as being "RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all the indicated Radio Link Sets.]

[FDD – If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all current and future Radio Links within the UE Context.]

[TDD – If the Dedicated Measurement Object Type is indicated as being "ALL RL" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for one existing DPCH per CCTrCH in each used time slot of current and future Radio Links within the UE Context, provided the measurement type is applicable to the respective DPCH.]

[FDD – If the Dedicated Measurement Object Type is indicated as being "ALL RLS" in the DEDICATED MEASUREMENT INITIATION REQUEST message, measurement results shall be reported for all the existing and future Radio Link Sets within the UE Context.]

[TDD – If the *DPCH ID* IE or *DPCH ID* 7.68*Mcps* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually. If no *DPCH ID* IE, *DPCH ID* 7.68*Mcps* IE or *HS-SICH ID* IE is provided within the RL Information the measurement request shall apply for one existing DPCH per CCTrCH in each used time slot of the Radio Link, provided the measurement type is applicable to this DPCH.]

[TDD – If the *HS-SICH Information* IE is provided within the RL Information, the measurement request shall apply for the requested physical channel individually.]

[TDD – If the *Dedicated Measurement Type* IE is set to "HS-SICH reception quality", the DRNS shall initiate measurements of the failed, missed and total HS-SICH transmissions on all of the HS-SICH assigned to this UE Context. If either the failed or missed HS-SICH transmission satisfies the requested report characteristics, the DRNS shall report the result of both failed and missed transmission measurements along with the total number of transmissions.]

# Report characteristics

The *Report Characteristics* IE indicates how the reporting of the dedicated measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *CFN* IE is not provided, the DRNS shall report the measurement result immediately in the DEDICATED MEASUREMENT INITIATION RESPONSE message. If the *CFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).

If the *Report Characteristics* IE is set to "Periodic" and if the *CFN* IE is not provided, the DRNS shall immediately and periodically initiate the Dedicated Measurement Reporting procedure for this measurement, with a frequency as specified by the *Report Periodicity* IE. If the *CFN* IE is provided, the DRNS shall initiate a Dedicated Measurement Reporting procedure for this measurement at the CFN indicated in the *CFN* IE, and shall repeat this initiation periodically thereafter with a frequency as specified by the *Report Periodicity* IE. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).

If the *Report Characteristics* IE is set to "Event A", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the requested threshold, as specified by the *Measurement Threshold* IE, and then stays above the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the requested threshold, as specified by the *Measurement Threshold* IE, and then stays below the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this rise occurs within the requested rising time specified by the *Measurement Change Time* IE. After reporting this type of event, DRNS shall not initiate the next C event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event D", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this falls occurs within the requested falling time specified by the *Measurement Change Time* IE. After reporting this type of event, the DRNS shall not initiate the next D event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event E", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity rises above the *Measurement Threshold 1* IE and stays above the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the DRNS shall initiate the Dedicated Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity falls below the *Measurement Threshold 2* IE and stays below the threshold for the *Measurement Hysteresis Time* IE, the DRNS shall initiate the Dedicated Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the DRNS shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the DRNS shall initiate the Dedicated Measurement Reporting procedure when the measured entity falls below the *Measurement Threshold 1* IE and stays below the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the DRNS shall initiate the Dedicated Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity rises above the *Measurement Threshold 2* IE and stays above the threshold for the *Measurement Hysteresis Time* IE, the DRNS shall initiate the Dedicated Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the DRNS shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the DRNC shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is not set to "On –Demand", the DRNS is required to perform reporting for a dedicated measurement object, in accordance with the conditions provided in the DEDICATED MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no dedicated measurement object(s) for which a measurement is defined exists any more, the DRNS shall terminate the measurement locally without reporting this to the SRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the DRNS shall initiate the Dedicated Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

#### **Higher layer filtering**

The *Measurement Filter Coefficient* IE indicates how filtering of the dedicated measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1-a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

 $F_n$  is the updated filtered measurement result.

 $F_{n-1}$  is the old filtered measurement result.

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the DEDICATED MEASUREMENT INITIATION RESPONSE, DEDICATED MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn).

 $A = \frac{1}{2}(k^{2})$ , where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter,  $F_0$  is set to  $M_I$  when the first measurement result from the physical layer measurement is received.

#### **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNS shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.3.12.2.

## Response message

If the DRNS was able to initiate the measurement requested by the SRNS it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message.

In the case in which the Report Characteristics IE is set to "On Demand":

- The DRNC shall include the measurement result in the *Dedicated Measurement Value* IE within the DEDICATED MEASUREMENT INITIATION RESPONSE message.
- If the *CFN Reporting Indicator* IE is set to "FN Reporting Required", the *CFN* IE shall be included in the DEDICATED MEASUREMENT INITIATION RESPONSE message. The reported CFN shall be the CFN at the time when the dedicated measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).
- [TDD If the measurement was made on a particular DPCH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the DPCH ID of that DPCH in the [1.28Mcps TDD and 3.84Mcps TDD DPCH ID IE] [7.68Mcps TDD DPCH ID 7.68Mcps IE].]
- [TDD If the measurement was made on a particular HS-SICH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the ID of that HS-SICH in the *HS-SICH ID* IE.]

[FDD – If the *Alternative Format Reporting Indicator* IE is set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNC may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT INITIATION RESPONSE message.]

# 8.3.11.3 Unsuccessful Operation

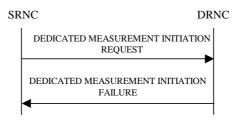


Figure 21: Dedicated Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated for one of the RL/RLS, the DRNC shall send a DEDICATED MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and shall include the *Cause* IE set to an appropriate value.

If the DEDICATED MEASUREMENT INITIATION REQUEST message includes the *Partial Reporting Indicator* IE, the DRNS shall, if partial reporting is supported, separate the unsuccessful measurement initiations from the successful measurement initiations. For the successful measurement initiations on a RL or an RLS, the DRNS shall include the *Successful RL Information* IE or the *Successful RL Set Information* IE for the concerned RL or RLS if the Report *Characteristics* IE in the DEDICATED MEASUREMENT INITIATION REQUEST message was set to "On Demand". For the unsuccessful measurement initiations, the DRNS shall include the *Individual Cause* IE set to an appropriate value if it differs from the value of the *Cause* IE.

Typical cause values are:

#### **Radio Network Layer Causes:**

Measurement not Supported For The Object; Measurement Temporarily not Available.

#### **Miscellaneous Causes:**

Control Processing Overload; HW Failure.

#### 8.3.11.4 Abnormal Conditions

The allowed combinations of the Dedicated Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the DRNS shall reject the Dedicated Measurement Initiation procedure using the DEDICATED MEASUREMENT INITIATION FAILURE message.

Dedicated Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	Χ	X	Х	Х	Х	Х	Х	Χ	
SIR Error	Χ	X	Χ	Х	Х	Х	Х	Χ	
Transmitted Code Power	Х	Х	Х	Х	Х	Х	Х	Х	
RSCP	Χ	X	Х	Х	Х	Х	Х	Χ	
Rx Timing Deviation	X	Х	Х	Х			Х	Χ	
Round Trip Time	X	Х	Χ	Х	Х	Х	Χ	Χ	
Rx Timing Deviation LCR	Х	Х	Х	Х			Х	Х	
HS-SICH Reception Quality	Х	Х	Х	Х			Х	Х	
Angle Of Arrival LCR	Χ	X							
Rx Timing Deviation 7.68Mcps	Х	Х	Х	Х			Х	Х	
Rx Timing Deviation 3.84Mcps Extended	Х	Х	Х	Х			Х	Х	
UE transmission power headroom	Х	Х		Х				Х	

Table 4: Allowed Dedicated Measurement Type and Report Characteristics Type combinations

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in TS 25.215 [11] or TS 25.225 [14] to be measured on the Dedicated Measurement Object Type received in the DEDICATED MEASUREMENT INITIATION REQUEST message, the DRNS shall reject the Dedicated Measurement Initiation procedure.

If the *CFN* IE is included in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic" or "On Demand", the DRNS shall reject the Dedicated Measurement Initiation procedure, and the DRNC shall send a DEDICATED MEASUREMENT INITIATION FAILURE message.

# 8.3.12 Dedicated Measurement Reporting

### 8.3.12.1 General

This procedure is used by the DRNS to report the results of the successfully initiated measurements requested by the SRNS with the Dedicated Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Dedicated Measurement Reporting procedure at any time after establishing a Radio Link.

# 8.3.12.2 Successful Operation



Figure 22: Dedicated Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the DRNS shall initiate the Dedicated Measurement Reporting procedure. If the measurement was initiated (by the Dedicated Measurement Initiation procedure) for multiple dedicated measurement objects, the DRNC may include dedicated measurement values in the *Dedicated Measurement Value Information* IE for multiple objects in the DEDICATED MEASUREMENT REPORT message.

The *Measurement ID* IE shall be set to the Measurement ID provided by the SRNC when initiating the measurement with the Dedicated Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement specified in TS 25.133 [23] and TS 25.123 [24] or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the Measurement not available shall be reported in the *Dedicated Measurement Value Information* IE in the DEDICATED MEASUREMENT REPORT message, otherwise the DRNC shall include the *Dedicated Measurement Value* IE within the *Dedicated Measurement Value Information* IE. If the DRNC was configured to perform the Measurement Recovery Behavior, the DRNC shall indicate Measurement Available to the SRNC when the achieved measurement accuracy again fullfils the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) and include the *Measurement Recovery Report Indicator* IE in the DEDICATED MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

If the CFN Reporting Indicator when initiating the measurement with the Dedicated Measurement Initiation procedure was set to "FN Reporting Required", the DRNC shall include the *CFN* IE in the DEDICATED MEASUREMENT REPORT message. The reported CFN shall be the CFN at the time when the dedicated measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]).

[TDD – If the measurement was made on a particular DPCH, the DEDICATED MEASUREMENT REPORT message shall include the DPCH ID of that DPCH in the [1.28Mcps TDD and 3.84Mcps TDD – DPCH ID IE] [7.68Mcps TDD – DPCH ID 7.68Mcps IE].]

[TDD – If the measurement was made on a particular HS-SICH, the DEDICATED MEASUREMENT INITIATION RESPONSE message shall include the ID of that HS-SICH in the *HS-SICH ID* IE.]

[FDD – If the *Alternative Format Reporting Indicator* IE was set to "Alternative format is allowed" in the DEDICATED MEASUREMENT INITIATION REQUEST message setting up the measurement to be reported, the DRNC may include the *Extended Round Trip Time* IE in the DEDICATED MEASUREMENT REPORT message.]

#### 8.3.12.3 Abnormal Conditions

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# 8.3.13 Dedicated Measurement Termination

### 8.3.13.1 General

This procedure is used by the SRNS to terminate a measurement previously requested by the Dedicated Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Dedicated Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.13.2 Successful Operation



Figure 23: Dedicated Measurement Termination procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT TERMINATION REQUEST message, sent from the SRNC to the DRNC.

Upon receipt, the DRNS shall terminate reporting of dedicated measurements corresponding to the received *Measurement ID* IE.

#### 8.3.13.3 Abnormal Conditions

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## 8.3.14 Dedicated Measurement Failure

### 8.3.14.1 General

This procedure is used by the DRNS to notify the SRNS that a measurement previously requested by the Dedicated Measurement Initiation procedure can no longer be reported. When partial reporting is allowed and supported, this procedure shall be used to report that measurement for one or more RL/RLS can no longer be reported.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNC may initiate the Dedicated Measurement Failure procedure at any time after establishing a Radio Link.

#### 8.3.14.2 Successful Operation



Figure 24: Dedicated Measurement Failure procedure, Successful Operation

This procedure is initiated with a DEDICATED MEASUREMENT FAILURE INDICATION message, sent from the DRNC to the SRNC, to inform the SRNC that a previously requested dedicated measurement can no longer be reported. The DRNC has locally terminated the indicated measurement. The DRNC shall include in the DEDICATED MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

The DRNS shall include *Unsuccessful RL Information* IE or the *Unsuccessful RL Set Information* IE for the concerned RL or RLS if partial reporting is allowed and it is supported. The DRNS shall include the *Individual Cause* IE set to an appropriate value if it differs from the value of the *Cause* IE.

Typical cause values are:

#### **Miscellaneous Causes:**

- Control Processing Overload;
- HW Failure:
- O&M Intervention.

#### 8.3.14.3 Abnormal Conditions

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# 8.3.15 Downlink Power Control [FDD]

#### 8.3.15.1 General

The purpose of this procedure is to balance the DL transmission powers of one or more radio links for one UE.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Downlink Power Control procedure may be initiated by the SRNC at any time after establishing a Radio Link. If the SRNC has initiated in this DRNS the deletion of the last Radio Link for this UE context, the Downlink Power Control procedure shall not be initiated.

# 8.3.15.2 Successful Operation



Figure 25: Downlink Power Control procedure, Successful Operation

The Downlink Power Control procedure is initiated by the SRNC sending a DL POWER CONTROL REQUEST message to the DRNC.

The Power Adjustment Type IE defines the characteristic of the power adjustment.

If the value of the *Power Adjustment Type* IE is "Common", the DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "Common". As long as the Power Balancing Adjustment Type of the UE Context is set to "Common", the DRNS shall perform the power adjustment (see below) for all existing and future radio links for the UE Context and use a common DL reference power level.

If the value of the *Power Adjustment Type* IE is "Individual", the DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "Individual". The DRNS shall perform the power adjustment (see below) for all radio links addressed in the message using the given DL Reference Power per RL. If the Power Balancing Adjustment Type of the UE Context was set to "Common" before this message was received, power balancing on all radio links not addressed by the DL POWER CONTROL REQUEST message shall remain to be executed in accordance with the existing power balancing parameters which are now considered RL individual parameters. Power balancing will not be started on future radio links without a specific request.

If the value of the *Power Adjustment Type* IE is "None", the DRNS shall set the Power Balancing Adjustment Type of the UE Context set to "None" and the DRNS shall suspend on going power adjustments for all radio links for the UE Context.

If the *Inner Loop DL PC Status* IE is present and set to "Active", the DRNS shall activate inner loop DL power control for all radio links for the UE Context. If the *Inner Loop DL PC Status* IE is present and set to "Inactive", the DRNS shall deactivate inner loop DL power control for all radio links for the UE Context according to TS 25.214 [10].

#### **Power Adjustment**

The power balancing adjustment shall be superimposed on the inner loop power control adjustment (see TS 25.214 [10]) if activated. The power balancing adjustment shall be such that:

$$\sum P_{bal} = (1-r)(P_{ref} + P_{P-CPICH} - P_{init})$$
 with an accuracy of  $\pm 0.5$  dB

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE,  $P_{ref}$  is the value of the *DL Reference Power* IE,  $P_{P-CPICH}$  is the power used on the primary CPICH,  $P_{init}$  is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode,  $P_{init}$  shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the DRNC.

The power adjustments shall be started at the first slot of a frame with CFN modulo the value of *Adjustment Period* IE equal to 0 and shall be repeated for every adjustment period and shall be restarted at the first slot of a frame with CFN=0, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted.

#### 8.3.15.3 Abnormal Conditions

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# 8.3.16 Compressed Mode Command [FDD]

#### 8.3.16.1 General

The Compressed Mode Command procedure is used to activate or deactivate the compressed mode in the DRNS for one UE-UTRAN connection. This procedure shall use the signalling bearer connection for the relevant UE Context.

The Compressed Mode Command procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.16.2 Successful Operation



Figure 26: Compressed Mode Command procedure, Successful Operation

The procedure is initiated by the SRNC sending a COMPRESSED MODE COMMAND message to the DRNC.

Upon receipt of the COMPRESSED MODE COMMAND message from the SRNC and at the CFN indicated in the *CM Configuration Change CFN* IE, the DRNS shall deactivate all the ongoing Transmission Gap Pattern Sequences. From that moment on all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions (if present) shall be started when the indicated *TGCFN* IE elapses. The *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value

If the values of the *CM Configuration Change CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CM Configuration Change CFN* IE.

If the *Affected HS-DSCH serving cell List* IE is included, the concerned Transmission Gap Pattern Sequence shall be applied to HS-DSCH serving cells associated with *C-ID* IE included in *Affected HS-DSCH serving cell List* IE. Otherwise the concerned Transmission Gap Pattern Sequence shall be applied to all the configured serving cells.

If the concerned UE Context is configured to use F-DPCH in the downlink, the DRNS shall ignore, when activating the Transmission Gap Pattern Sequence(s), the downlink compressed mode method information, if existing, for the concerned Transmission Gap Pattern Sequence(s) in the Compressed Mode Configuration.

#### 8.3.16.3 Abnormal Conditions

[FDD - If the Affected HS-DSCH serving cell List IE is included in the Active Pattern Sequence Information IE, and the Transmission Gap Pattern Sequence for affected HS-DSCH Serving Cells is activated on the HS-DSCH Primary Serving Cell but not for all the other serving cells, the DRNS shall initiate the Radio Link Failure procedure with the cause value "Invalid CM Settings".]

# 8.3.17 Downlink Power Timeslot Control [TDD]

#### 8.3.17.1 General

The purpose of this procedure is to provide the DRNS with updated DL Timeslot ISCP values to use when deciding the DL TX Power for each timeslot.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Downlink Power Timeslot Control procedure can be initiated by the SRNC at any time after establishing a Radio Link. If the SRNC has initiated deletion of the last Radio Link in this DRNS, the Downlink Power Timeslot Control procedure shall not be initiated.

# 8.3.17.2 Successful Operation



Figure 26A: Downlink Power Timeslot Control procedure, Successful Operation

The Downlink Power Timeslot Control procedure is initiated by the SRNC sending a DL POWER TIMESLOT CONTROL REQUEST message to the DRNC.

Upon receipt of the DL POWER TIMESLOT CONTROL REQUEST message, the DRNS shall use the included [3.84Mcps TDD and 7.68 Mcps TDD – *DL Timeslot ISCP Info* IE] [1.28Mcps TDD – *DL Timeslot ISCP Info LCR* IE] value when deciding the DL TX Power for each timeslot as specified in TS 25.224 [22], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link in which the interference is low, and increase the DL TX power in those timeslots in which the interference is high, while keeping the total downlink power in the radio link unchanged.

If the *Primary CCPCH RSCP Delta* IE is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS shall assume that the reported value is in the non-negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS should use the indicated value for HS-DSCH scheduling and transmit power adjustment.

### 8.3.17.3 Abnormal Conditions

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# 8.3.18 Radio Link Pre-emption

# 8.3.18.1 General

This procedure is started by the DRNS when resources need to be freed.

This procedure shall use the signalling bearer connection for the UE Context associated with the RL to be pre-empted.

The DRNS may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

#### 8.3.18.2 Successful Operation



Figure 26B: Radio Link Pre-emption procedure, Successful Operation

When DRNC detects that one or more Radio Link(s) should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the SRNC. If all Radio Links for a UE Context should be pre-empted, the *RL Information* IE shall not be included in the message. If one or several but not all Radio Link(s) should be pre-empted for an UE Context, the Radio Link(s) that should be pre-empted shall be indicated in the *RL Information* IE. The Radio Link(s) that should be pre-empted, should be deleted by the SRNC.

[FDD – If only the E-DCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the EDCH MAC-d flows that should be pre-empted by including the *E-DCH MAC-d Flow Specific Information* IE in the RADIO LINK PREEMPTION REQUIRED INDICATION message.]

When only the HS-DSCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the HS-DSCH MAC-d flow(s) that should be pre-empted by including the *HS-DSCH MAC-d Flow Specific Information* IE in the RADIO LINK PREEMPTION REQUIRED INDICATION message.

#### 8.3.18.3 Abnormal Conditions

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# 8.3.19 Radio Link Congestion

#### 8.3.19.1 General

This procedure is started by the DRNS when resource congestion is detected and the rate of one or more DCHs, corresponding to one or more radio links, is preferred to be limited in the UL and/or DL. This procedure is also used by the DRNC to indicate to the SRNC any change of the UL/DL resource congestion situation, affecting these radio links. This procedure shall use the signalling bearer connection for the relevant UE Context.

The Radio Link Congestion procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

#### 8.3.19.2 Successful Operation



Figure 26C: Radio Link Congestion procedure, Successful Operation

#### Start of an UL/DL Resource Congestion Situation

When the DRNC detects the start of a UL/DL resource congestion situation and prefers the rate of one or more DCHs for one or more Radio Link(s) to be limited below the maximum rate currently configured in the UL/DL TFS, it shall send the RADIO LINK CONGESTION INDICATION message to the SRNC. The DRNC shall indicate the cause of the congestion in the *Congestion Cause* IE and shall indicate all the Radio Links for which the rate of a DCH needs to be reduced. For each DCH within the RL with UL congestion, the DRNC shall indicate the desired maximum UL data rate with the *Allowed UL Rate* IE in the *Allowed Rate Information* IE. For each DCH within the RL with DL congestion, the DRNC shall indicate the desired maximum DL data rate with the *Allowed DL Rate* IE in the *Allowed Rate Information* IE.

[FDD – For each E-DCH MAC-d flow within the RL with UL congestion, the DRNC shall indicate all the MAC-d flows for which the rate cannot be fullfilled.]

When receiving the RADIO LINK CONGESTION INDICATION message the SRNC should reduce the rate in accordance with the *Congestion Cause* IE and the indicated *Allowed DL Rate* IE and/or *Allowed UL Rate* IE for a DCH.

[FDD – If the RADIO LINK CONGESTION INDICATION message includes the *DCH Indicator For E-DCH-HSDPA Operation* IE, then the SRNS shall ignore the *DCH Rate Information* IE in the RADIO LINK CONGESTION INDICATION message.]

#### Change of UL/DL Resource Congestion Situation

The DRNC shall indicate any change of the UL/DL resource congestion situation by sending the RADIO LINK CONGESTION INDICATION message in which the new allowed rate(s) of the DCHs are indicated by the *Allowed Rate Information* IE. In the case that for at least one DCH the new allowed rate is lower than the previously indicated allowed rate for that DCH, the *Congestion Cause* IE, indicating the cause of the congestion, shall also be included.

When receiving a RADIO LINK CONGESTION INDICATION message indicating a further rate decrease on any DCH(s) on any RL, the SRNC should reduce the rate in accordance with the indicated congestion cause and the indicated allowed rate(s) for the DCH(s).

#### **End of UL/DL Resource Congestion Situation**

The end of an UL resource congestion situation, affecting a specific RL, shall be indicated by including the TF corresponding to the highest data rate in the *Allowed UL Rate* IE in the *Allowed Rate Information* IE for the concerned RL. The end of a DL resource congestion situation, affecting a specific RL, shall be indicated by including the TF with the highest data rate in the *Allowed DL Rate* IE in the *Allowed Rate Information* IE for the concerned RL.

#### 8.3.19.3 Abnormal Conditions

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### 8.3.20 Radio Link Activation

#### 8.3.20.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

# 8.3.20.2 Successful Operation



Figure 26D: Radio Link Activation procedure

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the SRNC to the DRNC. This procedure shall use the signalling bearer connection for the relevant UE Context.

Upon receipt, the DRNS shall for each concerned RL:

- if the *Delayed Activation Update* IE indicates "Activate":
  - if the *Activation Type* IE equals "Unsynchronised":
    - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in TS 25.427 [4].]
    - [TDD start transmission on the new RL immediately as specified in TS 25.427 [4].]
  - if the *Activation Type* IE equals "Synchronised":
    - [FDD start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in TS 25.427 [4], however never before the CFN indicated in the *Activation CFN* IE.]
    - [TDD start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in TS 25.427 [4].]
  - [FDD the DRNS shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH or on the F-DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. During this period no inner loop power control shall be performed and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see TS 25.214 [10], subclause 5.2.1.2) and downlink power balancing adjustments (see 8.3.7).]

- [TDD the DRNS shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see TS 25.224 [22], subclause 4.2.3.3).]
- [FDD if the *Propagation Delay* IE and optionally the *Extended Propagation Delay* IE are included, the DRNS may use this information to speed up the detection of UL synchronisation on the Uu interface.]
- [FDD if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the DRNS to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in TS 25.214 [10], section 5.1.2.2.1.2.]
- if the *Delayed Activation Update* IE indicates "Deactivate":
  - stop DL transmission immediately if the *Deactivation Type* IE equals "Unsynchronised", or at the CFN indicated by the *Deactivation CFN* IE if the *Deactivation Type* IE equals "Synchronised".

#### 8.3.20.3 Abnormal Conditions

[FDD – If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the DRNC shall initiate the ERROR INDICATION procedure.]

# 8.3.21 Radio Link Parameter Update

#### 8.3.21.1 General

The Radio Link Parameter Update procedure is executed by the DRNS to update parameters related to HS-DSCH [FDD - or E-DCH or UL CLTD] on a radio link for a UE-UTRAN connection or to update phase reference on a list of the radio links.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Parameter Update procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

## 8.3.21.2 Successful Operation



Figure 26E: Radio Link Parameter Update Indication, Successful Operation

The Radio Link Parameter Update procedure is initiated by the DRNS by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the SRNC.

## **HS-DSCH** related Parameter(s) Updating:

If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to HS-DSCH, it contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If the DRNS needs to update HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD – HS-DSCH FDD Update Information IE] [TDD – HS-DSCH TDD Update Information IE].

If the DRNS needs to allocate new HS-SCCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD – If the DRNS needs to allocate new HS-PDSCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-PDSCH Code Change Indicator* IE.]

[FDD – If the DRNS needs to update the CQI Feedback Cycle k, CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k* IE, *CQI Repetition Factor* IE, *ACK-NACK Repetition Factor* IE, *CQI Power Offset* IE, *ACK Power Offset* IE and/or *NACK Power Offset* IE.]

[TDD – If the DRNS needs to update the TDD ACK-NACK Power Offset the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *TDD ACK-NACK Power Offset* IE.]

[FDD – If the DRNS needs to update the Precoder weight set restriction, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Precoder weight set restriction* IE.]

#### [FDD – Secondary Serving HS-DSCH related Parameter(s) Updating:]

[FDD – If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to secondary serving HS-DSCH, it contains suggested value(s) of the secondary serving HS-DSCH related parameter(s) that should be reconfigured on the radio link.]

[FDD – If the DRNS needs to update secondary serving HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message and include the *Additional HS Cell Information RL Param Upd* IE.]

- [FDD If the DRNS needs to allocate new secondary serving HS-SCCH Codes, the DRNS shall include the *HS-SCCH Code Change Indicator* IE in the *HS-DSCH FDD Secondary Serving Update Information* IE.]
- [FDD If the DRNS needs to update the Precoder weight set restriction, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Precoder weight set restriction* IE in the *HS-DSCH FDD Secondary Serving Update Information* IE.]

## [FDD – Phase Reference Handling:]

[FDD – If DRNS needs to update phase reference for the channel estimation for one or several Radio Links, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Phase Reference Update Information* IE for the concerned RL(s).]

#### [FDD – E-DCH:]

[FDD – If DRNS needs to update E-DCH related parameters, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH FDD Update Information* IE.]

[FDD – If the DRNS needs to update the HARQ process allocation for non-scheduled transmission and/or HARQ process allocation for scheduled Transmission, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant* IE for the concerned MAC-d Flows and/or *HARQ Process Allocation For 2ms Scheduled Transmission Grant* IE.]

[FDD – If the DRNS needs to allocate new E-AGCH Channelisation Code, new E-RGCH/E-HICH Channelisation Code, new E-RGCH Signature Sequence and/or new E-HICH Signature Sequence, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH DL Control Channel Change Information* IE.]

[FDD – If the DRNS needs to update Additional E-DCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional E-DCH Cell Information RL Param Upd* IE.]

- [FDD If the DRNS needs to update the HARQ process allocation for scheduled Transmission, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Scheduled Transmission Grant*.]
- [FDD If the DRNS needs to allocate new E-AGCH Channelisation Code, new E-RGCH/E-HICH Channelisation Code, new E-RGCH Signature Sequence and/or new E-HICH Signature Sequence, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Additional E-DCH DL Control Channel Change Information* IE.]

#### [FDD – UL CLTD:]

[FDD - If the DRNS needs to update the local activation state of UL CLTD of the UE in UL CLTD operation, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION including the *UL CLTD State Update Information* IE.]

#### [FDD – CPC Recovery:]

[FDD – If the DRNS needs to indicate that the CPC Recovery has been initiated, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CPC Recovery Report* IE.]

### 8.3.21.3 Abnormal Conditions

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# 8.3.22 UE Measurement Initiation [TDD]

#### 8.3.22.1 General

This procedure is used by a DRNC to request the initiation of UE measurements by the SRNC.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The UE Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

# 8.3.22.2 Successful Operation

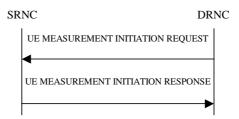


Figure 26F: UE Measurement Initiation procedure, Successful Operation

The procedure is initiated with a UE MEASUREMENT INITIATION REQUEST message sent from the DRNC to the SRNC.

Upon receipt the SRNC shall, provided that it determines that the measurement can be performed by the UE, initiate and forward the requested UE measurement according to the parameters given in the UE MEASUREMENT INITIATION REQUEST message. If the UE MEASUREMENT INITIATION REQUEST message includes the *UE Measurement Parameter Modification Allowed* IE with a value of "Parameter Modification Allowed" the *UE Measurement Report Characteristics* IE and the *Measurement Filter Coefficient* IE, if it is included, are suggested values, otherwise the values of these parameters must be fulfilled.

[3.84 Mcps TDD – If the *UE Measurement Timeslot Information HCR* IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the *UE Measurement Timeslot Information HCR* IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

[1.28 Mcps TDD – If the *UE Measurement Timeslot Information LCR* IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the *UE Measurement Timeslot Information LCR* IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

[7.68 Mcps TDD – If the *UE Measurement Timeslot Information 7.68 Mcps* IE is provided, the measurement request shall apply for the requested timeslot(s) individually. If the *UE Measurement Timeslot Information 7.68 Mcps* IE are not provided the SRNC may choose the timeslots for measurements that apply to individual timeslots.]

If the UE MEASUREMENT INITIATION REQUEST message includes the *Allowed Queuing Time* IE the SRNC may queue the request for a time period not to exceed the value of the *Allowed Queuing Time* IE before starting to execute the request.

The SRNC is required to perform reporting for a UE measurement object, in accordance with the conditions provided in the UE MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no UE measurement object(s) for which a measurement is defined exists any more, the SRNC shall terminate the measurement locally without reporting this to the DRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event 1h, Event 1i,Event 6a, Event 6b, Event 6c, or Event 6d, the SRNC shall initiate the UE Measurement Reporting procedure immediately, and then continue with the measurements as specified in the UE MEASUREMENT INITIATION REQUEST message.

At the start of a periodic measurement, the SRNC shall not initiate UE Measurement Reporting procedure until the next measurement is received from the UE, even if measurement data is available.

#### **Report characteristics**

The *UE Measurement Report Characteristics* IE indicates how the reporting of the dedicated measurement shall be performed. See TS 25.331 [16].

#### Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the dedicated measurement values shall be performed before measurement event evaluation and reporting. If the *Measurement Filter Coefficient* IE is not present, *a* shall be set to 1 (no filtering). The use of the *Measurement Filter Coefficient* IE is shown in TS 25.331 [16].

#### Response message

If the SRNC was able to initiate the measurement requested by the DRNC it shall respond with the UE MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the UE MEASUREMENT INITIATION REQUEST message.

If the DRNC allowed parameter modification and the SRNC modified the *Measurement Filter Coefficient* IE the SRNC shall include the modified value in the UE MEASUREMENT INTIATION RESPONSE message.

If the DRNC allowed parameter modification and the SRNC modified the *UE Measurement Report Characteristics* IE the SRNC shall include the modified value in the UE MEASUREMENT INTIATION RESPONSE message.

### 8.3.22.3 Unsuccessful Operation

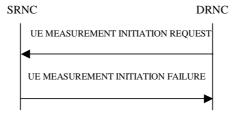


Figure 26G: UE Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the SRNC shall send a UE MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the UE MEASUREMENT INITIATION REQUEST message and shall include the *Cause* IE set to an appropriate value.

Typical cause values are:

# Radio Network Layer Causes:

Measurement not Supported For The Object; Measurement Temporarily not Available; Measurement Repetition Rate not Compatible with Current Measurements; UE not Capable to Implement Measurement.

#### **Miscellaneous Causes:**

Control Processing Overload; HW Failure.

### 8.3.22.4 Abnormal Conditions

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# 8.3.23 UE Measurement Reporting [TDD]

#### 8.3.23.1 General

This procedure is used by the SRNC to report the results of the successfully initiated measurements requested by the DRNC with the UE Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The SRNC may initiate the UE Measurement Reporting procedure at any time after establishing a Radio Link.

#### 8.3.23.2 Successful Operation



Figure 26H: UE Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria was met in the UE and reported to the SRNC, the SRNC shall initiate the UE Measurement Reporting procedure. The *Measurement ID* IE shall be set to the Measurement ID provided by the DRNC when initiating the measurement with the UE Measurement Initiation procedure.

If Primary CCPCH RSCP is being reported:

- If the *Primary CCPCH RSCP Delta* IE is included, the DRNC shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE.
- If the *Primary CCPCH RSCP Delta* IE is not included the DRNC shall assume that the reported value is in the non negative range as per TS 25.123 [24], and the value is equal to the *Primary CCPCH RSCP* IE.

If the achieved measurement accuracy does not fulfil the given accuracy requirement specified in TS 25.123 [24], the Measurement not available shall be reported in the *UE Measurement Value Information* IE in the UE MEASUREMENT REPORT message, otherwise the SRNC shall include the *UE Measurement Value* IE within the *UE Measurement Value Information* IE.

# 8.3.23.3 Abnormal Conditions

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# 8.3.24 UE Measurement Termination [TDD]

#### 8.3.24.1 General

This procedure is used by the DRNC to terminate a measurement previously requested by the UE Measurement Initiation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The UE Measurement Termination procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.24.2 Successful Operation



Figure 26I: UE Measurement Termination procedure, Successful Operation

This procedure is initiated with a UE MEASUREMENT TERMINATION REQUEST message, sent from the DRNC to the SRNC.

Upon receipt, the SRNC shall terminate forwarding of UE measurements corresponding to the received *Measurement ID* IE.

#### 8.3.24.3 Abnormal Conditions

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# 8.3.25 UE Measurement Failure [TDD]

#### 8.3.25.1 General

This procedure is used by the SRNC to notify the DRNC that a measurement previously requested by the UE Measurement Initiation procedure can no longer be reported.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The SRNC may initiate the UE Measurement Failure procedure at any time after establishing a Radio Link.

### 8.3.25.2 Successful Operation



Figure 26J: UE Measurement Failure procedure, Successful Operation

This procedure is initiated with a UE MEASUREMENT FAILURE INDICATION message, sent from the SRNC to the DRNC, to inform the DRNC that a previously requested UE measurement can no longer be reported. The SRNC has locally terminated the forwarding of the indicated measurement. The SRNC shall include in the UE MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

Typical cause values are:

#### **Miscellaneous Causes:**

- Control Processing Overload;
- HW Failure:
- O&M Intervention.

#### 8.3.25.3 Abnormal Conditions

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### 8.3.26 Iur Invoke Trace

#### 8.3.26.1 General

The purpose of the Iur Invoke Trace procedure is to inform the DRNC that it should begin a Trace Session for a given UE Context according to the Trace Parameters indicated by the SRNC. This procedure is used for Trace Parameter Propagation in the Signalling Based Activation mechanism as defined in TS 32.421 [48] and TS 32.422 [49].

This procedure shall use the signalling bearer mode specified below.

### 8.3.26.2 Successful Operation



Figure 26K: lur Invoke Trace procedure, Successful Operation

The Iur Invoke Trace procedure is invoked by the SRNC by sending an IUR INVOKE TRACE message to the DRNC.

When the concerned UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D-RNTI* IE shall be included in the message to identify the UE Context in the DRNC.

Upon receiving the IUR INVOKE TRACE message, the DRNC should begin a Trace Recording Session according to the parameters indicated in the IUR INVOKE TRACE message.

If the *List Of Interfaces To Trace* IE is included in the IUR INVOKE TRACE message, the DRNC shall trace, for the concerned UE Context, the interfaces indicated by the *List Of Interfaces To Trace* IE. Otherwise, the DRNC shall trace, for the concerned UE Context, the Iur and Iub interfaces.

The values of the *UE Identity* IE, *Trace Reference* IE and *Trace Recording Session Reference* IE are used to tag the Trace Record to allow simpler construction of the total record by the entity which combines Trace Records.

If the DRNC does not support the requested value "Minimum" or "Medium" of the *Trace Depth* IE, the DRNC should begin a Trace Recording Session with maximum Trace Depth.

The DRNC may not start a Trace Recording Session if there are insufficient resources available within the DRNC.

If the *MDT Configuration* IE is included and the *MDT Activation* IE is set to "MDT and Trace" then the DRNC shall, if supported, initiate the requested trace function and MDT function (M3 Report, if indicated) as described in TS 32.422 [49].

If the *MDT Configuration* IE is included and the *MDT Activation* IE is set to "MDT Only" then the DRNC shall, if supported, initiate the requested MDT function (M3 Report, if indicated) as described in TS 32.422 [49] and shall ignore the List of *Interfaces to Trace* IE and the *Trace Depth* IE.

If *Trace Collection Entity IP Address* IE is included then the DRNC shall, if supported, store the Trace Collection Entity IP address and may use the Trace Collection Entity IP address when transferring trace records.

#### 8.3.26.3 Abnormal Conditions

If the *MDT Configuration* IE is included in the IUR INVOKE TRACE message and the *Trace Collection Entity IP Address* IE is not included, the DRNC shall ignore the MDT Configuration.

# 8.3.27 Iur Deactivate Trace

#### 8.3.27.1 General

The purpose of the Iur Deactivate Trace procedure is to inform the DRNC that it should stop a Trace Session for the concerned UE Context and the indicated Trace Reference. This procedure is used for the Signalling Based Deactivation mechanism as defined in TS 32.421 [48] and TS 32.422 [49].

This procedure shall use the signalling bearer mode specified below.

# 8.3.27.2 Successful Operation



Figure 26L: Iur Invoke Trace procedure, Successful Operation

The Iur Deactivate Trace procedure is invoked by the SRNC by sending an IUR DEACTIVATE TRACE message to the DRNC.

When the concerned UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D-RNTI* IE shall be included in the message to identify the UE Context in the DRNC.

Upon receiving the IUR DEACTIVATE TRACE message, the DRNC shall stop for the concerned UE Context any ongoing Trace Recording Session for the Trace Session identified by the *Trace Reference* IE.

### 8.3.27.3 Abnormal Conditions

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#### 8.3.28 Enhanced Relocation

# 8.3.28.1 General

This procedure is used for relocation of SRNS in case the SRNC and DRNC connect to same CN node.

The connection-oriented service of the signalling bearer shall be established in conjunction with this procedure in case the relevant UE Context does not exist for the UE.

This procedure shall use the signalling bearer connection for the relevant UE Context in the UE Context exists. The Enhanced Relocation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

# 8.3.28.2 Successful Operation

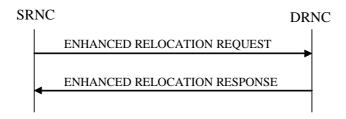


Figure 26M: Enhanced Relocation procedure: Successful Operation

The SRNC initiates the procedure by sending an ENHANCED RELOCATION REQUEST message. When the SRNC sends the ENHANCED RELOCATION REQUEST message, it shall start the timer  $T_{RELOCprep.}$  The ENHANCED RELOCATION REQUEST message shall contain the *Cause* IE with an appropriate value e.g.: "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons", "Directed Retry", "Reduce Load in Serving Cell", "No Iu CS UP relocation".

If the ENHANCED RELOCATION REQUEST message includes SRNC-ID, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context.

#### 8.3.28.3 Unsuccessful Operation

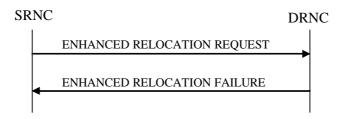


Figure 26N: Enhanced Relocation procedure: Unsuccessful Operation

If the DRNC is not able to accept any of the RABs or a failure occurs during the procedure, the DRNC shall send the ENHANCED RELOCATION FAILURE message to the SRNC. The message shall contain the *Cause* IE with an appropriate value.

#### **Interactions with Enhanced Relocation Cancel procedure:**

If there is no response from the DRNC to the ENHANCED RELOCATION REQUEST message before timer  $T_{\text{RELOC}prep}$  expires in the DRNC, the SRNC should cancel the Enhanced Relocation procedure towards the DRNC by initiating the Enhanced Relocation Cancel procedure with the appropriate value for the *Cause* IE, e.g. " $T_{\text{RELOC}prep}$  expiry". The SRNC shall ignore any ENHANCED RELOCATION RESPONSE or ENHANCED RELOCATION FAILURE message received after the initiation of the Enhanced Relocation Cancel procedure and remove any reference and release any resources related to the concerned UE Context.

#### 8.3.28.4 Abnormal Conditions

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# 8.3.29 Enhanced Relocation Cancel

#### 8.3.29.1 General

This procedure is used to cancel an ongoing enhanced relocation or an already prepared relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

## 8.3.29.2 Successful Operation



Figure 260: Enhanced Relocation Cancel procedure: Successful Operation

The SRNC initiates the procedure by sending the ENHANCED RELOCATION CANCEL message to the DRNC. The SRNC shall indicate the reason for cancelling the relocation by means of an appropriate cause value. Typical cause values are " $T_{RELOCprep}$ Expiry", "Relocation Cancelled", "Traffic Load In The Target Cell Higher Than In The Source Cell".

At the reception of the ENHANCED RELOCATION CANCEL message, the DRNC shall remove any reference to, and release any resources previously reserved to the concerned UE context.

### 8.3.29.3 Unsuccessful Operation

Not applicable.

#### 8.3.29.4 Abnormal Conditions

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## 8.3.30 Enhanced Relocation Signalling Transfer

### 8.3.30.1 General

The procedure is used by the SRNC to transfer DL L3 information to DRNC during enhanced relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.30.2 Successful Operation



Figure 26P: Enhanced Relocation Signalling Transfer procedure, Successful Operation

The procedure consists of the ENHANCED RELOCATION SIGNALLING TRANSFER message sent by the SRNC to the DRNC.

The ENHANCED RELOCATION SIGNALLING TRANSFER message contains the L3 Information and after the receipt of the message, the DRNC shall send the L3 Information on the DCCH.

## 8.3.30.3 Abnormal Conditions

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### 8.3.31 Enhanced Relocation Release

### 8.3.31.1 General

The procedure is used by the DRNC to signal to the SRNC that resource for CN domain is released due to failure of the enhanced relocation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.31.2 Successful Operation



Figure 26Q: Enhanced Relocation Signalling Transfer procedure, Successful Operation

The procedure consists of the ENHANCED RELOCATION RELEASE message sent by the DRNC to the SRNC.

Upon reception of the ENHANCED RELOCATION RELEASE message, the SRNC shall release related resources associated to indicated CN domain(s) by the *Released CN Domain* IE in the message for the UE context.

### 8.3.31.3 Abnormal Conditions

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# 8.3.32 Secondary UL Frequency Reporting [FDD]

#### 8.3.32.1 General

The purpose of this procedure is to inform the DRNS about the activation state of the secondary UL frequency of the UE in Dual Cell E-DCH operation.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.32.2 Successful Operation



Figure 26R: Secondary UL Frequency Reporting procedure

The Secondary UL Frequency Reporting procedure is initiated by sending the SECONDARY UL FREQUENCY REPORT message from the SRNC to the DRNC.

The *Activation Information* IE defines the local activation state of the Secondary uplink frequency of the UE in Dual Cell E-DCH operation.

- If the value of *Uu Activation State* IE is "Activated": the DRNS shall if supported use this information for resource allocation operation of the secondary E-DCH radio link(s), F-DPCH transmission and DPCCH detection.

- If the value of *Uu Activation State* IE is "De-Activated": the DRNS shall if supported use this information for release of the related resources for the secondary E-DCH radio link(s), cease of F-DPCH transmission and DPCCH detection.

### 8.3.32.3 Abnormal Conditions

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## 8.3.33 Secondary UL Frequency Update [FDD]

### 8.3.33.1 General

The purpose of this procedure is to inform the SRNC about updates to activation state of the secondary UL frequency of the UE in Dual Cell E-DCH operation .

This procedure shall use the signalling bearer connection for the relevant UE context.

### 8.3.33.2 Successful Operation

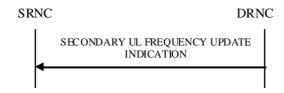


Figure 26S: Secondary UL Frequency Update procedure

The Secondary UL Frequency Update procedure is initiated by the DRNS by sending the SECONDARY UL FREQUENCY UPDATE INDICATION message to the SRNC.

If the DRNS needs to update the local activation state of the Secondary uplink frequency of the UE in Dual Cell E-DCH operation, the DRNS shall send SECONDARY UL FREQUENCY UPDATE INDICATION message and include the *Activation Information* IE.

#### 8.3.33.3 Abnormal Conditions

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# 8.4 Common Transport Channel Procedures

# 8.4.1 Common Transport Channel Resources Initialisation

### 8.4.1.1 General

The Common Transport Channel Resources Initialisation procedure is used by the SRNC for the initialisation of the Common Transport Channel user plane towards the DRNC and/or for the initialisation of the Common Transport Channel resources in the DRNC to be used by a UE.

This procedure shall use the connectionless mode of the signalling bearer.

## 8.4.1.2 Successful Operation

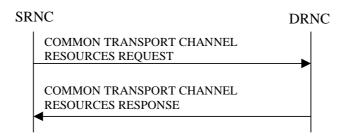


Figure 27: Common Transport Channel Resources Initialisation procedure, Successful Operation

The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST message to the DRNC.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer Requested", the DRNC shall store the received *Transport Bearer ID* IE. The DRNC may use the *Transport Layer Address* and *Binding ID* IEs included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message received from the SRNC when establishing a transport bearer for the common transport channel. In addition, the DRNC shall include its own *Binding ID* IE and *Transport Layer Address* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *TNL QoS* IE is included and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNC to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related common transport channels.

If the value of the *Transport Bearer Request Indicator* IE is set to" Bearer not Requested", the DRNC shall use the transport bearer indicated by the *Transport Bearer ID* IE.

If the *C-ID* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall allocate a C-RNTI for the indicated cell and include the *C-RNTI* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *C-ID* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall include the *FACH Info for UE Selected S-CCPCH* IE valid for the cell indicated by the *C-ID* IE and the corresponding *C-ID* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the *C-ID* IE is not included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall include the *FACH Info for UE Selected S-CCPCH* IE valid for the cell where the UE is located and the corresponding *C-ID* IE. The DRNC shall include the *FACH Scheduling Priority* IE and *FACH Initial Window Size* IE in the *FACH Flow Control Information* IE of the *FACH Info for UE Selected S-CCPCH* IE for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c/sh SDU Length* IEs for each priority class.

If the DRNS has any RACH and/or FACH [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH] resources previously allocated for the UE in another cell than the cell in which resources are currently being allocated, the DRNS shall release the previously allocated RACH and/or FACH resources [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH].

If the DRNS has successfully reserved the required resources, the DRNC shall respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the *Permanent NAS UE Identity* IE is present in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNS shall store the information for the considered UE Context for the lifetime of the UE Context.

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is available in the DRNC for the considered UE Context, the DRNC shall use this information to determine whether it can reserve resources on a common transport channel in this cell or not.

If the *MBMS Bearer Service List* IE is included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall, if supported, perform the UE Linking as specified in TS 25.346 [50], section 5.1.6. If an MBMS session for some MBMS bearer services contained in the UE Link is ongoing in the cell identified by the *C-ID* IE, the DRNC shall include in the *Active MBMS Bearer Service List* IE the *Transmission Mode* IE for each of these active MBMS bearer services in the COMMON TRANPORT CHANNEL RESOURCES RESPONSE message.

[FDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Enhanced FACH Support Indicator* IE, the DRNC may include the *Enhanced FACH Information Response* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If a HS-DSCH RNTI was not previously allocated to the UE or a new HS-DSCH RNTI is allocated to the UE, the DRNC shall include the *HS-DSCH-RNTI* IE in the *Enhanced FACH Information Response* IE. And if Enhanced PCH operation is activated in the cell indicated by the *C-ID* IE, the DRNC shall include the *Priority Queue Information for Enhanced PCH* IE in the *Enhanced FACH Information Response* IE.]

[1.28Mcps TDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Enhanced FACH Support Indicator* IE, the DRNC may include the *Enhanced FACH Information Response* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If a HS-DSCH RNTI was not previously allocated to the UE or a new HS-DSCH RNTI is allocated to the UE, the DRNC shall include the *HS-DSCH-RNTI* IE in the *Enhanced FACH Information Response* IE. And if Enhanced PCH operation is activated in the cell indicated by the *C-ID* IE, the DRNC shall include the *Priority Queue Information for Enhanced PCH* IE in the *Enhanced FACH Information Response* IE.]

[FDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *Common E-DCH Support Indicator* IE, the DRNC may include the *Common E-DCH MAC-d Flow Specific Information* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the E-DCH MAC-d Flow Multiplexing List for a Common E-DCH MAC-d Flow is configured in DRNC, the DRNC shall include the *E-DCH MAC-d Flow Multiplexing List* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes the *C-ID* IE and the *Common E-DCH Support Indicator* IE, the DRNC may include the *E-RNTI* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.]

[1.28Mcps TDD – If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes a *Enhanced FACH Support Indicator* IE, the DRNC may include the *Common E-DCH MAC-d Flow Specific Information LCR* IE in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.]

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message includes an *HS-DSCH physical layer category* IE, the DRNC may store the information for the considered UE Context for the lifetime of the UE Context.

[FDD – If the COMMON TRANSPORT CHANNEL RESOURES REQUEST message includes an *UE with enhanced HS-SCCH support indicator* IE, the DRNC may store the information for the considered UE Context for the lifetime of the UE context.]

### 8.4.1.3 Unsuccessful Operation

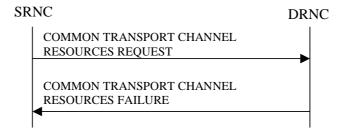


Figure 28: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

If the *Transport Bearer Request Indicator* IE is set to "Bearer Requested" and the DRNC is not able to provide a Transport Bearer, the DRNC shall reject the procedure and respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, including the reason for the failure in the *Cause* IE.

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message contains a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is not available for the considered UE Context, the DRNC shall reject the procedure and send the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, including the reason for the failure in the *Cause* IE.

Typical cause values are:

#### Radio Network Layer Causes:

- Common Transport Channel Type not Supported;

- Cell reserved for operator use.

### **Transport Layer Causes:**

- Transport Resource Unavailable.

#### 8.4.1.4 Abnormal Conditions

If the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport channel intended to be established, the DRNC shall reject the procedure using the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message.

If ALCAP is not used, if the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message contains the *Transport Bearer Request Indicator* IE set to "Bearer Requested" but does not contain the *Transport Layer Address* IE and the *Binding ID* IE, the DRNC shall reject the procedure using the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message.

## 8.4.2 Common Transport Channel Resources Release

#### 8.4.2.1 General

This procedure is used by the SRNC to request release of Common Transport Channel Resources for a given UE in the DRNS. The SRNC uses this procedure either to release the UE Context from the DRNC (and thus both the D-RNTI and the C-RNTI) or to release only the C-RNTI.

This procedure shall use the connectionless mode of the signalling bearer.

## 8.4.2.2 Successful Operation



Figure 29: Common Transport Channel Resources Release procedure, Successful Operation

The SRNC initiates the Common Transport Channel Resources Release procedure by sending the COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST message to the DRNC. Upon receipt of the message the DRNC shall release the UE Context identified by the D-RNTI and all its related RACH and/or FACH resources, unless the UE is using dedicated resources (DCH, [TDD – USCH and/or DSCH]) in the DRNS in which case the DRNC shall release only the C-RNTI and all its related RACH and/or FACH [FDD – and/or HS-DSCH] [1.28Mcps TDD – and/or HS-DSCH] resources allocated for the UE.

### 8.4.2.3 Abnormal Conditions

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## 8.5 Global Procedures

### 8.5.1 Error Indication

## 8.5.1.1 General

The Error Indication procedure is initiated by a node to report detected errors in a received message, provided they cannot be reported by an appropriate response message.

This procedure shall use the signalling bearer mode specified below.

## 8.5.1.2 Successful Operation

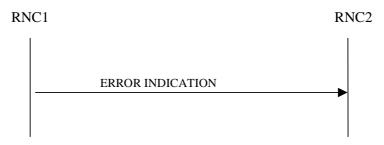


Figure 30: Error Indication procedure, Successful Operation

When the conditions defined in clause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node. This message shall use the same mode of the signalling bearer and the same signalling bearer connection (if connection oriented) as the message that triggers the procedure.

When the ERROR INDICATION message is sent from a DRNC to an SRNC using connectionless mode of the signalling bearer, the *S-RNTI* IE shall be included in the message if the UE Context addressed by the *D-RNTI* IE which was received in the message triggering the Error Indication procedure exists. When the ERROR INDICATION message is sent from an SRNC to a DRNC using connectionless mode of the signalling bearer, the *D-RNTI* IE shall be included in the message if available.

When a message using connectionless mode of the signalling bearer is received in the DRNC and there is no UE Context in the DRNC as indicated by the *D-RNTI* IE, the DRNC shall include the D-RNTI from the received message in the *D-RNTI* IE and set the *Cause* IE to "Unknown RNTI" in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message using connectionless mode of the signalling bearer is received in the SRNC and there is no UE in the SRNC as indicated by the *S-RNTI* IE, the SRNC shall include the S-RNTI from the received message in the *S-RNTI* IE and set the *Cause* IE to "Unknown RNTI" in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE, or both the *Cause* IE and the *Criticality Diagnostics* IE to indicate the reason for the error indication.

Typical cause values for the ERROR INDICATION message are:

### **Protocol Causes:**

- Transfer Syntax Error;
- Abstract Syntax Error (Reject);
- Abstract Syntax Error (Ignore and Notify);
- Message not Compatible with Receiver State;
- Unspecified.

### 8.5.1.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the error indication procedure as specified in section 8.5.1.2.

### 8.5.1.3 Abnormal Conditions

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## 8.5.2 Common Measurement Initiation

### 8.5.2.1 General

This procedure is used by an RNC to request the initiation of measurements of common resources to another RNC. The requesting RNC is referred to as RNC<sub>1</sub> and the RNC to which the request is sent is referred to as RNC<sub>2</sub>.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.2.2 Successful Operation

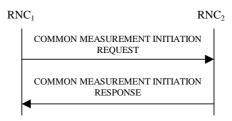


Figure 30A: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC<sub>1</sub> to the RNC<sub>2</sub>.

Upon receipt, the RNC<sub>2</sub> shall initiate the requested measurement according to the parameters given in the request.

Unless specified below, the meaning of the parameters are given in other specifications.

[TDD – If the [3.84 Mcps TDD and 7.68 Mcps TDD – *Time Slot* IE] [1.28 Mcps – *Time Slot LCR* IE] is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the requested time slot individually.]

#### **Common measurement type**

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then:

- The RNC<sub>2</sub> shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by the *Reference Cell Identifier* IE and the neighbouring cells identified by the *UTRAN Cell Identifier* IE (*UC-ID*) in the *Neighbouring Cell Measurement Information* IE.
- [3.84 Mcps TDD The RNC<sub>2</sub> shall perform the measurement using the time slot specified in the *Time Slot* IE in the *Neighbouring TDD Cell Measurement Information* IE and using the midamble shift and burst type specified in the *Midamble Shift And Burst Type* IE in the *Neighbouring TDD Cell Measurement Information* IE. If *Time Slot* IE and *Midamble Shift And Burst Type* IE are not available in the *Neighbouring TDD Cell Measurement Information* IE, the RNC<sub>2</sub> may use any appropriate time slots, midamble shifts and burst types to make the measurement.]
- [7.68 Mcps TDD The RNC<sub>2</sub> shall perform the measurement using the time slot specified in the *Time Slot* IE in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE and using the midamble shift and burst type specified in the *Midamble Shift And Burst Type 7.68 Mcps* IE in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE. If *Time Slot* IE and *Midamble Shift And Burst Type 7.68 Mcps* IE are not available in the *Neighbouring TDD Cell Measurement Information 7.68 Mcps* IE, the RNC<sub>2</sub> may use any appropriate time slots, midamble shifts and burst types to make the measurement.]

If the *Common Measurement Type* IE is set to "load", the RNC<sub>2</sub> shall initiate measurements of uplink and downlink load on the measured object identified by the *Reference Cell Identifier* IE. If either uplink or downlink load satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink measurements.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", "UTRAN GANSS Timing of Cell Frames for UE Positioning", "transmitted carrier power", "received total wide band power", or

"UL timeslot ISCP" the RNC<sub>2</sub> shall initiate measurements on the measured object identified by the *Reference Cell Identifier* IE.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> shall initiate the UTRAN GANSS Timing of Cell Frames measurements using the GNSS system time identified by *GANSS Time ID* IE included in the COMMON MEASUREMENT INITIATION REQUEST message.

- If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning" and the *GANSS Time ID* IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> shall assume that the corresponding GANSS time is "Galileo" system time.

If the Common Measurement Type IE is set to "RT load", the RNC $_2$  shall initiate measurements of uplink and downlink estimated share of RT (Real Time) traffic of the load of the measured object. If either uplink or downlink RT load satisfies the requested report characteristics, the RNC $_2$  shall report the result of both uplink and downlink measurements.

If the Common Measurement Type IE is set to "NRT load Information", the RNC $_2$  shall initiate measurements of uplink and downlink NRT (Non Real Time) load situation on the measured object. If either uplink or downlink NRT load satisfies the requested report characteristics, the RNC $_2$  shall report the result of both uplink and downlink measurements.

#### Report characteristics

The Report Characteristics IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *SFN* IE is not provided, the RNC<sub>2</sub> shall report the result of the requested measurement immediately in the COMMON MEASUREMENT INITIATION RESPONSE message. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE.

If the *Report Characteristics* IE is set to "Periodic" and if the *SFN* IE is not provided, the RNC<sub>2</sub> shall immediately and periodically initiate a Common Measurement Reporting procedure for this measurement, with a frequency as specified by the *Report Periodicity* IE. If the *SFN* IE is provided, the RNC<sub>2</sub> shall initiate a Common Measurement Reporting procedure for this measurement at the SFN indicated in the *SFN* IE, and shall repeat this initiation periodically thereafter with a frequency as specified by the *Report Periodicity* IE. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE.

If the *Report Characteristics* IE is set to "Event A", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold, as specified by the *Measurement Threshold* IE, and then stays above the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold, as specified by the *Measurement Threshold* IE, and then stays below the threshold for the requested hysteresis time, as specified by the *Measurement Hysteresis Time* IE. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity rises more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this rise occurs within the requested rising time specified by the *Measurement Change Time* IE. After reporting this type of event, the RNC<sub>2</sub> shall not initiate the next C event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event D", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold specified by the *Measurement Increase/Decrease Threshold* IE, and only when this fall occurs within the requested falling time specified by the *Measurement Change Time* IE. After reporting this type of event,, the RNC<sub>2</sub> shall not initiate the next D event reporting for the same measurement during the subsequent time specified by the *Measurement Change Time* IE.

If the *Report Characteristics* IE is set to "Event E", the RNC<sub>2</sub>shall initiate the Common Measurement Reporting procedure when the measured entity rises above the *Measurement Threshold 1* IE and stays above the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity falls below the *Measurement Threshold 2* IE and stays below the threshold for the *Measurement Hysteresis Time* IE, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the RNC<sub>2</sub> shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "Event F", the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure when the measured entity falls below the *Measurement Threshold 1* IE and stays below the threshold for the *Measurement Hysteresis Time* IE (Report A). When the conditions for Report A are met and if the *Report Periodicity* IE is provided, the RNC<sub>2</sub> shall initiate the Measurement Reporting procedure periodically with the requested report frequency specified by the *Report Periodicity* IE. If the conditions for Report A have been met and the measured entity rises above the *Measurement Threshold 2* IE and stays above the threshold for the *Measurement Hysteresis Time* IE, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure (Report B) and shall terminate any corresponding periodic reporting. If the *Measurement Threshold 2* IE is not present, the RNC<sub>2</sub> shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC<sub>2</sub> shall use the value zero as hysteresis times for both Report A and Report B.

[1.28Mcps TDD-If the *Report Characteristics* IE is set to "Event H" (figure B.7), the Measurement Reporting procedure (Report A) is initiated when the measurement value of measured entity rises above the *Measurement Threshold 1* and stays above the threshold for the *Measurement Hysteresis Time* ( $T_1$  in figure B.7).] The measurement value of measured entity in Report A substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions has been met and the measurement value of measured entity rises above or falls below the *Measurement Base Value* by *Measurement Fluctuation Range* (H<sub>1</sub> in figure B.7), and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7) counting from the beginning of every *Report Periodicity*, the Measurement Reporting procedure (Report B or Report C) is initiated. The the measurement value of measured entity in (Report B or Report C) substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions have been met and the measurement value of measured entity falls below the *Measurement Threshold 2* and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7), the Measurement Reporting procedure (Report D) is initiated and the reporting is terminated.]

If the *Report Characteristics* IE is set to "On Modification" and if the *SFN* IE is not provided, the RNC<sub>2</sub> shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the first measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). Furthermore, if the *SFN* IE is present and if the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the *Reference Cell Identifier* IE. Following the first measurement report, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

- 1. If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning":
  - If the *T<sub>UTRAN-GPS</sub> Change Limit* IE is included in the *T<sub>UTRAN-GPS</sub> Measurement Threshold Information* IE, the RNC<sub>2</sub> shall calculate the change of T<sub>UTRAN-GPS</sub> value (F<sub>n</sub>) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F<sub>n</sub> rises above the threshold indicated by the *T<sub>UTRAN-GPS</sub> Change Limit* IE. The change of T<sub>UTRAN-GPS</sub> value (F<sub>n</sub>) is calculated according to the following:

 $F_n=0$  for n=0

$$F_n = (M_n - M_{n-1}) \bmod 37158912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) *10*3.84*10^3*16 + F_{n-1} \qquad \qquad \text{for } n > 0$$

F<sub>n</sub> is the change of the T<sub>UTRAN-GPS</sub> value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

- $M_n$  is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- $M_{n-1}$  is the previous measurement result received after point C in the measurement model (TS 25.302 [26]), measured at  $SFN_{n-1}$ .
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.
- M<sub>0</sub> is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.
- If the *Predicted T<sub>UTRAN-GPS</sub> Deviation Limit* IE is included in the *T<sub>UTRAN-GPS</sub> Measurement Threshold Information* IE, the RNC<sub>2</sub> shall update the P<sub>n</sub> and F each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the *Predicted T<sub>UTRAN-GPS</sub> Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

```
P_n=b for n=0
```

```
P_n = ((a/16)*((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096)*10*3.84*10^3*16 + P_{n-1}) \bmod 37158912000000 \ for \quad n>0
```

```
F_n = min((M_n - P_n) \text{ mod } 37158912000000, (P_n - M_n) \text{ mod } 37158912000000) for n>0
```

 $P_n$  is the predicted  $T_{UTRAN\text{-}GPS}$  value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

A is the last reported T<sub>UTRAN-GPS</sub> Drift Rate value.

B is the last reported  $T_{UTRAN-GPS}$  value.

- $F_n$  is the deviation of the last measurement result from the predicted  $T_{UTRAN\text{-}GPS}$  value  $(P_n)$  when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.
- $M_n$  is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- $M_1$  is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.

The  $T_{UTRAN-GPS}$  Drift Rate is determined by the RNS<sub>2</sub> in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

- 2. If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference":
  - If the SFN-SFN Change Limit IE is included in the SFN-SFN Measurement Threshold Information IE, the RNC<sub>2</sub> shall calculate the change of SFN-SFN value (F<sub>n</sub>) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the absolute value of F<sub>n</sub> rises above the threshold indicated by the SFN-SFN Change Limit IE. The change of the SFN-SFN value is calculated according to the following:

 $F_n=0$  for n=0

$$[FDD - F_n = (M_n - a) \mod 614400$$
 for n>0]

 $[TDD - F_n = (M_n - a) \mod 40960$  for n>0]

 $F_n$  is the change of the SFN-SFN value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

A is the last reported SFN-SFN.

- M<sub>n</sub> is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at SFN<sub>n</sub>.
- M<sub>1</sub> is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after the first Common Measurement Reporting at initiation or after the last event was triggered.
- If the Predicted SFN-SFN Deviation Limit IE is included in the SFN-SFN Measurement Threshold Information IE, the RNC<sub>2</sub> shall each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]), update the P<sub>n</sub> and F<sub>n</sub>. The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the Predicted SFN-SFN Deviation Limit IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

 $P_n=b$  for n=0

$$[FDD - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \mod 4096)/100 + P_{n-1}) \mod 614400$$
 for  $n>0$ 

$$[FDD - F_n = min((M_n - P_n) \text{ mod } 614400, (P_n - M_n) \text{ mod } 614400)$$
 for n>0]

$$[TDD - P_n = ((a/16)*(15*(SFN_n - SFN_{n-1})mod\ 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}\ )\ mod\ 40960\ for \\ m>0]$$

$$[TDD - F_n = min((M_n - P_n) \mod 40960, (P_n - M_n) \mod 40960)$$
 for n>0]

P<sub>n</sub> is the predicted SFN-SFN value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

A is the last reported SFN-SFN Drift Rate value.

B is the last reported SFN-SFN value.

- $F_n$  is the deviation of the last measurement result from the predicted SFN-SFN value  $(P_n)$  when n measurements have been received after first Common Measurement Reporting at initiation or after the last event was triggered.
- $M_n$  is the latest measurement result received after point C in the measurement model (TS 25.302 [26]), measured at the [TDD the Time Slot  $TS_n$  of] the Frame  $SFN_n$ .
- $M_1$  is the first measurement result received after point C in the measurement model (TS 25.302 [26]), after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the RNS<sub>2</sub> in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

- 3. If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning":
  - If the *T<sub>UTRAN-GANSS</sub> Change Limit* IE is included in the *T<sub>UTRAN-GANSS</sub> Measurement Threshold Information* IE, the RNC<sub>2</sub> shall calculate the change of T<sub>UTRAN-GANSS</sub> value (F<sub>n</sub>) each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F<sub>n</sub> rises above the threshold indicated by the *T<sub>UTRAN-GANSS</sub> Change Limit* IE. The change of T<sub>UTRAN-GANSS</sub> value (F<sub>n</sub>) is calculated according to the following:

Fn=0 for n=0

$$Fn = (GAMn - GAMn - 1) \bmod 5308416000000 - ((SFNn - SFNn - 1) \bmod 4096) *10*3.84*10^3 *16 + Fn - 1 \\ for n > 0$$

Fn is the change of the TUTRAN-GANSS value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

GAMn is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFNn.

- GAMn-1 is the previous GANSS measurement result received after point C in the GANSS measurement model, measured at SFNn-1.
- GAM1 is the first GANSS measurement result received after point C in the GANSS measurement model, after the first Common Measurement Reporting at initiation or after the last event was triggered.
- GAM0 is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

GANSS measurement model is the timing between cell j and GANSS Time Of Day.  $T_{UE\text{-}GANSSj}$  is defined as the time of occurrence of a specified UTRAN event according to GANSS time. The specified UTRAN event is the beginning of a particular frame (identified through its SFN) in the first detected path (in time) of the cell j CPICH, where cell j is a cell chosen by the UE. The reference point for  $T_{UE\text{-}GANSSj}$  shall be the antenna connector of the UE.

- If the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE is included in the *T<sub>UTRAN-GANSS</sub> Measurement Threshold Information* IE, the RNC<sub>2</sub> shall update the P<sub>n</sub> and F each time a new measurement result is received after point C in the measurement model (TS 25.302 [26]). The RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure and set n equal to zero when F<sub>n</sub> rises above the threshold indicated by the *Predicted T<sub>UTRAN-GANSS</sub> Deviation Limit* IE. The P<sub>n</sub> and F<sub>n</sub> are calculated according to the following:

 $P_n=b$  for n=0

 $P_n = ((a/16)*((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096)*10*3.84*10^3*16 + P_{n-1}) \bmod 5308416000000 \qquad \qquad for \ n > 0$ 

 $F_n = min((GAM_n - P_n) \mod 5308416000000, (P_n - GAM_n) \mod 5308416000000)$  for n>0

 $P_n$  is the predicted  $T_{UTRAN-GANSS}$  value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

A is the last reported T<sub>UTRAN-GANSS</sub> Drift Rate value.

B is the last reported T<sub>UTRAN-GANSS</sub> value.

- $F_n$  is the deviation of the last measurement result from the predicted  $T_{UTRAN\text{-}GANSS}$  value  $(P_n)$  when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.
- GAM<sub>n</sub> is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFN<sub>n</sub>.
- GAM<sub>1</sub> is the first GANSS measurement result received after point C in the GANSS measurement model, after the first Common Measurement Reporting at initiation or after the last event was triggered.

The  $T_{UTRAN-GANSSS}$  Drift Rate is determined by the RNS<sub>2</sub> in an implementation-dependent way after point B (see model of physical layer measurements in (TS 25.302 [26])).

If the *Report Characteristics* IE is not set to "On Demand", the RNC<sub>2</sub> is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more, the RNC<sub>2</sub> shall terminate the measurement locally without reporting this to RNC<sub>1</sub>.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the RNC<sub>2</sub> shall initiate a Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

### Common measurement accuracy

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> shall use the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE included in the Common Measurement Accuracy IE according to the following:

- If the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE indicates "Class A", then the concerned RNC<sub>2</sub> shall perform the measurement with the highest supported accuracy within the accuracy classes A, B or C.

- If the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE indicates the "Class B", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy within the accuracy classes B and C.
- If the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE indicates "Class C", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy according to class C.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the concerned RNC<sub>2</sub> shall initiate the SFN-SFN observed Time Difference measurements between the reference cell identified by *UC-ID* IE and the neighbouring cells identified by their UC-ID. The *Report Characteristics* IE applies to each of these measurements.

If the *Common Measurement Type* IE is set to "UTRAN GANSS Timing of Cell Frames for UE positioning", then the RNC<sub>2</sub> shall use the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE included in the Common Measurement Accuracy IE according to the following:

- If the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE indicates "Class A", then the concerned RNC<sub>2</sub> shall perform the measurement with the highest supported accuracy within the accuracy classes A, B or C.
- If the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE indicates the "Class B", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy within the accuracy classes B and C.
- If the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE indicates "Class C", then the concerned RNC<sub>2</sub> shall perform the measurements with the highest supported accuracy according to class C.

#### Higher layer filtering

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1-a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for Fn).

 $A = \frac{1}{2}(k^2)$ , where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering).

In order to initialise the averaging filter,  $F_0$  is set to  $M_1$  when the first measurement result from the physical layer measurement is received.

## **Measurement Recovery Behavior:**

If the *Measurement Recovery Behavior* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the COMMON MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.5.3.2.

### Response message

If the RNC<sub>2</sub> was able to initiate the measurement requested by RNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message.

In the case in which the Report Characteristics IE is set to "On Demand" or "On Modification":

The COMMON MEASUREMENT INITIATION RESPONSE message shall include the *Common Measurement Object Type* IE containing the measurement result. It shall also include the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE positioning" or "UTRAN GANSS Timing of Cell Frames for UE positioning".

- If the *Common Measurement Type* IE is not set to "SFN-SFN Observed Time Difference" and if the *SFN Reporting Indicator* IE is set to "FN Reporting Required", then the RNC<sub>2</sub> shall include the *SFN* IE in the COMMON MEASUREMENT INITIATION RESPONSE message,. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the *SFN Reporting Indicator* IE is ignored.
- If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference", then the RNC<sub>2</sub> shall report all the available measurements in the Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE, and the RNC<sub>2</sub> shall report the neighbouring cells with no measurement result available in the Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE. For all available measurement results, the RNC<sub>2</sub> shall include in the Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE the SFN-SFN Quality IE and the SFN-SFN Drift Rate Quality IE, if available.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", the RNC<sub>2</sub> shall include in the  $T_{UTRAN-GPS}$  *Measurement Value Information* IE the  $T_{UTRAN-GPS}$  *Quality* IE and the  $T_{UTRAN-GPS}$  *Drift Rate Quality* IE, if available.

If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning" and the Report Characteristics IE is set to "On Demand" or "On Modification", the RNC<sub>2</sub> shall include in the  $T_{UTRAN-GANSS}$  Measurement Value Information IE, the  $T_{UTRAN-GANSS}$  Quality IE and the  $T_{UTRAN-GANSS}$  Drift Rate Quality IE, if available.

### 8.5.2.2.1 Successful Operation for lur-g

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC<sub>1</sub> to the BSS<sub>2</sub> or from the BSS<sub>1</sub> to the RNC<sub>2</sub>/BSS<sub>2</sub>.

Upon receipt, the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate the requested measurement according to the parameters given in the request.

[1.28Mcps TDD-The procedure is also initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the TDD RNC $_1$  to the BSS $_2$  for multiple GERAN cells' measurements by allocating unique Measurement ID for each GERAN cell. Upon receipt, the BSS $_2$  shall initiate the requeted measurement according to the parameters given in the request.]

### Common measurement type on Iur-g

If the *Common Measurement Type* IE is set to "load", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

If the *Common Measurement Type* IE is set to "RT load", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

If the *Common Measurement Type* IE is set to "NRT load Information", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.2.2.

### Report characteristics on Iur-g

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. This IE is used as described in section 8.5.2.2.

### Response message for Iur-g

If the RNC<sub>2</sub>/BSS<sub>2</sub> was able to initiate the measurement requested by RNC<sub>1</sub>/BSS<sub>1</sub> it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On Demand", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result.

[1.28Mcps TDD- If the  $BSS_2$  was able to initiate the measurement requested by  $RNC_1$ , it shall respond with one or more COMMON MEASUREMENT INITIATION RESPONSE messages sent. The message(s) should include the same Measurement ID that was used in the mesasurement request.

## 8.5.2.3 Unsuccessful Operation

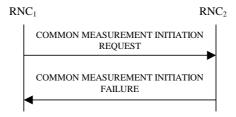


Figure 30B: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the RNC<sub>2</sub> shall send a COMMON MEASUREMENT INITIATION FAILURE message. The message shall include the same *Measurement ID* IE that was used in the COMMON MEASUREMENT INITIATION REQUEST message and shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

### Radio Network Layer Cause

- Measurement not supported for the object;
- Measurement Temporarily not Available.

### 8.5.2.4 Abnormal Conditions

If the COMMON MEASUREMENT INITIATION REQUEST message contains the SFN-SFN Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the RNC<sub>2</sub> shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the  $T_{UTRAN-GPS}$  Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the RNC<sub>2</sub> shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the RNC<sub>2</sub> shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE positioning", but the  $T_{UTRAN-GPS}$  Measurement Accuracy Class IE in the Common Measurement Accuracy IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE positioning", but the  $T_{UTRAN-GANSS}$  Measurement Accuracy Class IE in the Common Measurement Accuracy IE is not included in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the Common Measurement Type received in the *Common Measurement Type* IE is not "load", "RT load" or "NRT load Information", and if the Common Measurement Type received in the *Common Measurement Type* IE is not defined in TS 25.215 [11] or TS 25.225 [14] to be measured on the Common Measurement Object Type indicated in the COMMON MEASUREMENT INITIATION REQUEST message the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

The allowed combinations of the Common Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

Table 5: Allowed Common Measurement Type and Report Characteristics Type Combinations

Common measurement type	Report characteristics type									
31	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	-	On Modification
Received total wide band power	Χ	X	Х	Х	Х	Х	X	Х		
Transmitted Carrier Power	Х	Х	Х	Х	Х	Х	Х	Х		
UL Timeslot ISCP	Χ	Х	Х	Х	Х	X	Х	Х		
Load	X	X	Χ	Χ	X	X	Χ	X	X	
UTRAN GPS Timing of Cell Frames for UE Positioning	Х	X								X
SFN-SFN Observed Time Difference	Х	Х								Х
RT load	X	X	Χ	Χ	X	X	Χ	X		
NRT load Information	Χ	Х	Х	Х	Х	X	Х	Х		
UpPTS interference	X	X	X	Х	X	X	X	Х		
UTRAN GANSS Timing of Cell Frames for UE Positioning	Х	Х								Х

[TDD – If the Common Measurement Type requires the Time Slot Information but the [3.84Mcps TDD and 7.68 Mcps TDD – *Time Slot* IE] [1.28Mcps TDD – *Time Slot LCR* IE] is not provided in the COMMON MEASUREMENT INITIATION REQUEST message the RNS<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.]

If the *SFN* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic", "On Demand" or "On Modification", the RNS<sub>2</sub> shall reject the Common Measurement Initiation procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

## 8.5.2.4.1 Abnormal Conditions for lur-g

The measurements which can be requested on the Iur and Iur-g interfaces are shown in the table below marked with "X".

Table 6: Allowed Common measurement type on lur and lur-g interfaces

Common Measurement Type	Interface	
	lur	lur-g
Received total wide band power	X	
Transmitted Carrier Power	X	
UL Timeslot ISCP	X	
Load	Х	X
UTRAN GPS Timing of Cell	Х	
Frames for LCS		
SFN-SFN Observed Time	X	
Difference		
RT load	X	X
NRT load Information	Х	X
UTRAN GANSS Timing of Cell	Х	
Frames for UE Positioning		

If the RNC<sub>2</sub> receives from the BSS<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the RNC<sub>2</sub> shall reject the Common Measurement Initiation procedure.

If the  $BSS_2$  receives from the  $BSS_1$  / RNC<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the  $BSS_2$  shall reject the Common Measurement Initiation procedure.

If the RNC<sub>2</sub> receives from the BSS<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the RNC<sub>2</sub> shall ignore that IE.

If the BSS<sub>2</sub> receives from the BSS<sub>1</sub> / RNC<sub>1</sub> a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the BSS<sub>2</sub> shall ignore that IE.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table in section 8.5.2.4 marked with "X". For not allowed combinations, the RNC<sub>2</sub>/BSS<sub>2</sub> shall reject the Common Measurement Initiation procedure.

## 8.5.3 Common Measurement Reporting

### 8.5.3.1 General

This procedure is used by an RNC to report the result of measurements requested by another RNC using the Common Measurement Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

## 8.5.3.2 Successful Operation



Figure 30C: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the RNC<sub>2</sub> shall initiate the Common Measurement Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Measurement ID* IE shall be set to the Measurement ID provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the *Common Measurement Value Information* IE shall indicate Measurement not Available. If the RNC<sub>2</sub> was configured to perform the Measurement Recovery Behavior, the RNC<sub>2</sub> shall indicate Measurement Available to the RNC<sub>1</sub> when the achieved measurement accuracy again fulfils the given accuracy requirement (see TS 25.133 [23] and TS 25.123 [24]) and include the *Measurement Recovery Report Indicator* IE in the COMMON MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

For measurements included in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE, the RNC<sub>2</sub> shall include the *SFN-SFN Quality* IE and the *SFN-SFN Drift Rate Quality* IE if available.

If the Common Measurement Type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GPS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> shall include in the  $T_{UTRAN-GPS}$  Measurement Value Information IE the  $T_{UTRAN-GPS}$  Quality IE and the  $T_{UTRAN-GPS}$  Drift Rate Quality IE, if available.

If the Common Measurement Type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the RNC<sub>2</sub> shall include in the  $T_{UTRAN-GANSS}$  Measurement Value Information IE the  $T_{UTRAN-GANSS}$  Quality IE and the  $T_{UTRAN-GANSS}$  Drift Rate Quality IE, if available.

## 8.5.3.2.1 Successful Operation for lur-g

If the requested measurement reporting criteria are met, the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate a Measurement Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Common Measurement ID* IE shall be set to the Common Measurement ID provided by RNC<sub>1</sub>/BSS<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure.

If the Common measurement type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was "SFN-SFN Observed Time Difference", then RNC<sub>2</sub> shall include in the COMMON MEASUREMENT REPORT all the available measurements in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE and shall include the neighbouring cells with no measurement result available in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE.

If the Common measurement type provided by RNC<sub>1</sub> when initiating the measurement with the Common Measurement Initiation procedure was not set to "SFN-SFN Observed Time Difference" and the SFN Reporting Indicator when initiating the measurement was set to "FN Reporting Required", the RNC<sub>2</sub> shall include the SFN IE in the COMMON MEASUREMENT REPORT message. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model (TS 25.302 [26]). If the Common Measurement Type IE is set to "SFN-SFN Observed Time Difference", then the SFN Reporting Indicator IE is ignored.

### 8.5.3.3 Abnormal Conditions

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### 8.5.4 Common Measurement Termination

#### 8.5.4.1 General

This procedure is used by an RNC to terminate a measurement previously requested by the Common Measurement Initiation procedure.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.4.2 Successful Operation



Figure 30D: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message.

Upon receipt, RNC<sub>2</sub> shall terminate reporting of common measurements corresponding to the received *Measurement ID* IF.

## 8.5.4.2.1 Successful Operation for lur-g

The  $RNC_1/BSS_1$  and  $RNC_2/BSS_2$  shall use the Common Measurement Termination procedure as specified in section 8.5.4.2.

### 8.5.4.3 Abnormal Conditions

-

### 8.5.5 Common Measurement Failure

### 8.5.5.1 General

This procedure is used by an RNC to notify another RNC that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

## 8.5.5.2 Successful Operation



Figure 30E: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from RNC<sub>2</sub> to RNC<sub>1</sub> to inform the RNC<sub>1</sub> that a previously requested measurement can no longer be reported. RNC<sub>2</sub> has locally terminated the indicated measurement. The RNC<sub>2</sub> shall include in the COMMON MEASUREMENT FAILURE INDICATION message the reason for the failure in the *Cause* IE.

### 8.5.5.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the Common Measurement Failure procedure as specified in section 8.5.5.2.

### 8.5.5.3 Abnormal Conditions

-

## 8.5.6 Information Exchange Initiation

### 8.5.6.1 General

This procedure is used by an RNC to request the initiation of an information exchange with another RNC.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.6.2 Successful Operation

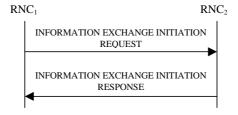


Figure 30F: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from RNC<sub>1</sub> to RNC<sub>2</sub>.

Upon receipt, the RNC<sub>2</sub> shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

If the *Information Exchange Object Type* IE is set to "MBMS Bearer Service" and the *Information Type Item* IE is set to "MBMS Bearer Service Full Address", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE, the Access Point Name and the IP Multicast Address corresponding to this TMGI in the *MBMS Bearer Service Identifiers List* IE in the INFORMATION EXCHANGE INITIATION RESPONSE message.

[FDD – If the *Information Exchange Object Type* IE is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Counting Information", the RNC<sub>2</sub> shall perform counting in cells as defined in TS 25.346 [50] and report in the *Counting Result* IE for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE either the counting information or, if relevant counting information is not available in RNC<sub>2</sub> (TS 25.346 [50]), the value "0" in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD – If the *Information Exchange Object Type* IE is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Transmission Mode", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE, the transmission mode for each TMGI in the cells of RNC<sub>2</sub> that have a neighbour relation to the cells received in *MBMS Cell List* IE as defined in TS 25.346 [50] in the INFORMATION EXCHANGE INITIATION RESPONSE message. If no cells of RNC<sub>2</sub> have a neighbour relation to a cell received in *MBMS Cell List* IE for a TMGI the value "Not Provided" shall be used.]

[FDD – If the *Information Exchange Object Type* IE is set to "MBMS Cell" and the *Information Type Item* IE is set to "MBMS Neighbouring Cell Information", the RNC<sub>2</sub> shall report for each cell included in the received *MBMS Cell List* IE, the MBMS radio bearer information for each cells in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD – If the *Information Exchange Object Type* IE is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS RLC Sequence Number", the RNC<sub>2</sub> shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE for each cell included in the received *MBMS Cell List* IE, the RLC sequence number for each TMGI for the indicated cells in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

If the *Information Exchange Object Type* IE is set to "ANR Cell" and the *Information Type Item* IE is set to "ANR Cell Information", the RNC<sub>2</sub> shall, if supported, for each cell in the *ANR Cell List* IE that is controlled by RNC<sub>2</sub>, report the ANR Cell Information in the INFORMATION EXCHANGE INITIATION RESPONSE message.

If the Information Type IE contains a GANSS Generic Data IE, at least one of the GANSS Navigation Model And Time Recovery, GANSS Time Model GNSS-GNSS, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity, GANSS Data Bit Assistance, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, GANSS Auxiliary Information IEs shall be present in the GANSS Generic Data IE.

- If the *GANSS Generic Data* IE does not contain the *GANSS ID* IE, the RNC<sub>2</sub> shall assume that the corresponding GANSS is "Galileo".

If the *Information Exchange Object Type* IE is set to "Common E-RGCH Cell" and the *Information Type Item* IE is set to "Common E-RGCH Cell Information", the RNC<sub>2</sub> shall, for each Common E-RGCH capable cell in the *Common E-RGCH Cell List* IE that is controlled by RNC<sub>2</sub>, report the Common E-RGCH Cell Information in the INFORMATION EXCHANGE INITIATION RESPONSE message.

#### **Information Report Characteristics:**

The Information Report Characteristics IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to "On Demand", the RNC<sub>2</sub> shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the RNC<sub>2</sub> shall report the requested information immediately and then shall periodically initiate the Information Reporting procedure for all the requested information, with the report frequency indicated by the *Information Report Periodicity* IE.

If the *Information Report Characteristics* IE is set to "On Modification", the RNC<sub>2</sub> shall report the requested information immediately if available. If the requested information is not available at the moment of receiving the INFORMATION EXCHANGE INITIATION REQUEST message, but expected to become available after some acquisition time, the RNC<sub>2</sub> shall initiate the Information Reporting procedure when the requested information becomes available. The RNC<sub>2</sub> shall then initiate the Information Reporting procedure in accordance to the following conditions:

- If the *Information Type Item* IE is set to "IPDL Parameters", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameters occurs.
- If the *Information Type Item* IE is set to "DGPS Corrections", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Type when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IODE.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Navigation Model & Recovery Assistance", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *Sat ID* IEs.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Ionospheric Model", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS UTC Model", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when a change in the t<sub>oa</sub> or WN<sub>a</sub> parameter has occurred.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.
- If the *Information Type* IE is set to "Cell Capacity Class", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for uplink and downlink cell capacity class when any change has occurred. If either uplink or downlink cell capacity class satisfies the requested report characteristics, the RNC<sub>2</sub> shall report the result of both uplink and downlink cell capacity information.
- If any of the above *Information Type* IEs becomes temporarily unavailable, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Item by indicating "Information Not Available" in the *Requested Data Value Information* IE. If the Information becomes available again, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information.
- If the *Information Type* IE is set to "NACC related data", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for NACC related data if any change has occurred.
- If the *Information Type* IE is set to "Inter-frequency Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Item when any change has occurred to the inter-frequency cell information broadcasted in the SIB11 or SIB12.
- If the *Information Type Item* IE is set to "DGANSS Corrections", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific Information Type when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE in the *Information Threshold* IE or a change has occurred in the IODE.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Navigation Model And Time Recovery* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Ionospheric Model* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.

- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS UTC Model* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change has occurred in the t<sub>ot</sub> or WN<sub>t</sub> parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Almanac* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change in the T<sub>oa</sub>, IOD<sub>a</sub>, or Week Number parameter has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Real Time Integrity* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Data Bit Assistance* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information Item when any change has occurred.
- If the *Information Type Item* IE is set to "MBMS Transmission Mode", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameter occurs.
- If the *Information Type Item* IE is set to "MBMS Neighbouring Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure when any change in the parameters occurs.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Navigation Models And Time Recovery* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred regarding either the IOD or the list of visible satellites, identified by the *Sat ID* IEs.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional Ionospheric Model* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when any change has occurred.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Additional UTC Models* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>ot</sub>, WN<sub>ot</sub>, WN<sub>t</sub>, or N<sup>A</sup> parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Earth Orientation Parameters* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t<sub>FOP</sub> parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Auxiliary Information* IE, the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the *Signals Available* or *Channel Number* IE parameter.
- If the *Information Type Item* IE is set to "Common E-RGCH Cell Information", the RNC<sub>2</sub> shall initiate the Information Reporting procedure for this Common E-RGCH Information item when a change has occurred in the *Common E-RGCH Cell Information* IE parameter for the specific cell.

#### **Response message:**

If the RNC<sub>2</sub> is able to determine the information requested by the RNC<sub>1</sub>, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message. The message shall include the *Information Exchange ID* IE set to the same value that was included in the INFORMATION EXCHANGE INITIATION REQUEST message. When the *Report Characteristics* IE is set to or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the *Requested Data Value* IE if the data are available. When the *Report Characteristics* IE is set to "On Demand", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the *Requested Data Value* IE.

If the Requested DataValue IE contains the GANSS Common Data IE, at least one of the GANSS Ionospheric Model, GANSS RX Pos, GANSS Additional Ionospheric Model, or GANSS Earth Orientation Parameters IEs shall be present.

Any GANSS Generic Data IE associated with a given GANSS included in the Requested DataValue IE shall contain at least one of the DGANSS Corrections, GANSS Navigation Model And Time Recovery, GANSS Time Model, GANSS UTC Model, GANSS Almanac, GANSS Real Time Integrity, GANSS Data Bit Assistance, GANSS Additional Time

Models, GANSS Additional Navigation Models And Time Recovery, GANSS Additional UTC Models, or GANSS Auxiliary Information IEs.

- If the GANSS Generic Data IE does not contain the GANSS ID IE, the corresponding GANSS is "Galileo".
- The *DGANSS Corrections* IE contains one or several *DGANSS Information* IE(s), each of them associated with a GANSS Signal. A *DGANSS Information* IE for a particular GANSS that does not contain the *GANSS Signal ID* IE is by default associated with the default signal defined in TS 25.331 [16], clause 10.3.3.45a.
- The *GANSS Real Time Integrity* IE contains one or several *Satellite Information* IEs, each of them associated with a satellite and a GANSS Signal. A *Satellite Information* IE for a particular GANSS that does not contain the *Bad GANSS Signal ID* IE is by default associated with all the signals of the corresponding satellite (see [53], IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], DTFA01-96-C-00025 [58], IS-QZSS [59], [60]).

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with exactly one bit set to value "1", the RNC<sub>2</sub> shall include the *GANSS Time Model* IE in the *Requested Data Value* IE with the requested time information.

If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Time Model GNSS-GNSS* IE with more than one bit set to value "1", the RNC<sub>2</sub> shall include the *GANSS Additional Time Models* IE in *Requested Data Value* IE with the requested time information for each GANSS.

If the *Information Type Item* IE is set to "DGPS Corrections", the RNC<sub>2</sub> shall include the *DGPS Corrections* IE in *Requested Data Value* IE with the *DGNSS Validity Period* IE included, if available.

If the *Information Type Item* IE is set to "DGANSS Corrections", the RNC<sub>2</sub> shall include the *DGANSS Corrections* IE in *Requested Data Value* IE with the *DGNSS Validity Period* IE included, if available.

If the *Information Type Item* IE is set to "GPS Almanac", the RNC<sub>2</sub> shall include the *GPS Almanac* IE in *Requested Data Value* IE with the *Complete Almanac Provided* IE included, if available.

If the *Information Type Item* IE is set to "GANSS Almanac", the RNC<sub>2</sub> shall include the *GANSS Almanac* IE in *Requested Data Value* IE with the *Complete Almanac Provided* IE included, if available.

If the *Information Type Item* IE is set to "GANSS Time Model GNSS-GNSS", the RNC<sub>2</sub> shall include the *GANSS Time Model* IE in *Requested Data Value* IE with the *Delta\_T* IE included, if available.

### 8.5.6.2.1 Successful Operation for lur-g

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from BSS<sub>1</sub> to BSS<sub>2</sub>/RNC<sub>2</sub> or by RNC<sub>1</sub> to BSS<sub>2</sub>.

Upon receipt, the BSS<sub>2</sub>/RNC<sub>2</sub> shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

#### **Information Report Characteristics on Iur-g:**

If the *Information Type Item* IE is set to "Cell Capacity Class", the RNC<sub>2</sub>/BSS<sub>2</sub> shall initiate measurements and report results as described in section 8.5.6.2.

The *Information Report Characteristics* IE indicates how the reporting of the information shall be performed. This IE is used as described in section 8.5.6.2.

## 8.5.6.3 Unsuccessful Operation

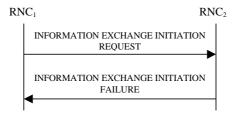


Figure 30G: Information Exchange Initiation procedure, Unsuccessful Operation

If the requested Information Type received in the *Information Type* IE indicates a type of information that RNC<sub>2</sub> cannot provide, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure.

If the requested information provision cannot be accessed, the RNC<sub>2</sub> shall reject the procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

The message shall include the *Information Exchange ID* IE set to the same value that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

### Radio Network Layer Cause:

- Information temporarily not available;
- Information Provision not supported for the object.

### 8.5.6.4 Abnormal Conditions

If the *Information Report Characteristics* IE is set to "On Modification", and the *Information Type Item* IE is set to "DGPS Corrections", but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Exchange Object Type* IE is set to a value other than "GSM Cell" and the *Information Type Item* IE set to "NACC related data" the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "MBMS Bearer Service Full Address" and the *Information Exchange Object Type* IE is not set to "MBMS Bearer Service", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "ANR Cell Information" and the *Information Exchange Object Type* IE is not set to "ANR Cell", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "ANR Cell Information" and the *Information Exchange Object Type* IE is set to "ANR Cell", but the RNC<sub>2</sub> can only collect the "Requested Data Value" for the subset of the cells requested, RNC<sub>2</sub> shall not reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION RESPONSE message with the information it could obtain.

If the *Information Type Item* IE is set to the value "Common E-RGCH Cell Information" and the *Information Exchange Object Type* IE is not set to "Common E-RGCH Cell", the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

If the *Information Type Item* IE is set to the value "Common E-RGCH Cell Information" and the *Information Exchange Object Type* IE is set to "Common E-RGCH Cell", but only the subset of the cells requested are Common E-RGCH capable, the RNC<sub>2</sub> shall not reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION RESPONSE message with the information it could obtain.

The allowed combinations of the Information type and Information Report Characteristics type are shown in the table below marked with "X". For not allowed combinations, the RNC<sub>2</sub> shall reject the Information Exchange Initiation procedure using the INFORMATION EXCHANGE INITIATION FAILURE message.

Table 6a: Allowed Information Type and Information Report Characteristics type combinations

Туре	Information Report Characteristics Type				
	On Demand	Periodic	On Modification		
UTRAN Access Point Position with	X				
Altitude Information					
UTRAN Access Point Position	Χ				
IPDL Parameters	Χ	Χ	X		
GPS Information	Χ	Χ	X		
DGPS Corrections	Χ	Χ	X		
GPS RX Pos	Χ				
SFN-SFN Measurement Reference Point	Χ				
Position					
Cell Capacity Class	X		X		
NACC related data	Χ		X		
MBMS Bearer Service Full Address	Χ				
Inter-frequency Cell Information	Χ		X		
GANSS Information	Χ	Χ	X		
DGANSS Corrections	Χ	Χ	X		
GANSS RX Pos	Χ				
MBMS Counting Information [FDD only]	Χ				
MBMS Transmission Mode [FDD only]			X		
MBMS Neighbouring Cell Information	Χ		X		
[FDD only]					
MBMS RLC Sequence Number	Χ				
[FDD only]					
ANR Cell Information	Χ				
Common E-RGCH Cell Information	X		X		

## 8.5.6.4.1 Abnormal Conditions for lur-g

The information types that can be requested on the Iur and Iur-g interfaces are shown in the table below marked with "X". For information types that are not applicable on the Iur-g interface, the BSS shall reject the Information Exchange Initiation procedure.

Table 7: Allowed Information types on lur and lur-g interfaces

Information Type	Inte	rface
	lur	lur-g
UTRAN Access Point Position with Altitude Information	Х	
UTRAN Access Point Position	Х	
IPDL Parameters	Х	
DGPS Corrections	Х	
GPS Information	Х	
GPS RX Pos	Х	
SFN-SFN Measurement Reference Point Position	Х	
Cell Capacity Class	X	X
NACC related data	Х	
MBMS Bearer Service Full Address	Х	
Inter-frequency Cell Information	Х	
DGANSS Corrections	Х	
GANSS Information	X	
GANSS RX Pos	Х	
MBMS Counting Information [FDD only]	Х	
MBMS Transmission Mode [FDD only]	Х	
MBMS Neighbouring Cell Information [FDD only]	Х	
MBMS RLC Sequence Number [FDD only]	Х	

## 8.5.7 Information Reporting

### 8.5.7.1 General

This procedure is used by a RNC to report the result of information requested by another RNC using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.7.2 Successful Operation



Figure 30H: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the RNC<sub>2</sub> shall initiate an Information Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the RNC<sub>1</sub> when initiating the information exchange with the Information Exchange Initiation procedure.

The Requested Data Value IE shall include at least one IE containing the data to be reported.

## 8.5.7.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the Information Reporting procedure as specified in section 8.5.7.2.

#### 8.5.7.3 Abnormal Conditions

-

## 8.5.8 Information Exchange Termination

### 8.5.8.1 General

This procedure is used by a RNC to terminate the information exchange requested using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.8.2 Successful Operation



Figure 30I: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE TERMINATION REQUEST message.

Upon receipt, the RNC<sub>2</sub> shall terminate the information exchange corresponding to the *Information Exchange ID* IE provided by the RNC<sub>1</sub> when initiating the information exchange with the Information Exchange Initiation procedure.

### 8.5.8.2.1 Successful Operation for lur-g

The  $RNC_1/BSS_1$  and  $RNC_2/BSS_2$  shall use the Information Exchange Termination procedure as specified in section 8.5.8.2.

### 8.5.8.3 Abnormal Conditions

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## 8.5.9 Information Exchange Failure

#### 8.5.9.1 General

This procedure is used by a RNC to notify another that the information exchange it previously requested using the Information Exchange Initiation can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

### 8.5.9.2 Successful Operation



Figure 30J: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE FAILURE INDICATION message, sent from the RNC<sub>2</sub> to the RNC<sub>1</sub>, to inform the RNC<sub>1</sub> that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The RNC<sub>2</sub> shall include in the INFORMATION EXCHANGE FAILURE INDICATION message the *Information Exchange ID* IE set to the same value provided by the RNC<sub>1</sub> when initiating the information exchange with the Information Exchange Initiation procedure, and the RNC<sub>2</sub> shall include the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

### Radio Network Layer Cause:

Information temporarily not available.

### 8.5.9.2.1 Successful Operation for lur-g

The RNC<sub>1</sub>/BSS<sub>1</sub> and RNC<sub>2</sub>/BSS<sub>2</sub> shall use the Information Exchange Failure procedure as specified in section 8.5.9.2.

### 8.5.10 Reset

#### 8.5.10.1 General

The purpose of the reset procedure is to align the resources in RNC<sub>1</sub> and RNC<sub>2</sub> in the event of an abnormal failure.

The procedure uses connectionless signalling.

## 8.5.10.2 Successful Operation

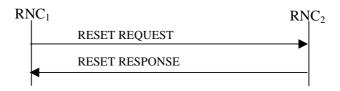


Figure 30K: Reset procedure, Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the RNC<sub>1</sub> to the RNC<sub>2</sub>.

If the *Reset Indicator* IE is set to "Context", then:

- For all indicated UE Contexts identified by the *S-RNTI* IE, the RNC<sub>2</sub> in the role of DRNC, shall remove all the indicated UE Contexts and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.
- For all indicated UE Contexts identified by the *D-RNTI* IE, the RNC<sub>2</sub> in the role of SRNC, shall remove the
  information related to the RNC<sub>1</sub> for all indicated UE Contexts and the radio resources allocated for these UE
  Contexts.

If the *Reset Indicator* IE is set to "Context Group", then:

- For all indicated UE Context Groups identified by the *S-RNTI Group* IE, the RNC<sub>2</sub> in the role of DRNC, shall remove all the indicated UE Contexts and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.

If the *Reset Indicator* IE is set to "All Contexts", then the RNC<sub>2</sub> shall:

- In the role of DRNC, remove all the UE Contexts for which the RNC<sub>1</sub> is the SRNC and all the radio resources allocated for these UE Contexts. In addition, the RNC<sub>2</sub> shall take actions according to Annex D.2.
- In the role of SRNC, remove the information related to the RNC<sub>1</sub> for all the UE Contexts and all the radio resources allocated for these UE Contexts.

For all the removed UE Contexts and for all the UE Contexts for which the RNC<sub>2</sub> has removed information related to the RNC<sub>1</sub>, the RNC<sub>2</sub> shall also initiate release of the dedicated or common user plane resources that were involved in these UE Contexts. After clearing all related resources, the RNC<sub>2</sub> shall return the RESET RESPONSE message to the RNC<sub>1</sub>.

### 8.5.10.3 Abnormal Conditions

If the RESET message is received, any other ongoing procedure (except another Reset procedure) on same Iur interface related to a context indicated explicitly or implicitly in the message shall be aborted.

### 8.5.11 Direct Information Transfer

### 8.5.11.1 General

This procedure is used by an RNC to transfer information to another RNC spontaneously.

This procedure shall use the connectionless mode of signalling bearer.

## 8.5.11.2 Successful Operation



Figure 30L: Direct Information Transfer procedure, Successful Operation

The procedure is initiated with an DIRECT INFORMATION TRANSFER message sent from RNC<sub>1</sub> to RNC<sub>2</sub>.

If the initiating RNC of this procedure is RNC<sub>1</sub>, RNC<sub>1</sub> shall provide appropriate information in the *Provided Information* IE.

### **MBMS Channel Type Indication:**

At the start time of a session for an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for some Ues whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC<sub>2</sub> and if the channel type is determined by the RNC<sub>1</sub> for certain cells in the DRNS, the procedure shall be initiated by the RNC<sub>1</sub> to the RNC<sub>2</sub>. In this case, the RNC<sub>1</sub> shall include in the *Provided Information* IE the *Channel Type Information* IE in the DIRECT INFORMATION TRANSFER message.

During a session of an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for some Ues whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC<sub>2</sub>, then the RNC<sub>1</sub> may initiate this procedure to indicate channel type change for the MBMS bearer service in certain cells. In this case, the RNC<sub>1</sub> shall include in the *Provided Information* IE the *Channel Type Information* IE in the DIRECT INFORMATION TRANSFER message.

The RNC<sub>1</sub> shall include the available information within the *PTM Cell List* IE, the *PTP Cell List* IE and/or the *Not Provided Cell List* IE in the *Channel Type Information* IE.

### **MBMS Preferred Frequency Layer Indication:**

At the start time of a session for an MBMS bearer service, if the RNC<sub>1</sub> is in the DRNC role for at least one CELL\_DCH UE whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC<sub>2</sub> and if the preferred frequency layer is determined by the RNC<sub>1</sub> for certain cells that host at least one of these CELL\_DCH Ues whose SRNC is RNC<sub>2</sub>, the procedure shall be initiated by the RNC<sub>1</sub> to the RNC<sub>2</sub>. In this case, the RNC<sub>1</sub> shall include in the *Provided Information* IE the *Preferred Frequency Layer Information* IE in the DIRECT INFORMATION TRANSFER message.

If some of the cells controlled by RNC<sub>1</sub> that host at least one of these CELL\_DCH Ues whose SRNC is RNC<sub>2</sub> are configured with different preferred frequencies, the *Additional Preferred Frequency* IE as well as *Default Preferred Frequency* IE shall be included in the *Preferred Frequency Layer Information* IE. In this case, for each preferred frequency different from the *Default Preferred Frequency* IE, one *Additional Preferred Frequency* IE shall be included containing at least one *Corresponding Cells* IE.

### **ANR Report Indication:**

The message contains ANR Report Indication IE if the initiating RNC (RNC<sub>1</sub>) has decided to forward a logged ANR report received over Uu to RNC<sub>2</sub>. On reception of the ANR Report Indication IE, RNC2 may use the information to configure neighbour relations.

## 8.5.12 Information Transfer Control

### 8.5.12.1 General

This procedure is used by an RNC to control transfer of information (e.g. log information related to ANR) from an RNC to any other RNC. This procedure is initiated by an RNC to suspend or resume transfer of information.

This procedure shall use the connectionless mode of signalling bearer.

## 8.5.12.2 Successful Operation



Figure 30M: Information Transfer Control procedure, Successful Operation

The RNC<sub>1</sub> initiates the procedure by sending the INFORMATION TRANSFER CONTROL REQUEST message to the RNC<sub>2</sub>.

The *Control Type* IE within the INFORMATION TRANSFER CONTROL REQUEST message shall be used to either suspend or to resume (respectively indicated by *Suspension* IE or *Resume* IE in *Control Type* IE) the transfer of information for the specified scope of objects indicated by *Controlled Object Scope* IE.

If the control of information transfer is intended for individual cells, those cells shall be indicated in the *UMTS Cell Information* IE within the *Controlled Object Scope* IE. If the *UMTS Cell Information* IE is not included, the procedure is intended for the whole entity indicated in *RNC-ID* IE or *Extended RNC-ID* IE. In shared network configurations, PLMN identities shall be indicated with *Multiple PLMN List* IE.

### 8.5.12.3 Abnormal Conditions

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## 8.6 MBMS Procedures

### 8.6.1 MBMS Attach

### 8.6.1.1 General

The MBMS Attach procedure is used by the SRNC to either create a UE Link/URA Link in the DRNC or inform the DRNC about any addition of one or several MBMS bearer services in an already stored UE Link or URA Link.

This procedure shall use the signalling bearer mode specified below.

### 8.6.1.2 Successful Operation



Figure 31: MBMS Attach procedure, Successful Operation

The SRNC initiates the procedure by sending the message MBMS ATTACH COMMAND message to the DRNC.

When the UE is utilising one or more radio links in the DRNC, the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If the UE is not utilising any radio link, the message shall be sent using the connectionless service of the signalling bearer.

If no *UE State* IE is included in the message or the *UE State* IE is set to "CELL\_FACH/CELL\_PCH", the DRNC shall perform the UE Linking as specified in TS 25.346 [50], section 5.1.6.

If the *UE State* IE is set to "URA\_PCH", the DRNC shall perform the URA Linking as specified in TS 25.346 [50], section 5.1.10.

## 8.6.1.3 Abnormal Conditions

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## 8.6.2 MBMS Detach

### 8.6.2.1 General

The MBMS Detach procedure is used by the SRNC to either delete a UE Link/URA Link in the DRNC or to inform DRNC about any removal of one or several MBMS bearer services in an already stored UE link or URA Link.

This procedure shall use the signalling bearer mode specified below.

### 8.6.2.2 Successful Operation



Figure 32: MBMS Detach procedure, Successful Operation

The SRNC initiates the procedure by sending the message MBMS DETACH COMMAND message to the DRNC.

When the UE is utilising one or more radio links in the DRNC, the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE Context in the DRNC is required. If the UE is not utilising any radio link, the message shall be sent using the connectionless service of the signalling bearer.

If no *UE State* IE is included in the message or the *UE State* IE is set to "CELL\_FACH/CELL\_PCH", the DRNC shall perform the UE De-linking as specified in TS 25.346 [50], section 5.1.6.

If the *UE State* IE is set to "URA\_PCH", the DRNC shall perform the URA De-linking as specified in TS 25.346 [50], section 5.1.10.

### 8.6.2.3 Abnormal Conditions

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# 9 Elements for RNSAP Communication

# 9.1 Message Functional Definition and Content

### 9.1.1 General

This subclause defines the structure of the messages required for the RNSAP protocol in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is contradiction between the tabular format in subclause 9.1 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional IEs, in which the tabular format shall take precedence.

NOTE: The messages have been defined in accordance to the guidelines specified in TR 25.921 [28].

## 9.1.2 Message Contents

### 9.1.2.1 Presence

An information element can be of the following types:

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 I shall be included in a message only if the condition is satisfied. Otherwise the IE shall not be included.

In the case of an Information Element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. Each group may be also repeated within one message. The presence field of the Information Elements inside one group defines if the Information Element is mandatory, optional or conditional if the group is present.

### 9.1.2.2 Criticality

Each information element or Group of information elements may have criticality information applied to it. Following cases are possible:

-	No criticality information is applied explicitly.
YES	Criticality information is applied. 'YES' is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information.
	'GLOBAL' is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign
	different criticality values to the repetitions. 'EACH' is usable only for repeatable information elements.

### 9.1.2.3 Range

The Range column indicates the allowed number of copies of repetitive IEs/IE groups.

## 9.1.2.4 Assigned Criticality

This column provides the actual criticality information as defined in subclause 10.3.2, if applicable.

# 9.1.3 RADIO LINK SETUP REQUEST

## 9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	•
SRNC-ID	М		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
S-RNTI	M		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	reject
D-RNTI	0		9.2.1.24		YES	reject
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	М		9.2.2.53		_	, , , , , , , , , , , , , , , , , , , ,
>Min UL Channelisation Code Length	M		9.2.2.25		_	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		_	
>Puncture Limit	М		9.2.1.46	For the UL.	_	
>TFCS	М		9.2.1.63		_	
>UL DPCCH Slot Format	М		9.2.2.52		_	
>Uplink SIR Target	0		Uplink SIR 9.2.1.69		_	
>Diversity mode	М		9.2.2.8		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>DPC Mode	0		9.2.2.12A		YES	reject
>UL DPDCH Indicator for E- DCH operation	0		9.2.2.52A	This IE may be present without the presence of the <i>E-DPCH Information</i> IE.	YES	reject
DL DPCH Information		01			YES	reject
>TFCS	М		9.2.1.63		_	-,
>DL DPCH Slot Format	М	1	9.2.2.9		_	
>Number of DL Channelisation Codes	M		9.2.2.26A		_	
>TFCI Signalling Mode	М	<u> </u>	9.2.2.46		_	
>TFCI Signalling Mode >TFCI Presence	C- SlotFormat		9.2.1.55			
- Multiploying Docition			0.2.2.20			
>Multiplexing Position	M	1	9.2.2.26		_	
>Power Offset Information >>PO1	M	1	Power Offset	Power offset for the TFCI		
			9.2.2.30	bits.		

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
	M		Reference	Power offset		
>>PO2	IVI		Power Offset 9.2.2.30	for the TPC bits.	_	
>>PO3	М		Power Offset	Power offset for the pilot	_	
>FDD TPC Downlink Step	M		9.2.2.30 9.2.2.16	bits.	_	
Size						
>Limited Power Increase	M		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21a		-	
DCH Information	M		DCH FDD Information 9.2.2.4A		YES	reject
RL Information		1 <maxnr OfRLs&gt;</maxnr 	3.2.2. <del>4</del> A		EACH	notify
>RL ID	М	Onteo	9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>First RLS Indicator	M	<u> </u>	9.2.2.16A		_	
>Frame Offset	M		9.2.1.30		_	
>Chip Offset	M		9.2.2.1		_	
>Propagation Delay	0		9.2.2.33		_	
>Diversity Control Field	C – NotFirstRL		9.2.1.20		_	
>Initial DL TX Power	0		DL Power 9.2.1.21A		_	
>Primary CPICH Ec/No	0		9.2.2.32		_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		_	
>Enhanced Primary CPICH Ec/No	0		9.2.2.131		YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject
>Cell Portion ID	0		9.2.2.E		YES	ignore
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>Extended Propagation Delay	0		9.2.2.33a		YES	ignore
>Synchronisation Indicator	0		9.2.2.45A		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>F-TPICH Information Transmission Gap Pattern	0		9.2.2.139 9.2.2.47A		YES YES	ignore reject
Sequence Information Active Pattern Sequence	0		9.2.2.A		YES	reject
Information		<del> </del>	0.2.4.72		YES	ianoro
Permanent NAS UE Identity DL Power Balancing	0	+	9.2.1.73 9.2.2.10A		YES	ignore ignore
Information			3.2.2.1UA		153	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-PDSCH RL ID	C – InfoHSDS		RL ID 9.2.1.49		YES	reject
MBMS Bearer Service List	СН	0 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	notify

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>TMGI	М		9.2.1.80		_	
E-DPCH Information		01			YES	reject
>Maximum Set of E-	М		9.2.2.24e		_	,
DPDCHs						
>Puncture Limit	M		9.2.1.46		_	
>E-TFCS Information	M		9.2.2.4G		_	
>E-TTI	М		9.2.2.4J		_	
>E-DPCCH Power Offset	M		9.2.2.4K		_	
>E-RGCH 2-Index-Step Threshold	М		9.2.2.64		-	
>E-RGCH 3-Index-Step Threshold	М		9.2.2.65		_	
>HARQ Info for E-DCH	М		9.2.2.66		_	
>HS-DSCH Configured	M		9.2.2.19C		_	
Indicator	'''		0.2.2.100			
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
E-DCH FDD Information	C-		9.2.2.4B		YES	reject
	EDCHInfo		3.4.4.D		IES	reject
Serving E-DCH RL	O	<del> </del>	9.2.2.38C		YES	reject
F-DPCH Information	0	01	9.2.2.300		YES	
>Power Offset Information		1	+		-	reject
>>PO2	M		Power Offset 9.2.2.30	This IE shall be ignored by DRNS.	_	
>FDD TPC Downlink Step Size	М		9.2.2.16	by Bitino.	_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21a		_	
>F-DPCH Slot Format	0		9.2.2.86		YES	reject
Support Request			3.2.2.00		120	10,000
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
Initial DL DPCH Timing	Ö		9.2.2.21b		YES	ignore
Adjustment Allowed			5.2.2.210		120	ignore
DCH Indicator For E-DCH- HSDPA Operation	0		9.2.2.67		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.9		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		YES	reject
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		YES	reject
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Additional HS Cell Information RL Setup		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS-DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>HS-DSCH Secondary	М		9.2.2.19aa		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Serving Information						
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Setup Req		01		For E-DCH on multiple frequencies in this DRNS.	YES	reject
>Multicell E-DCH Transport Bearer Mode	М		9.2.2.113		_	
>Additional E-DCH Cell Information Setup		1 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>Additional E-DCH FDD Setup Information	М		9.2.2.110		-	
Usefulness of Battery Optimization	0		9.2.2.127		YES	ignore
UL CLTD Information	0		9.2.2.131		YES	reject
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

Condition	Explanation
CodeLen	The IE shall be present if Min UL Channelisation Code length IE
	equals to 4.
SlotFormat	The IE shall be present if the DL DPCH Slot Format IE is equal to
	any of the values from 12 to 16.
NotFirstRL	The IE shall be present if the RL is not the first one in the RL
	Information IE.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i>
	IE is not equal to "none".
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.
EDCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
S-RNTI	M		9.2.1.53	If the Extended S-RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	reject
D-RNTI	0		9.2.1.24		YES	reject
UL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	M		9.2.3.3A	For the UL.	_	
>Minimum Spreading Factor	М		9.2.3.4A	For the UL.	_	
>Maximum Number of UL Physical Channels per Timeslot	М		9.2.3.3B		-	
>Support of 8PSK	0		9.2.3.7H	Applicable to 1.28Mcps TDD only.	YES	ignore
>Minimum Spreading Factor 7.68Mcps	0		9.2.3.19	Applicable to 7.68Mcps TDD only.	YES	ignore
DL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	M		9.2.3.3A	For the DL.	_	
>Minimum Spreading Factor	M		9.2.3.4A	For the DL.	_	
>Maximum Number of DL Physical Channels	М		9.2.3.3C		_	
>Maximum Number of DL Physical Channels per Timeslot	0		9.2.3.3D		YES	ignore
>Support of 8PSK	0		9.2.3.7H	Applicable to 1.28Mcps TDD only.	YES	ignore
>Support of PLCCH	0		9.2.3.16	Applicable to 1.28Mcps TDD only.	YES	ignore

>Minimum Spreading Factor 7.68Mcps	0		9.2.3.19	Applicable to 7.68Mcps TDD only.	YES	ignore
>Maximum Number of DL Physical Channels 7.68Mcps	0		9.2.3.20	Applicable to 7.68Mcps TDD only.	YES	ignore
>Maximum Number of DL Physical Channels per Timeslot 7.68Mcps	0		9.2.3.21	Applicable to 7.68Mcps TDD only.	YES	ignore
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 	0.22	For DCH and USCH	EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	M		9.2.1.63	For the UL.	_	
>TFCI Coding	M		9.2.3.11		_	
>Puncture Limit	M		9.2.1.46		_	
>TDD TPC Uplink Step Size	0		9.2.3.10a	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
DL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and DSCH.	EACH	notify
>CCTrCH ID	М	1	9.2.3.2		_	
>TFCS	М		9.2.1.63	For the DL.	_	
>TFCI Coding	M		9.2.3.11		_	
>Puncture Limit	М		9.2.1.46		_	
>TDD TPC Downlink Step Size	М		9.2.3.10		-	
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 		List of uplink CCTrCH which provide TPC.	-	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.2		_	
DCH Information	0		DCH TDD Information 9.2.3.2A		YES	reject
DSCH Information	0		DSCH TDD Information 9.2.3.3a		YES	reject
USCH Information	0		9.2.3.15		YES	reject
RL Information		1			YES	reject
>RL ID	M		9.2.1.49		_	
>C-ID	M		9.2.1.6			
>Frame Offset	M		9.2.1.30		_	
>Special Burst Scheduling	M		9.2.3.7D		_	
>Primary CCPCH RSCP	0		9.2.3.5		_	
>DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.		
>DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	reject
>TSTD Support Indicator	0		9.2.3.13F	Applicable to 1.28Mcps TDD only.	YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0	1	9.2.1.19Aa		YES	reject

III Come to a to at	_		1	T. A	\/=0	
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or	YES	reject
				7.68Mcps TDD.		
>>Uplink Synchronisation Step Size	M		9.2.3.13J	טטו.	_	
>>Uplink Synchronisation Frequency	М		9.2.3.131		_	
>Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
>Idle Interval Configuration Indicator	0		NULL	TDD only.	YES	ignore
>Cell Portion LCR ID	0		9.2.3.73	Applicable to 1.28Mcps TDD only.	YES	ignore
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	C – InfoHSDSC H		RL ID 9.2.1.49		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.49		YES	ignore
MBMS Bearer Service List		0 <maxn rOfMBM SService s&gt;</maxn 			GLOBAL	notify
>TMGI	M		9.2.1.80		_	
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	M		9.2.3.36		_	
>E-TFCS Information TDD >E-DCH MAC-d Flows	M		9.2.3.37 9.2.3.38		_	
Information TDD					_	
>E-DCH TDD Information	M		9.2.3.40		_	
E-DCH Serving RL	0		RL ID 9.2.1.49	TDD only.	YES	reject
E-DCH Information 7.68Mcps	DA.	01	0.0.00	7.68Mcps TDD only.	YES	reject
>E-PUCH Information >E-TFCS Information TDD	M		9.2.3.36 9.2.3.37		_	
>E-DCH MAC-d Flows	M		9.2.3.37		_ _	
Information TDD >E-DCH TDD Information 7.68Mcps	M		9.2.3.51		_	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only.	YES	reject
>E-PUCH Information LCR	М		9.2.3.36a		_	
>E-TFCS Information TDD	М		9.2.3.37		-	
>E-DCH MAC-d Flows Information TDD	М		9.2.3.38		_	
>E-DCH TDD Information LCR	М		9.2.3.40a		_	
Extended SRNC-ID  Continuous Packet	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Continuous Factor		ļ	J.Z.J.U I	1.20 IVIUPS	110	reject

Connectivity DRX Information				TDD only.		
LCR						
HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64	1.28 Mcps TDD only.	YES	reject
E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66	1.28 Mcps TDD only.	YES	reject
RNTI Allocation Indicator	0		ENUMERA TED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject
>Multi-Carrier E-DCH Transport Bearer Mode LCR	М		9.2.3.79	1.28 Mcps TDD only.	-	
>Multi-Carrier E-DCH Information LCR	М		9.2.3.77	1.28 Mcps TDD only.	_	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

Condition	Explanation					
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.					

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE.
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

## 9.1.4 RADIO LINK SETUP RESPONSE

## 9.1.4.1 FDD Message

Message Type	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Transaction ID	Message Type	M		9.2.1.40		YES	reject
CN PS Domain Identifier	Transaction ID					_	
Not Used   Section   Sec	D-RNTI	0		9.2.1.24		YES	ignore
SNC SDomain Identifier	CN PS Domain Identifier	0		9.2.1.12		YES	ignore
RL Information Response		0				YES	
Set ID	RL Information Response					EACH	
SURA Information   O   9.2.1.70B   -		M				_	
SAI		M				_	
SCEI GAI	>URA Information	0		9.2.1.70B		_	
SUTRAN Access Point	>SAI	M		9.2.1.52		_	
Position   Position   Power   Power	>Cell GAI	0				_	
Power	>UTRAN Access Point Position	0		9.2.1.70A		_	
SDL Code Information	Power					_	
Code   Information   9.2.2.14A     -						_	
Indication	>DL Code Information	М		Code Information		_	
SSPALID	Indication	М				_	
RL ID for the combining.   ST   ST   ST   ST   ST   ST   ST   S						_	
>>>DCH Information Response         O         9.2.1.16A         YES         ignore ignore           >>>E-DCH FDD Information Response         O         9.2.2.4C         YES         ignore           >>Non Combining or First RL         -         -         -         -           L         >>>DCH Information Response         M         9.2.1.16A         -         -           >>>E-DCH FDD Information Response         O         9.2.2.4C         YES         ignore           >SSDT Support Indicator         M         9.2.2.43         -         -           >Maximum Uplink SIR         M         Uplink SIR         -         -           >Minimum Uplink SIR         M         Uplink SIR         -         -           >Closed Loop Timing Adjustment Mode         9.2.1.69         -         -           >Maximum Allowed UL Tx Power         M         9.2.1.35         -         -           >Maximum DL TX Power         M         DL Power         -         -           >Minimum DL TX Power         M         DL Power         -         -           >Primary Scrambling Code         O         9.2.1.45         -         -           >UL UARFCN         O         UARFCN         Corresponds         -	>>>RL ID	M		9.2.1.49	RL ID for the	_	
SSE-DCH FDD		0		9.2.1.16A		YES	ignore
RL	Information Response	0		9.2.2.4C		YES	ignore
Response	RL					_	
Information Response	Response					_	
>Maximum Uplink SIR         M         Uplink SIR 9.2.1.69         —           >Minimum Uplink SIR         M         Uplink SIR 9.2.1.69         —           >Closed Loop Timing Adjustment Mode         O         9.2.2.3A         —           >Maximum Allowed UL Tx Power         M         9.2.1.35         —           >Maximum DL TX Power         M         DL Power 9.2.1.21A         —           >Minimum DL TX Power         M         DL Power 9.2.1.21A         —           >Primary Scrambling Code         O         9.2.1.45         —           >UL UARFCN         O         UARFCN Corresponds 1.0 Nu in TS 2.5.104 [6].           >DL UARFCN         O         UARFCN Corresponds 1.0 Nu in TS 2.1.66 to Nu in TS 2.5.104 [6].           >Primary CPICH Power         M         9.2.1.44         —	Information Response					YES	ignore
9.2.1.69						_	
9.2.1.69	•			9.2.1.69		_	
Adjustment Mode   SMaximum Allowed UL Tx   M   9.2.1.35   SMaximum DL TX Power   M   DL Power   9.2.1.21A   SMinimum DL TX Power   M   DL Power   9.2.1.21A   SPrimary Scrambling Code   O   9.2.1.45   SUL UARFCN   O   UARFCN   Corresponds   SMaximum DL TX Power   O   UARFCN   Corresponds   O   O   O   O   O   O   O   O   O	·			9.2.1.69		_	
Power	Adjustment Mode					-	
9.2.1.21A	Power					_	
9.2.1.21A				9.2.1.21A		-	
>UL UARFCN         O         UARFCN 9.2.1.66 to Nu in TS 25.104 [6].         —           >DL UARFCN         O         UARFCN Corresponds 1.66 to Nd in TS 25.104 [6].         —           >Primary CPICH Power         M         9.2.1.44         —				9.2.1.21A		_	
9.2.1.66 to Nu in TS 25.104 [6].  >DL UARFCN O UARFCN Corresponds - 5.2.1.66 to Nd in TS 25.104 [6].  >Primary CPICH Power M 9.2.1.44						_	
>DL UARFCN         O         UARFCN 9.2.1.66         Corresponds to Nd in TS 25.104 [6].         —           >Primary CPICH Power         M         9.2.1.44         —	>UL UARFCN	0			to Nu in TS	_	
>Primary CPICH Power M 9.2.1.44 –	>DL UARFCN	0			Corresponds to Nd in TS	_	
	>Primary CPICH Power	М		92144	20.10 1 [0].	_	
>Not Used O NULL -	>Not Used		+				

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Neighbouring UMTS Cell	0		9.2.1.41A		_	
Information >Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>PC Preamble	M		9.2.2.27a		_	
>SRB Delay	M		9.2.2.27a 9.2.2.39A		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>Secondary CPICH Information	0		9.2.2.38A		YES	ignore
>Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi ces&gt;</maxnr 			GLOBAL	ignore
>>TMGI	М		9.2.1.80		_	
>>Transmission Mode	0		9.2.1.81		_	
>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Frame Offset	Ö		9.2.1.30		YES	ignore
>Chip Offset	0		9.2.2.1		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Uplink SIR Target	0		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>HS-PDSCH RL ID	М		RL ID		_	
			9.2.1.49			
>HS-DSCH-RNTI	M		9.2.1.30P		_	
>HS-DSCH FDD Secondary	M		9.2.2.19ba		_	
Serving Information						
Response						
>SixtyfourQAM DL Support	0		9.2.1.123		_	
Indicator						
Additional E-DCH Cell		0 <maxnr< td=""><td></td><td>E-DCH on</td><td>EACH</td><td>ignore</td></maxnr<>		E-DCH on	EACH	ignore
Information Response		OfEDCH-		Secondary		
		1>		uplink		
				frequency -		
				max 1 in this		
				3GPP		
				release.		
>Additional E-DCH FDD	M		9.2.2.120		_	
Information Response						

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	TOJOOL
D-RNTI	O		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	_
	0		9.2.1.12		YES	ignore
CN CS Domain Identifier RL Information Response	U	01	9.2.1.11	Mandatanifan	YES	ignore
		01		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.		ignore
>RL ID	M		9.2.1.49		_	
>URA Information	0		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A			
>UL Time Slot ISCP Info	М		9.2.3.13D		_	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR		_	
·			9.2.1.69		_	
>Maximum Allowed UL Tx Power	M		9.2.1.35		_	
>Maximum DL TX Power	M		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	M		DL Power 9.2.1.21A		_	
>UARFCN	0		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Cell Parameter ID	0		9.2.1.8		_	
>Sync Case	0		9.2.1.54		_	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	0		9.2.1.78		_	
>PCCPCH Power	M		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A		_	
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation Configuration	M		9.2.3.7E		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B			
>UL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH Information		01			YES	ignore
>>>Repetition Period	М		9.2.3.7			3
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M	1	9.2.3.8A		_	
>>>UL Timeslot Information	M		9.2.3.13C		_	
>>Uplink SIR Target	0		Uplink SIR		YES	ignore
CCTrCH >DL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 	9.2.1.69	For DCH.	GLOBAL	ignore
>>CCTrCH ID	М	+	9.2.3.2	+	ļ	ļ

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>>DL DPCH Information		01			YES	ignore
>>>Repetition Period	M		9.2.3.7		_	<u> </u>
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot	М		9.2.3.2C			
Information						
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information		0			GLOBAL	ignore
Response		<maxnoof DSCHs&gt;</maxnoof 			0202/12	.g
>>DSCH ID	M		9.2.3.3ae		_	
>>DSCH Flow Control	М		9.2.3.3ag		-	
Information			-			
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format	М		9.2.3.13		_	
Management >USCH Information		0			GLOBAL	ignoro
Response		<maxnoof USCHs&gt;</maxnoof 			GLODAL	ignore
>>USCH ID	M		9.2.3.14		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	М		9.2.3.13		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Time Slot for SCH	C-Case1		Time Slot		YES	ignore
			9.2.1.56			.9
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Uplink SIR Target	M		Uplink SIR		YES	ignore
Criticality Diagraphics			9.2.1.69		VEC	iana an-
Criticality Diagnostics	0	0.4	9.2.1.13	Mondatarife	YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.49		_	
>URA Information	M		9.2.1.70B		_	
>SAI	M		9.2.1.52		-	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A			
>UL Time Slot ISCP Info LCR	М		9.2.3.13H		_	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Allowed UL Tx	M		9.2.1.35		_	
Power >Maximum DL TX Power	M		DL Power		_	
>Minimum DL TX Power	M		9.2.1.21A DL Power		_	
>UARFCN	0		9.2.1.21A 9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Cell Parameter ID	0		9.2.1.8	23.103 [7].	_	
>SCTD Indicator	0		9.2.1.78		_	
>PCCPCH Power	M		9.2.1.43		_	
>Alpha Value	М		9.2.3.a		_	
>UL PhysCH SF Variation	М		9.2.3.13B		_	
>Synchronisation	M		9.2.3.7E		_	
Configuration						
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F		_	
>UL CCTrCH Information LCR		0 <maxnr OfCCTrCH sLCR&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot Information LCR	M		9.2.3.13G		_	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		YES	ignore
>DL CCTrCH Information LCR		0 <maxnr OfCCTrCH sLCR&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>DL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information LCR	М		9.2.3.2E		-	
>>>TSTD Indicator	М		9.2.3.13E			
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information Response LCR		0 <maxnoof DSCHsLC R&gt;</maxnoof 			GLOBAL	ignore
>>DSCH ID	М		9.2.3.3ae		_	
>>DSCH Flow Control Information	M		9.2.3.3ag		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		-	
>>Transport Format Management	М		9.2.3.13		-	
>USCH Information Response LCR		0 <maxnoof USCHsLC</maxnoof 			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		_
		R>				
>>USCH ID	M		9.2.3.14		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	M		9.2.3.13		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>Uplink Timing Advance	M		9.2.3.13K		YES	ignore
Control LCR	'*'		0.2.0.1010		120	ignore
>PowerControl GAP	0		INTEGER (1255)	Unit: umber of subframes Applicable to 1.28Mcps TDD only.	YES	ignore
>SixtyfourQAM DL Support Indicator	0		9.2.1.123	Applicable to 1.28Mcps TDD only.	YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Idle Interval Information	0		9.2.3.60	TDD only.	YES	ignore
>Neighbouring UMTS Cell	0		9.2.1.141		YES	ignore
Information Extension						
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
DSCH-RNTI	0		9.2.3.3ah		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi ces&gt;</maxnr 			GLOBAL	ignore
>TMGI	M		9.2.1.80		_	
>Transmission Mode	0		9.2.1.81		_	
>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
RL Information Response 7.68Mcps		01		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.49		_	
>URA Information	0		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>UL Time Slot ISCP Info	M		9.2.3.13D		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69			
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Minimum DL TX Power	M		9.2.1.21A DL Power			
>Minimum DL TX Power	IVI		9.2.1.21A		_	
>UARFCN	0		UARFCN	Corresponds		
>UARFON			9.2.1.66	to Nt in TS	_	
0.11.0			0.04.0	25.105 [7].		
>Cell Parameter ID	0		9.2.1.8		_	
>Sync Case	0		9.2.1.54		_	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	0		9.2.1.78		_	
>PCCPCH Power	М		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A		_	
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation Configuration	М		9.2.3.7E		_	
>Secondary CCPCH Info 7.68Mcps TDD	0		9.2.3.22		_	
>UL CCTrCH Information		0 <maxnr< td=""><td></td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnr<>		For DCH.	GLOBAL	ignore
7.68 Mcps		OfCCTrCH s>		7 0. 5011.	OLODAL	ignore
>>CCTrCH ID	M	3/	9.2.3.2	+	_	
>>UL DPCH Information	IVI	01	3.2.3.2	+	YES	ianoro
>>> Repetition Period	M	<i>U</i> 1	9.2.3.7	+	IES	ignore
	M		9.2.3.6		_	
>>>Repetition Length					_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot Information 7.68Mcps	М		9.2.3.26		_	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		_	
>DL CCTrCH Information 7.68 Mcps		0 <maxnr OfCCTrCH s&gt;</maxnr 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>DL DPCH Information		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	J
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>DL Timeslot	M		9.2.3.28		_	
Information 7.68Mcps			0.2.0.20			
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	_	
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	_	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information		0			GLOBAL	ignore
Response 7.68 Mcps		<maxnoof DSCHs&gt;</maxnoof 				
	M		9,2,3.3ae		_	
>>DSCH ID >>DSCH Flow Control	M M		9.2.3.3ae 9.2.3.3ag		_ 	
>>DSCH ID >>DSCH Flow Control Information	М		9.2.3.3ag		_	
>>DSCH ID >>DSCH Flow Control Information >>Binding ID >>Transport Layer						
>>DSCH ID >>DSCH Flow Control Information >>Binding ID >>Transport Layer Address >>Transport Format	M		9.2.3.3ag 9.2.1.3		_	
>>DSCH ID >>DSCH Flow Control Information >>Binding ID >>Transport Layer Address >>Transport Format Management	M O O	DSCHs>	9.2.3.3ag 9.2.1.3 9.2.1.62		- - -	
>>DSCH ID >>DSCH Flow Control Information >>Binding ID >>Transport Layer Address >>Transport Format	M O O	DSCHs>  0 <maxnoof< td=""><td>9.2.3.3ag 9.2.1.3 9.2.1.62</td><td></td><td>_</td><td>ignore</td></maxnoof<>	9.2.3.3ag 9.2.1.3 9.2.1.62		_	ignore
>>DSCH ID >>DSCH Flow Control Information >>Binding ID >>Transport Layer Address >>Transport Format Management >USCH Information	M O O	DSCHs>	9.2.3.3ag 9.2.1.3 9.2.1.62		- - -	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Officiality
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	M		9.2.3.13		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		_	
>HCS Prio	0		9.2.1.30N		_	
>Time Slot for SCH	C-Case1		Time Slot 9.2.1.56		_	
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD only.	YES	reject

Condition	Explanation
Case2	The IE shall be present if Sync Case IE is equal to "Case2".
Case1	This IE shall be present if Sync Case IE is equal to "Case1".

Range bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNoOfUSCHs	Maximum number of USCHs for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNoOfDSCHsLCR	Maximum number of DSCHs for one UE for 1.28Mcps TDD.
maxNoOfUSCHsLCR	Maximum number of USCHs for one UE for 1.28Mcps TDD.
maxNrOfCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.

## 9.1.5 RADIO LINK SETUP FAILURE

## 9.1.5.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	,
D-RNTI	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					_	.g
>>Cause	М		9.2.1.5		_	
>RL Specific			0.20		_	
>>Unsuccessful RL Information Response		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>>Max UE DTX Cycle	C-DTX- CycleNotA vailable		9.2.2.87		YES	ignore
>>Successful RL		0 <maxnr< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnr<>			EACH	ignore
Information Response		OfRLs-1>				
>>>RL ID	М		9.2.1.49		_	
>>>RL Set ID	M		9.2.2.35		_	
>>>URA Information	0		9.2.1.70B		_	
>>>SAI	M		9.2.1.52		_	
>>>Cell GAI	0		9.2.1.5A		_	
>>>UTRAN Access Point	0		9.2.1.70A		_	
Position >>>Received Total Wide	M		9.2.2.35A		_	
Band Power						
>>>Not Used	0		NULL		_	
>>>DL Code Information	M		FDD DL Code Information 9.2.2.14A		_	
>>>CHOICE Diversity Indication	М				-	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL ID for the combining.	_	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>Non Combining or First RL					_	
>>>>DCH Information Response	M		9.2.1.16A		_	
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	M		9.2.2.43		_	
>>>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>>>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>>>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>>>Maximum Allowed UL Tx Power	M		9.2.1.35		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Maximum DL TX	M		DL Power			
Power	IVI		9.2.1.21A		_	
>>>Minimum DL TX	М		DL Power		_	
Power			9.2.1.21A			
>>>Primary CPICH	М		9.2.1.44		-	
Power						
>>>Primary Scrambling Code	0		9.2.1.45		-	
>>>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].	-	
>>>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].	-	
>>>Not Used	0		NULL		_	
>>>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>>>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>>>PC Preamble	M		9.2.2.27a		_	
>>>SRB Delay	M		9.2.2.39A		_	-
>>>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>>>Secondary CPICH Information	0		9.2.2.38A		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServi ces&gt;</maxnr 			GLOBAL	ignore
>>>>TMGI	М		9.2.1.80		_	
>>>>Transmission Mode	0		9.2.1.81		-	
>>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9A		YES	ignore
>>>Neighbouring E- UTRA Cell Information	0		9.2.1.41De		YES	ignore
>>>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>>>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>>>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
>>HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
>>HS-DSCH Information	0		HS-DSCH		YES	ignore
		1	FDD	1		

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Information Response 9.2.2.19b			
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
>>Additional HS Cell Information Response	0	0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>>>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>>>HS-DSCH-RNTI	М		9.2.1.30P		_	
>>>HS-DSCH FDD Secondary Serving Information Response	M		9.2.2.19ba		1	
>>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		_	
>>Additional E-DCH Cell Information Response		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>>>Additional E-DCH FDD Information Response	М		9.2.2.120		-	
Uplink SIR Target	0		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

Condition	Explanation
DTX-CycleNotAvailable	The IE shall be present if the Cause IE is set to Continuous Packet
	Connectivity UE DTX Cycle not Available ".

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.5.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
CHOICE Cause Level	M				YES	ignore
>General					_	_
>>Cause	M		9.2.1.5		_	
>RL Specific					_	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

## 9.1.6 RADIO LINK ADDITION REQUEST

## 9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Uplink SIR Target	М		Uplink SIR 9.2.1.69		YES	reject
RL Information		1 <max NrOfRLs- 1&gt;</max 			EACH	notify
>RL ID	М		9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>Frame Offset	M		9.2.1.30		_	
>Chip Offset	M		9.2.2.1		_	
>Diversity Control Field	M		9.2.1.20		_	
>Primary CPICH Ec/No	0		9.2.2.32		_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	0		9.2.2.48		_	
>DL Reference Power	0		DL Power 9.2.1.21A	Power on DPCH or on F-DPCH.	YES	ignore
>Enhanced Primary CPICH Ec/No	0		9.2.2.131		YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>Synchronisation Indicator	0		9.2.2.45A		YES	ignore
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	Ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	Ignore
>F-TPICH Information	0		9.2.2.139		YES	ignore
Active Pattern Sequence Information	0		9.2.2A	Either all the already active Transmission Gap Sequence(s) are addressed (Transmission Gap Pattern sequence shall overlap with the existing one) or none of the transmission gap sequences is	YES	reject
DPC Mode	0		9.2.2.12A	activated.	YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
Serving E-DCH RL	Ö	1	9.2.2.38C		YES	reject
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.21b		YES	ignore
HS-DSCH Serving Cell	0		9.2.2.19f		YES	reject

Change Information		1	I	1		
Change Information Serving Cell Change CFN	0		CFN		YES	reject
			9.2.1.9			reject
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	M		9.2.2.24e		-	
>Puncture Limit	M		9.2.1.46		_	
>E-TFCS Information	M		9.2.2.4G		_	
>E-TTI	M		9.2.2.4J		_	
>E-DPCCH Power Offset	M		9.2.2.4K		_	
>E-RGCH 2-Index-Step Threshold	М		9.2.2.64		_	
>E-RGCH 3-Index-Step Threshold	М		9.2.2.65		_	
>HARQ Info for E-DCH	M		9.2.2.66		_	
>HS-DSCH Configured	M		9.2.2.19C		YES	reject
Indicator >Minimum Reduced E-	0		9.2.2.102		YES	ignore
DPDCH Gain Factor						
E-DCH FDD Information	C- EDCHInfo		9.2.2.4B		YES	reject
Additional HS Cell		0 <max< td=""><td></td><td>For</td><td>EACH</td><td>reject</td></max<>		For	EACH	reject
Information RL Addition		NrOfHSD SCH-1>		secondary serving HS- DSCH cell. Max 7 in this 3GPP release.		
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>C-ID	М		9.2.1.6		_	
>HS-DSCH FDD Secondary	M		9.2.2.19aa			
Serving Information			0.2.2.1044			
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Add Req		01		For E-DCH on multiple frequencies in this DRNS.	YES	reject
>CHOICE Setup Or Addition Of E-DCH On Secondary UL Frequency	М				YES	reject
>> Setup				Used when the secondary UL frequency does not exist or is not configured with E-DCH in the current UE context.	_	
>>>Multicell E-DCH Transport Bearer Mode	М		9.2.2.113		_	
>>>Additional E-DCH Cell Information Setup		1 <max NrOfEDC H-1&gt;</max 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>>>Additional E- DCH FDD Setup Information	М		9.2.2.110		-	

>> Addition				Used when there exist additional E- DCH RLs in the current UE context.	-	
>>>Additional E-DCH Cell Information Addition		1 <max NrOfEDC H-1&gt;</max 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>>UL DPCH Information		1			-	
>>>>Uplink SIR Target	М		Uplink SIR 9.2.1.69		-	
>>>>Additional E-DCH RL Specific Information To Add	M		9.2.2.116		-	
>>>>Additional E-DCH FDD Information	0		9.2.2.112		_	
>>>>Multicell E-DCH Information	0		9.2.2.114		YES	ignore
UL CLTD Information	0	_	9.2.2.131		YES	reject

Condition	Explanation
EDCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	.,
RL Information		1			YES	reject
>RL ID	М		9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>Frame Offset	M		9.2.1.30		ı	
>Diversity Control Field	M		9.2.1.20		-	
>Primary CCPCH RSCP	0		9.2.3.5		_	
>DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	-	
>DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	reject
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>Delayed Activation	0		9.2.1.19Aa		YES	reject
>UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>>Uplink Synchronisation Step Size	М		9.2.3.13J		_	
>>Uplink Synchronisation Frequency	М		9.2.3.131		-	
> Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
> Idle Interval Configuration Indicator	0		NULL	TDD only.	YES	ignore
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
UL CCTrCH Information		0< maxNr OfCCTr CHs >			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TDD TPC Uplink Step Size	0		9.2.3.10a	Applicable to 1.28Mcps TDD only.	I	
DL CCTrCH Information		0< maxNr OfCCTr CHs >			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TDD TPC Downlink Step Size	0		9.2.3.10		-	
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	М		9.2.3.36	<u> </u>	_	

>E-TFCS Information TDD	М		9.2.3.37		_	
>E-DCH MAC-d Flows	М		9.2.3.38		_	
Information TDD						
>E-DCH TDD Information	M		9.2.3.40		_	
E-DCH Serving RL	0		RL ID	3.84Mcps	YES	reject
_			9.2.1.49	TDD only.		_
E-DCH Information		01		7.68Mcps	YES	reject
7.68Mcps				TDD only.		
>E-PUCH Information	M		9.2.3.36		_	
>E-TFCS Information TDD	M		9.2.3.37		_	
>E-DCH MAC-d Flows	M		9.2.3.38		_	
Information TDD						
>E-DCH TDD Information	M		9.2.3.51		_	
7.68Mcps						
E-DCH Information		01		1.28Mcps	YES	reject
1.28Mcps				TDD only.		
>E-PUCH Information LCR	M		9.2.3.36a		_	
>E-TFCS Information TDD	M		9.2.3.37		_	
>E-DCH MAC-d Flows	M		9.2.3.38		_	
Information TDD						
>E-DCH TDD Information	M		9.2.3.40a		_	
LCR						
Continuous Packet	0		9.2.3.61	1.28 Mcps	YES	reject
Connectivity DRX				TDD only.		
Information LCR						
HS-DSCH Semi-Persistent	0		9.2.3.64	1.28 Mcps	YES	reject
scheduling Information LCR				TDD only.		
E-DCH Semi-Persistent	0		9.2.3.66	1.28 Mcps	YES	reject
scheduling Information LCR			0.0070	TDD only.	\/F0	
DCH Measurement Type	0		9.2.3.76	1.28 Mcps	YES	reject
indicator Multi-Carrier E-DCH		0.4		TDD only.	\/F0	
Information		01		Applicable	YES	reject
information				for Multi-		
				Carrier E-		
				DCH Operation in		
				1.28 Mcps		
				TDD only.		
>Multi-Carrier E-DCH	М		9.2.3.79	1.28 Mcps		
Transport Bearer Mode	l IVI		3.2.3.13	TDD only.	-	
LCR				155 only.		
>Multi-Carrier E-DCH	М		9.2.3.77	1.28 Mcps	_	
Information LCR			0.2.0	TDD only.		
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps	YES	reject
				TDD only.		

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCH for one UE.

## 9.1.7 RADIO LINK ADDITION RESPONSE

## 9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	10,000
RL Information Response		1 <maxnrof RLs-1&gt;</maxnrof 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>RL Set ID	М		9.2.2.35		_	
>URA Information	0		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>Received Total Wide Band Power	M		9.2.2.35A		_	
>Not Used	0		NULL		_	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		YES	ignore
>CHOICE Diversity Indication	М				_	
>>Combining					-	
>>>RL ID	M		9.2.1.49	Reference RL ID.	_	
>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>Non Combining					_	
>>>DCH Information Response	M		9.2.1.16A		-	
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>SSDT Support Indicator	M		9.2.2.43		_	
>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	M		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>PC Preamble	M		9.2.2.27a		_	
>SRB Delay	M		9.2.2.39A		_	
>Primary CPICH Power	M		9.2.1.44		-	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Active MBMS Bearer		0 <maxnrof< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxnrof<>			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Service List		ActiveMBM SServices>	Kelefelice			
>>TMGI	М	33ervices>	9.2.1.80		_	
>>Transmission Mode	0		9.2.1.81		_	
>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9.A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH Serving Cell Change Information Response	0		9.2.2.19g		YES	ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.19h		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Additional HS Cell Change Information Response		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS-DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	M		RL ID 9.2.1.49		_	
>HS-DSCH Secondary Serving Cell Change Information Response	М		9.2.2.19ga		_	
Additional E-DCH Cell Information Response RL Add		0 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Information Response	0		9.2.2.120		_	
>Additional E-DCH Serving Cell Change Information response	0		E-DCH Serving Cell Change Information Response 9.2.2.19h		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.7.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RL Information Response		01		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.49		_	
>URA Information	0		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>UL Time Slot ISCP Info	M		9.2.3.13D		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>PCCPCH Power	М		9.2.1.43		_	
>Timing Advance Applied	М		9.2.3.12A		_	
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation Configuration	M		9.2.3.7E		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B		_	
>UL CCTrCH Information		0 <maxnro fCCTrCHs&gt;</maxnro 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH Information		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>UL Timeslot Information	М		9.2.3.13C		_	
>DL CCTrCH Information		0 <maxnr0 fCCTrCHs&gt;</maxnr0 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>DL DPCH Information		01			YES	ignore
>>>Repetition Period	М	1	9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information	М		9.2.3.2C		_	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				power on DPCH.		
>DCH Information		01		DPCH.	_	
>>CHOICE Diversity Indication	М	01			_	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL.	_	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>Non Combining					_	
>>>>DCH Information Response	M		9.2.1.16A		_	
>DSCH Information Response		0 <maxnoof DSCHs&gt;</maxnoof 			GLOBAL	ignore
>>DSCH ID	М		9.2.3.3ae			
>>Transport Format Management	М		9.2.3.13		_	
>>DSCH Flow Control Information	М		9.2.3.3ag		_	
>>CHOICE Diversity Indication	0				_	
>>>Non Combining					-	
>>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address >USCH Information	0		9.2.1.62		-	
Response		0 <maxnoofu SCHs&gt;</maxnoofu 			GLOBAL	ignore
>>USCH ID	М		9.2.3.14		_	
>>Transport Format Management	М		9.2.3.13		_	
>>CHOICE Diversity Indication	0				_	
>>>Non Combining					_	
>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>RL ID	M		9.2.1.49		_	
>URA Information	M		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>UL Time Slot ISCP Info LCR	М		9.2.3.13H		_	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>PCCPCH Power	М		9.2.1.43		_	
>Maximum Allowed UL Tx Power	M		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>Alpha Value	M		9.2.1.21A 9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.4 9.2.3.13B		_	
>Synchronisation	M		9.2.3.7E		_	
Configuration >Secondary CCPCH Info	0		9.2.3.7F			
TDD LCR >UL CCTrCH Information	0	O many MrO	9.2.3.7	F DOLL	-	:
LCR		0 <maxnr0 fCCTrCHsL CR&gt;</maxnr0 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>UL DPCH		01			YES	ignore
Information LCR						
>>>Repetition Period	M		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot Information LCR	М		9.2.3.13G		_	
>DL CCTrCH Information LCR		0 <maxnr0 fCCTrCHsL CR&gt;</maxnr0 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>DL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot	M		9.2.3.2E		_	
Information LCR						
>>>TSTD Indicator	M		9.2.3.13E		_	
>DCH Information Response	М		9.2.1.16A		-	
>DSCH Information Response LCR		0 <maxnoofd SCHsLCR&gt;</maxnoofd 			GLOBAL	ignore
>>DSCH ID	М	33.10L01\/	9.2.3.3ae		_	
>>DSCH Flow Control Information	M		9.2.3.3ag		-	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		-	
>>Transport Format	М		9.2.3.13		_	
Management >USCH Information Response LCR		0 <maxnoofu SCHsLCR&gt;</maxnoofu 			GLOBAL	ignore
>>USCH ID	M	GOI ISLON>	9.2.3.14		_	
>>Transport Format	M		9.2.3.14		_	
Management			0.2.0.10			

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>CHOICE Diversity Indication	0		Reference		_	
>>>Non Combining					_	
>>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Uplink Timing Advance Control LCR	M		9.2.3.13K		YES	ignore
>PowerControl GAP	0		INTEGER (1255)	Unit: number of subframes Applicable to 1.28Mcps TDD only.	YES	ignore
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only. Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt □3GPP TS 25.105□.	YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Idle Interval Information	0		9.2.3.60	TDD only.	YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Active MBMS Bearer Service List		0 <maxnro fActiveMBM SServices&gt;</maxnro 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	0		9.2.1.81		_	
>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
RL Information Response 7.68Mcps		01	-	Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.	YES	ignore
>RL ID	М		9.2.1.49		_	
>URA Information	0		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
LII Time Class ICCD Info	M					
>UL Time Slot ISCP Info >Minimum Uplink SIR	M		9.2.3.13D Uplink SIR		_	
>WIIIIIIIIIII OPIIIIK SIK	IVI		9.2.1.69		_	
>Maximum Uplink SIR	М		Uplink SIR		_	
> Maximum Opinik One	'''		9.2.1.69			
>Maximum Allowed UL Tx	М		9.2.1.35		_	
Power						
>Maximum DL TX Power	М		DL Power		_	
			9.2.1.21A			
>Minimum DL TX Power	M		DL Power		_	
			9.2.1.21A			
>PCCPCH Power	M		9.2.1.43		_	
>Timing Advance Applied	M		9.2.3.12A		_	
>Alpha Value	M		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation	M		9.2.3.7E		_	
Configuration >Secondary CCPCH Info	0		0.0.0.00			
	0		9.2.3.22		_	
7.68Mcps TDD >UL CCTrCH Information		0 <maxnro< td=""><td>1</td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnro<>	1	For DCH.	GLOBAL	ignore
7.68 Mcps		fCCTrCHs>		1 01 0011.	GLOBAL	ignore
>>CCTrCH ID	М	1001101132	9.2.3.2		_	
>>UL DPCH	IVI	01	3.2.3.2		YES	ignore
Information 7.68 Mcps		01			120	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>UL Timeslot	М		9.2.3.26		_	
Information 7.68Mcps						
>DL CCTrCH Information		0 <maxnro< td=""><td></td><td>For DCH.</td><td>GLOBAL</td><td>ignore</td></maxnro<>		For DCH.	GLOBAL	ignore
7.68 Mcps		fCCTrCHs>				
>>CCTrCH ID	M		9.2.3.2			
>>DL DPCH		01			YES	ignore
Information 7.68 Mcps	1.4		0007			
>>>Repetition Period	M		9.2.3.7		_	
>>>Repetition Length			9.2.3.6		_	
>>>TDD DPCH Offset >>>DL Timeslot	M		9.2.3.8A 9.2.3.28		_	
Information 7.68Mcps	IVI		9.2.3.20		_	
>>CCTrCH Maximum DL	0		DL Power	Maximum	_	
TX Power			9.2.1.21A	allowed		
17(1 0110)			0.2.1.217	power on		
				DPCH.		
>>CCTrCH Minimum DL	0		DL Power	Minimum	_	
TX Power			9.2.1.21A	allowed		
				power on		
				DPCH.		
>DCH Information	ļ.,	01			_	
>>CHOICE Diversity	M				_	
Indication			1			
>>>Combining	N4	1	0.2.4.40	Doforance	_	
>>>RL ID	M		9.2.1.49	Reference RL.	_	
>>>>DCH	0		9.2.1.16A	IXL.	YES	ignore
Information			3.2.1.10A		123	ignote
Response						
>>>Non Combining					_	
>>>DCH	М		9.2.1.16A		_	
Information						
Response	<u>                                     </u>	<u>                                      </u>	<u> </u>			
>DSCH Information		0			GLOBAL	ignore
Response 7.68 Mcps		<maxnoof< td=""><td></td><td></td><td></td><td></td></maxnoof<>				
		DSCHs>	1			
>>DSCH ID	M		9.2.3.3ae		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Transport Format Management	М		9.2.3.13		-	
>>DSCH Flow Control Information	М		9.2.3.3ag		_	
>>CHOICE Diversity	0				_	
Indication						
>>>Non Combining	0		0.04.0		_	
>>>>Binding ID >>>>Transport	0		9.2.1.3 9.2.1.62		_	
Layer Address	O		9.2.1.02		_	
>USCH Information Response 7.68 Mcps		0 <maxnoofu SCHs&gt;</maxnoofu 			GLOBAL	ignore
>>USCH ID	M		9.2.3.14		_	
>>Transport Format Management	М		9.2.3.13		_	
>>CHOICE Diversity Indication	0				-	
>>>Non Combining					_	
>>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		-	
>HCS Prio	0		9.2.1.30N		_	
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				TDD only.		

Range Bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE for 3.84Mcps TDD.
maxNoOfUSCHs	Maximum number of USCHs for one UE for 3.84Mcps TDD.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for one UE for 3.84Mcps TDD.
maxNoOfDSCHsLCR	Maximum number of DSCHs for one UE for 1.28Mcps TDD.
maxNoOfUSCHsLCR	Maximum number of USCHs for one UE for 1.28Mcps TDD.
maxNrOfCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.

## 9.1.8 RADIO LINK ADDITION FAILURE

## 9.1.8.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.5		_	
>RL Specific						
>>Unsuccessful RL Information Response		1 <maxnrof RLs-1&gt;</maxnrof 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>Successful RL		0 <maxnrof< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnrof<>			EACH	ignore
Information Response		RLs-2>				
>>>RL ID	M		9.2.1.49		_	
>>>RL Set ID	M		9.2.2.35		_	
>>>URA Information	0		9.2.1.70B		_	
>>>SAI	М		9.2.1.52		_	
>>>Cell GAI	0		9.2.1.5A		_	
>>>UTRAN Access Point Position	0		9.2.1.70A		_	
>>>Received Total Wide Band Power	М		9.2.2.35A		_	
>>>Not Used	0		NULL		_	
>>>DL Code	M		FDD DL		YES	ignore
Information			Code Information 9.2.2.14A			
>>>CHOICE Diversity Indication	М				_	
>>>Combining					_	
>>>>RL ID	М		9.2.1.49	Reference RL ID.	_	
>>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>Non Combining	N 4		0.04.404		_	
>>>>DCH Information Response	M		9.2.1.16A		_	
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	М		9.2.2.43		_	
>>>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>>>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>>>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>>>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>>>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>>>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Neighbouring	0		9.2.1.41A		-	
UMTS Cell Information >>>Neighbouring GSM	0		9.2.1.41C			
Cell Information			9.2.1.410		_	
>>>Primary CPICH	M		9.2.1.44		_	
Power						
>>>PC Preamble	M		9.2.2.27a		_	
>>>SRB Delay	M O		9.2.2.39A 9.2.1.5B		YES	ignoro
>>>Cell GA Additional Shapes						ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxnrof ActiveMBM SServices&gt;</maxnrof 			GLOBAL	ignore
>>>TMGI	M		9.2.1.80		_	
>>>>Transmission Mode	0		9.2.1.81			
>>>>Preferred	0		UARFCN		_	
Frequency Layer	<u> </u>		9.2.1.66			
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>>>Initial DL DPCH	0		DL DPCH		YES	ignore
Timing Adjustment			Timing Adjustment 9.2.2.9.A			
>>>Neighbouring E- UTRA Cell Information	0		9.2.1.41De		YES	ignore
>>>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>>>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>>>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>>>Neighbouring UMTS Cell Information Extension	0		9.2.1.141		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH Serving Cell Change Information	0		9.2.2.19g		YES	Ignore
Response E-DCH Serving Cell Change Information Response	0		9.2.2.19h		YES	Ignore
Additional HS Cell Change Information Response		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	Ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49	70.000.	_	
>HS-DSCH Secondary Serving Cell Change Information Response	М		9.2.2.19ga		-	
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Additional E-DCH Cell Information Response RL Add		0 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink	EACH	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				frequency – max 1 in this 3GPP release.		
>Additional E-DCH FDD Information Response	0		9.2.2.120		-	
>Additional E-DCH Serving Cell Change Information response	0		E-DCH Serving Cell Change Information Response 9.2.2.19h		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of radio links for one UE.
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

#### 9.1.8.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Managara Tura	NA.		Reference		VEC	maia at
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		ı	
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.5		-	
>RL Specific					-	
>>Unsuccessful RL		1			YES	ignore
Information Response						
>>>RL ID	M		9.2.1.49		-	
>>>Cause	M		9.2.1.5		ı	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

## 9.1.9 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
RL Information		1 <maxnr< td=""><td></td><td></td><td>EACH</td><td>notify</td></maxnr<>			EACH	notify
		OfRLs>				
>RL ID	M		9.2.1.49		_	

Range bound	Explanation			
maxNrOfRLs	Maximum number of radio links for one UE			

## 9.1.10 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

## 9.1.11 RADIO LINK RECONFIGURATION PREPARE

#### FDD Message 9.1.11.1

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Managa Tuna	M		<b>Reference</b> 9.2.1.40		YES	rainat
Message Type Transaction ID	M				150	reject
Allowed Queuing Time	0		9.2.1.59 9.2.1.2		YES	roiget
UL DPCH Information	0	0.1	9.2.1.2		YES	reject
	0	01	9.2.2.53		TES	reject
>UL Scrambling Code >UL SIR Target	0		Uplink SIR			
· ·			9.2.1.69		_	
>Min UL Channelisation Code Length	0		9.2.2.25		ı	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		_	
>Puncture Limit	0		9.2.1.46	For the UL.	_	
>TFCS	0		9.2.1.63	TFCS for the UL.	-	
>UL DPCCH Slot Format	0		9.2.2.52	OL.	_	
>Diversity Mode	Ö		9.2.2.8		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>UL DPDCH Indicator For	0		9.2.2.52A		YES	reject
E-DCH Operation  DL DPCH Information		01			YES	reject
>TFCS	0	01	9.2.1.63	TFCS for the	-	reject
				DL.	_	
>DL DPCH Slot Format	0		9.2.2.9		1	
>Number of DL Channelisation Codes	0		9.2.2.26A		_	
>TFCI Signalling Mode	0		9.2.2.46		_	
>TFCI Presence	C- SlotFormat		9.2.1.55		-	
>Multiplexing Position	0		9.2.2.26		_	
>Limited Power Increase	0		9.2.2.21A		_	
>DL DPCH Power Information		01			YES	reject
>>Power Offset Information		1			_	
>>>PO1	М		Power	Power offset		
>>>i	IVI		Offset 9.2.2.30	for the TFCI bits.		
>>>PO2	M		9.2.2.30 Power	Power offset		
>>>FO2	IVI		Offset 9.2.2.30	for the TPC bits.	_	
>>>PO3	M		9.2.2.30 Power	Power offset		
>>>PU3	IVI		Offset	for the pilot	_	
>>FDD TPC Downlink	M		9.2.2.30 9.2.2.16	bits.	_	
Step Size >>Inner Loop DL PC	M		9.2.2.21a		_	
Status DCUs To Modify			EDD DOLL		VEO	
DCHs To Modify	0		FDD DCHs To Modify		YES	reject
DOLLA TA Add			9.2.2.13C		VEO	wa!4
DCHs To Add	0		DCH FDD Information		YES	reject
DOLL- T- D-L-1		0 1/ 01	9.2.2.4A		01.0541	
DCHs To Delete		0 <maxnrof DCHs&gt;</maxnrof 			GLOBAL	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>DCH ID	M		9.2.1.16		-	
RL Information		0 <maxnrof RLs&gt;</maxnrof 			EACH	reject
>RL ID	M		9.2.1.49		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		_	
>DL Reference Power	0		DL Power 9.2.1.21A	Power on DPCH.	YES	ignore
>RL Specific DCH Information	0		9.2.1.49A		YES	ignore
>DL DPCH Timing Adjustment	0		9.2.2.9A	Required RL Timing Adjustment.	YES	reject
>Phase Reference Update Indicator	0		9.2.2.27B		YES	ignore
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigu ration Setup 9.2.2.124		YES	ignore
>F-TPICH Information Reconf	0		9.2.2.142		YES	ignore
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify	0		9.2.1.30Q		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.300A		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	0		9.2.2.24e		_	
>Puncture Limit	0		9.2.1.46		_	
>E-TFCS Information	0		9.2.2.4G		_	
>E-TTI	0		9.2.2.4J		_	
>E-DPCCH Power Offset	0		9.2.2.4K		_	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.64		-	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.65		_	
>HARQ Info for E-DCH	0		9.2.2.66		_	
>HS-DSCH Configured	0		9.2.2.19C		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Indicator Deduced 5	0		0.0.0.400		VEO	
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
E-DCH FDD Information	0		9.2.2.4B		YES	reject
E-DCH FDD Information to Modify	0		9.2.2.4F		YES	reject
E-DCH MAC-d Flows to Add	0		E-DCH MAC-d flows Information 9.2.2.4MC		YES	reject
E-DCH MAC-d Flows to Delete	0		9.2.1.90		YES	reject
Serving E-DCH RL	0		9.2.2.38C		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset		1			_	
Information						
>>PO2	М		Power Offset 9.2.2.30	This IE shall be ignored by DRNS.	I	
>FDD TPC Downlink Step Size	M		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		YES	reject
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
Fast Reconfiguration Mode	0		9.2.2.70		YES	ignore
CPC Information	0	01	J.Z.Z.1 0		YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		_	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.73		I	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		-	
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.75A		YES	reject
Additional HS Cell Information RL Reconf Prep		0 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>C-ID	0		9.2.1.6		_	
>HS-DSCH FDD Secondary Serving Information	0		9.2.2.19aa		-	
>HS-DSCH FDD Secondary Serving Information To Modify	0		9.2.2.19bb		_	
>HS-DSCH Secondary Serving Remove	0		NULL		1	
UE Aggregate Maximum Bit Rate	0		9.2.1.137		YES	ignore
Additional E-DCH Cell Information RL Reconf		01		For E-DCH on multiple	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Prep			11010101100	frequencies in this DRNS.		
>CHOICE Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency	M			DINIVO.	YES	reject
>>Setup				Used when RLs on the secondary UL frequency does not exist or is not configured with E-DCH in the current UE context.	-	
>>>Multicell E-DCH Transport Bearer Mode	М		9.2.2.113		-	
>>>Additional E- DCH Cell Information Setup		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>>>Additional E- DCH FDD Setup Information	М		9.2.2.110		1	
>>Configuration Change  >>>Additional E-		1 <maxnrof< td=""><td></td><td>Used when RLs with additional E-DCH on the secondary UL frequency exist in the current UE context and the configuration is modified (adding new RLs or modification of existing RLs).  E-DCH on</td><td></td><td></td></maxnrof<>		Used when RLs with additional E-DCH on the secondary UL frequency exist in the current UE context and the configuration is modified (adding new RLs or modification of existing RLs).  E-DCH on		
DCH Cell Information Configuration Change		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>>>Additional E- DCH Configuration Change Information	М		9.2.2.111		_	
>>Removal				Used when all RLs on the indicated	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				secondary UL frequency is removed.		
>>>Additional E- DCH Cell Information Removal		1 <maxnrof EDCH-1&gt;</maxnrof 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>RL on Secondary UL Frequency	M		ENUMERA TED (Remove, )	Removal of all RL on secondary UL frequency.	_	
UL CLTD Information Reconf	0		9.2.2.130		YES	reject

Condition	Explanation
CodeLen	The IE shall be present only if the Min UL
	Channelisation Code length IE equals to 4.
SlotFormat	The IE shall only be present if the DL DPCH Slot
	Format IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE is present
	in the UL DPCH Information IE and is not equal to
	"none".

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for a UE.
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE

# 9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Allowed Queuing Time UL CCTrCH To Add	0	0 <maxn rOfCCTr CHs&gt;</maxn 	9.2.1.2	For DCH and USCH.	YES EACH	reject notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	M		9.2.1.63	For the UL.	_	
>TFCI Coding	M		9.2.3.11		_	
>Puncture Limit	M		9.2.1.46		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Mandatory for 1.28Mcps TDD; not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
>TDD TPC Uplink Step Size	0		9.2.3.10a	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	reject
UL CCTrCH To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	0		9.2.1.63	For the UL.	_	
>TFCI Coding	0		9.2.3.11		_	
>Puncture Limit	0		9.2.1.46		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	reject
>TDD TPC Uplink Step Size	0		9.2.3.10a	Applicable to 1.28Mcps TDD only.	YES	reject
UL CCTrCH to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
DL CCTrCH To Add		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH and DSCH.	EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	М		9.2.1.63	For the DL.	_	
>TFCI Coding	М		9.2.3.11		_	
>Puncture Limit	M		9.2.1.46		_	
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 		List of uplink CCTrCH which provide TPC.	-	
>>TPC CCTrCH ID	М		9.2.3.2		-	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject
DL CCTrCH To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	0		9.2.1.63	For the DL.	_	
>TFCI Coding	0		9.2.3.11		_	
>Puncture Limit	0		9.2.1.46		-	
>TPC CCTrCH List		0 <maxn oCCTrC Hs&gt;</maxn 		List of uplink CCTrCH which provide TPC.	-	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.2		ı	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject
DL CCTrCH to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		ı	
DCHs To Modify	0		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		0 <maxn rOfDCHs &gt;</maxn 			GLOBAL	reject
>DCH ID	М		9.2.1.16		_	
DSCHs To Modify		0 <maxn oOfDSC Hs&gt;</maxn 			GLOBAL	reject
>DSCH ID	M		9.2.3.3ae		_	
>CCTrCH ID	0		9.2.3.2	DL CCTrCH in which the DSCH is mapped.	-	
>TrCH Source Statistics Descriptor	0		9.2.1.65		-	
>Transport Format Set	0		9.2.1.64		_	
>Allocation/Retention Priority	0		9.2.1.1		Ι	
>Scheduling Priority Indicator	0		9.2.1.51A		_	
>BLER	0		9.2.1.4		_	
>Transport Bearer Request Indicator	М		9.2.1.61		-	
>Traffic Class	0		9.2.1.58A	0	YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCHs To Add	0		DSCH TDD Information 9.2.3.3a		YES	reject

IE/Group Name	Presence	Range	IE Type	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
DSCHs to Delete		0 <maxn oOfDSC Hs&gt;</maxn 			GLOBAL	reject
>DSCH ID	M		9.2.3.3ae		_	
USCHs To Modify		0 <maxn oOfUSC Hs&gt;</maxn 			GLOBAL	reject
>USCH ID	M		9.2.3.14		_	
>CCTrCH ID	0		9.2.3.2	UL CCTrCH in which the USCH is mapped.	_	
>TrCH Source Statistics Descriptor	0		9.2.1.65		_	
>Transport Format Set	0		9.2.1.64		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Scheduling Priority Indicator	0		9.2.1.51A		_	
>BLER	0		9.2.1.4		_	
>Transport Bearer Request Indicator	M		9.2.1.61		_	
>RB Info		0 <maxn oOfRB&gt;</maxn 		All Radio Bearers using this USCH	_	
>>RB Identity	M		9.2.3.5B		_	
>Traffic class	0		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCHs To Add	0		USCH Information 9.2.3.15		YES	reject
USCHs to Delete		0 <maxn oOfUSC Hs&gt;</maxn 	0.2.0.10		GLOBAL	reject
>USCH ID	М		9.2.3.14		_	
Primary CCPCH RSCP	0		9.2.3.5		YES	ignore
DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.2F	Applicable to 1.28Mcps TDD only.	YES	ignore
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-DSCH Information To Modify	0		9.2.1.30Q		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
PDSCH-RL-ID	0		RL ID 9.2.1.49		YES	ignore
UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	М		9.2.3.13J	155.	_	
>Uplink Synchronisation Frequency	М		9.2.3.131		_	
RL Information		0 <maxn rOfRLs.</maxn 			YES	ignore
>RL ID	М	70771207	9.2.1.49		_	
>RL Specific DCH Information	0		9.2.1.49A		_	
Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36		_	-
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		_	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information	0		9.2.3.40		_	
>E-DCH TDD Information to	0		9.2.3.42		_	
Modify						

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
E-DCH Serving RL	0		RL ID	3.84Mcps	YES	reject
E-DCH Information		01	9.2.1.49	TDD only. 7.68Mcps	YES	reject
7.68Mcps		01		TDD only.	120	reject
>E-PUCH Information	0		9.2.3.36	- 7	_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to	0		9.2.3.38		_	
Add						
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information 7.68Mcps	0		9.2.3.51		_	
>E-DCH TDD Information to	0		9.2.3.42		-	
Modify						
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only.	YES	reject
>E-PUCH Information LCR	0		9.2.3.36a		_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to	0		9.2.3.38		_	
Add						
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information LCR	0		9.2.3.40a		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		-	
Need for Idle Interval	0		ENUMERA TED (True, False)	TDD only.	YES	ignore
CPC Information		01		1.28Mcps TDD only.	YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.61	- ,	_	
>Continuous Packet Connectivity DRX Information To Modify LCR	0		9.2.3.62		_	
>HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64		-	
>HS-DSCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.65		_	
>HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.70		_	
>E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66		_	
>E-DCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.67		_	
>E-DCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.71		_	
RNTI Allocation Indicator	0		ENUMERA TED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Reconf		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>CHOICE continue, Setup or Change	M				_	
>>continue					_	
>>Setup					_	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	M		9.2.3.79		_	
>>>Multi-Carrier E-DCH Information LCR	M		9.2.3.77		_	
>>change					_	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	0		9.2.3.79		_	
>>>Multi-Carrier E-DCH Information LCR	0		9.2.3.77		_	
>>>Removal UL Multi- Carrier info		0 <maxn rOfULCar riersLCR- 1&gt;</maxn 			_	
>>>UARFCN	M		9.2.1.66	Corresponds to Nt TS 25.105 [17].	-	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for a UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNoOfDSCHs	Maximum number of DSCHs for one UE.
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNrOfRLs	Maximum number of RLs for one UE
maxNrOfULCarriersLCR	Maximum number of uplink frequencies in Multi-
	Carrier E-DCH Operation.
maxNoOfRB	Maximum number of Radio Bearers for one UE.

## 9.1.12 RADIO LINK RECONFIGURATION READY

#### FDD Message 9.1.12.1

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	,
RL Information Response		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		ı	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		ı	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Not Used	0		NULL		_	
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		YES	ignore
>DCH Information Response	0		9.2.1.16A		YES	ignore
>Not Used	0		NULL		_	
>DL Power Balancing Updated Indicator	0		9.2.2.10D		YES	ignore
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>Secondary CPICH Information Change	0		9.2.2.38B		YES	ignore
>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Fast Reconfiguration Permission	0		9.2.2.71	FDD only.	YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS- DSCH cell. Max 7 in this	EACH	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				3GPP release.		
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>HS-DSCH-RNTI	М		9.2.1.30P		_	
>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.19ba		-	
Additional E-DCH Cell Information Response RLReconf		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Information Response	0		9.2.2.120	For new E- DCH Radio Links on secondary carrier.	-	
>Additional Modified E- DCH FDD Information Response	0		9.2.2.121		-	

Range bound	Explanation			
maxNrOfRLs	Maximum number of RLs for a UE.			
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.			
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.			

# 9.1.12.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
RL Information Response		0 <maxn rOfRLs&gt;</maxn 		See Note 1 below.	YES	ignore
>RL ID	M		9.2.1.49		_	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B	Applicable to 3.84Mcps TDD only.	_	
>UL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH to be Added		01		Applicable to 3.84Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>Rx Timing Deviation	0		9.2.3.7A		-	
>>>UL Timeslot Information	М		9.2.3.13C		_	
>>>Rx Timing Deviation 3.84 Mcps Extended	0		9.2.3.35		YES	Ignore
>>UL DPCH to be Modified		01			YES	ignore
>>>Repetition Period	0		9.2.3.7		_	
>>>Repetition Length	0		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		_	
>>>UL Timeslot Information		0 <maxn rOfTS&gt;</maxn 		Applicable to 3.84Mcps TDD only.	-	
>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift And Burst Type	0		9.2.3.4		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>UL Code Information		0 <maxn rOfDPCH s&gt;</maxn 			_	
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code	0		9.2.3.8		_	
>>>UL Timeslot Information LCR		0 <maxn rOfTsLC R&gt;</maxn 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot LCR	М		9.2.3.12a		_	
>>>Midamble	0		9.2.3.4C		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
CF:# 1 CD			Reference			
Shift LCR >>>TFCI	0		9.2.1.55		1	
Presence	O		9.2.1.55		_	
>>>UL Code Information LCR		0 <maxn rOfDPCH sLCR&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.8a		_	
>>>>TDD UL DPCH Time Slot Format LCR	0		9.2.3.10C		YES	reject
>>>UL Timeslot Information 7.68Mcps		0 <maxn rOfTS&gt;</maxn 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		-	
>>>TFCI Presence	0		9.2.1.55		_	
>>>UL Code Information 7.68Mcps		0 <maxn rOfDPCH s768&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.25		_	
>>UL DPCH to be Deleted		0 <maxn rOfDPCH s&gt;</maxn 			GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		_	
>>UL DPCH to be Added LCR		01		Applicable to 1.28Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A			
>>>UL Timeslot Information LCR	М		9.2.3.13G		_	
>>UL DPCH to be Added 7.68Mcps		01		Applicable to 7.68Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A			
>>>Rx Timing Deviation 7.68Mcps	0		9.2.3.30		_	
>>>UL Timeslot Information 7.68Mcps	М		9.2.3.26		-	
>DL CCTrCH Information		0 <maxn rOfCCTr CHs&gt;</maxn 		For DCH.	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH to be Added		01		Applicable to 3.84Mcps TDD only.	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>DL Timeslot	М		9.2.3.2C		_	
Information						
>>DL DPCH to be Modified		01			YES	ignore
>>>Repetition Period	0		9.2.3.7		_	
>>>Repetition Length	0		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		_	
>>>DL Timeslot Information		0 <maxn rOfTS&gt;</maxn 		Applicable to 3.84Mcps TDD only.	_	
>>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift	0		9.2.3.4		_	
And Burst Type						
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information		0 <maxn rOfDPCH</maxn 			_	
		S>				
>>>>DPCH ID	M		9.2.3.3		_	
>>>>TDD Channelisation Code	0		9.2.3.8		_	
>>>DL Timeslot Information LCR		0 <maxn rOfTsLC R&gt;</maxn 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>>Time Slot LCR	М		9.2.3.12a		_	
>>>>Midamble Shift	0		9.2.3.4C		_	
LCR						
>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code Information LCR		0 <maxn rOfDPCH sLCR&gt;</maxn 			GLOBAL	ignore
>>>>DPCH ID	М	020/12	9.2.3.3		_	
>>>>TDD Channelisation Code LCR	0		9.2.3.8a		_	
>>>>TDD DL DPCH Time Slot Format LCR	0		9.2.3.8E		YES	reject
>>>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>>>>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore
>>>DL Timeslot Information 7.68Mcps		0 <maxn rOfTS&gt;</maxn 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>Time Slot	М		9.2.1.56	•	_	
>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information		0 <maxn rOfDPCH s768&gt;</maxn 			_	
>>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.25		_	
>>DL DPCH to be		0 <maxn< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxn<>			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Deleted		rOfDPCH				
>>>DPCH ID	M	S>	9.2.3.3			
>>DL DPCH to be Deleted 7.68Mcps TDD		0 <maxn rOfDPCH s768&gt;</maxn 			GLOBAL	ignore
>>>DPCH ID 7.68Mcps	M		9.2.3.34		_	
>>DL DPCH to be Added LCR		01		Applicable to 1.28Mcps TDD only.	YES	ignore
>>>Repetition Period	M		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information LCR	M		9.2.3.2E		-	
>>DL DPCH to be Added 7.68Mcps		01		Applicable to 7.68Mcps TDD only.	YES	ignore
>>>Repetition Period	M		9.2.3.7		_	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information 7.68Mcps	М		9.2.3.28		-	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>DCH Information Response	0		9.2.1.16A	- ,	YES	ignore
>DSCH to be Added or Modified		0 <maxnoo f DSCHs&gt;</maxnoo 			GLOBAL	ignore
>>DSCH ID	М		9.2.3.3ae		_	
>>Transport Format Management	М		9.2.3.13		_	
>>DSCH Flow Control Information	M		9.2.3.3ag		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	-
>USCH to be Added or Modified		0 <maxno OfUSCH s&gt;</maxno 			GLOBAL	ignore
>>USCH ID	М		9.2.3.14			
>>Transport Format Management	М		9.2.3.13		_	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>Uplink Timing Advance Control LCR	0		9.2.3.13K	Applicable to 1.28Mcps TDD only.	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F	Applicable to 1.28Mcps TDD only.	YES	ignore
>Secondary CCPCH Info 7.68Mcps TDD	0		9.2.3.22	Applicable to 7.68Mcps TDD only.	YES	ignore
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only. Mandatory for 1.28Mcps TDD when using multiple frequencies. Corresponds to Nt (3GPP TS 25.105).	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
DSCH-RNTI	0		9.2.3.3ah		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information Response 9.2.3.41	3.84Mcps TDD only.	YES	ignore
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
PowerControl GAP	0		INTEGER (1255)	1.28Mcps TDD only.	YES	ignore
Idle Interval Information	0		9.2.3.60	TDD only	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality		
				only.				
Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through								

ote 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxNrOfRLs are represented by separate ASN.1 structures with different criticalities.

Range bound	Explanation
maxNoOfDSCHs	Maximum number of DSCHs for one UE.
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfDPCHs	Maximum number of DPCH for a UE for 3.84Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxNrOfDPCHsLCR	Maximum number of DPCH for a UE for 1.28Mcps TDD.
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfDPCHs768	Maximum number of DPCH for a UE for 7.68Mcps TDD.

#### 9.1.13 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
CFN	M		9.2.1.9		YES	ignore
Active Pattern Sequence Information	0		9.2.2.A	FDD only.	YES	ignore
Fast Reconfiguration Mode	0		9.2.2.70	FDD only.	YES	reject

#### 9.1.14 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.5		_	
>RL Specific					_	
>>RLs Causing		0 <maxnrof< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnrof<>			EACH	ignore
Reconfiguration Failure		RLs>				_
>>>RL ID	M		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>>Max UE DTX Cycle	C-DTX- CycleNotA vailable		9.2.2.87		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

Condition	Explanation
DTX-CycleNotAvailable	The IE shall be present if the Cause IE is set to "Continuous Packet
	Connectivity UE DTX Cycle not Available ".

Range bound	Explanation		
maxNrOfRLs	Maximum number of RLs for a UE.		

#### 9.1.15 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	

## 9.1.16 RADIO LINK RECONFIGURATION REQUEST

## 9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	•
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the UL.	-	•
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.52A		YES	reject
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the DL.	-	
>TFCI Signalling Mode	0		9.2.2.46		_	
>Limited Power Increase	0		9.2.2.21A		_	
DCHs To Modify	0		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4A		YES	reject
DCHs To Delete		0 <maxnr OfDCHs&gt;</maxnr 			GLOBAL	reject
>DCH ID	M		9.2.1.16		_	
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
RL Information		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	M		9.2.1.49		1	
>RL Specific DCH Information	0		9.2.1.49A		ı	
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
>HS-DSCH Preconfiguration Setup	0		9.2.2.100		YES	ignore
>Non-Serving RL Preconfiguration Setup	0		9.2.2.124		YES	ignore
>Non-Serving RL Preconfiguration Removal	0		Non- Serving RL Preconfigu ration Setup 9.2.2.124		YES	ignore
>F-TPICH Information Reconf	0		9.2.2.142		YES	ignore
DL Reference Power Information	0		9.2.2.10C		YES	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.30NA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.300A		YES	reject

HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID 9.2.1.49		YES	reject
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	O		9.2.2.24e		_	
>Puncture Limit	О		9.2.1.46		_	
>E-TFCS Information	0		9.2.2.4G		_	
>E-TTI	О		9.2.2.4J		-	
>E-DPCCH Power Offset	0		9.2.2.4K		-	
>E-RGCH 2-Index-Step Threshold	0		9.2.2.64		-	
>E-RGCH 3-Index-Step Threshold	0		9.2.2.65		_	
>HARQ Info for E-DCH	0		9.2.2.66		_	
>Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
>HS-DSCH Configured Indicator	0		9.2.2.19C		_	
E-DCH FDD Information	0		9.2.2.4B		YES	reject
E-DCH FDD Information to	0		9.2.2.4F		YES	reject
Modify			9.2.2.4		163	reject
E-DCH MAC-d Flows to Add	0		E-DCH MAC-d flows Information 9.2.2.4MC		YES	reject
E-DCH MAC-d Flows to	0		9.2.1.90		YES	reject
Delete			9.2.2.38C		VE0	
Serving E-DCH RL	0	0.4	9.2.2.380		YES	reject
CPC Information		01			YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		_	
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.73		_	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		_	
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.75A		YES	reject
No of Target Cell HS-SCCH Order	0		INTEGER (130)		YES	ignore
Additional HS Cell Information RL Reconf Req		0 <maxnr OfHSDSC H-1&gt;</maxnr 	/	For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>C-ID	0		9.2.1.6		_	1
>HS-DSCH FDD Secondary Serving	0		9.2.2.19aa		_	
Information >HS-DSCH FDD	0		9.2.2.19bc			
Secondary Serving			0.2.2.1300			

	1			1		
Information To Modify Unsynchronised						
>HS-DSCH Secondary	0		NULL		_	
Serving Remove	`					
UE Aggregate Maximum Bit	0		9.2.1.137		YES	ignore
Rate						
Additional E-DCH Cell Information RL Reconf Req		01		For E-DCH on multiple frequencies in this DRNS.	YES	reject
>CHOICE Setup, Configuration Change or Removal of E-DCH On Secondary UL Frequency	M				YES	reject
>>Setup				Used when RLs on the secondary UL frequency does not exist or is not configured with E-DCH in the current UE context.		
>>>Multicell E-DCH	М		9.2.2.113		-	
Transport Bearer Mode >>>Additional E-DCH Cell Information		1 <maxnr OfEDCH-</maxnr 		E-DCH on Secondary	_	
Setup		1>		uplink frequency – max 1 in this 3GPP release.		
>>>Additional E- DCH FDD Setup Information	M		9.2.2.110		ı	
>>Configuration Change		1 amovAle		Used when RLs with additional E-DCH on the secondary UL frequency exist in the current UE context and the configuration is modified (adding new RLs or modification of existing RLs).		
Cell Information Configuration Change		1 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	_	
>>>>Additional E- DCH Configuration Change Information	M		9.2.2.111		_	
>>Removal				Used when	-	

				all RLs on the indicated secondary UL frequency is removed.		
>>>Additional E-DCH Cell Information Removal		1 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	-	
>>>>RL on Secondary UL Frequency	М		ENUMERA TED (Remove, )	Removal of all RL on secondary UL frequency.	_	
UL CLTD Information Reconf	0		9.2.2.130		YES	reject

Range Bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH
	cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH
	for one UE

# 9.1.16.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40	•	YES	reject
Transaction ID	М		9.2.1.59		_	
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH Information To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	0		9.2.1.63		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	reject
UL CCTrCH Information to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
DL CCTrCH Information To Modify		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	0		9.2.1.63		_	
DL CCTrCH Information to Delete		0 <maxn rOfCCTr CHs&gt;</maxn 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
DCHs To Modify	0		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		0 <maxn rOfDCHs &gt;</maxn 			GLOBAL	reject
>DCH ID	M		9.2.1.16		_	
RL Information		0 <maxn rOfRLs&gt;</maxn 			YES	ignore
>RL ID	M		9.2.1.49		_	
>RL Specific DCH Information	0		9.2.1.49A		-	
UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	М		9.2.3.13J		_	
>Uplink Synchronisation Frequency	М		9.2.3.131		_	
HS-DSCH Information	0		HS-DSCH TDD Information9. 2.3.3aa		YES	reject
HS-DSCH Information To Modify Unsynchronised	0		9.2.1.30NA		YES	reject
HS-DSCH MAC-d Flows To Add	0		HS-DSCH MAC-d Flows Information 9.2.1.300A		YES	reject
HS-DSCH MAC-d Flows To Delete	0		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	0		RL ID		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			9.2.1.49			
E-DCH Information		01		3.84Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36		_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		_	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information	0		9.2.3.40		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		_	
E-DCH Serving RL	0		RL ID 9.2.1.49	3.84Mcps TDD only.	YES	reject
E-DCH Information 7.68Mcps		01		7.68Mcps TDD only.	YES	reject
>E-PUCH Information	0		9.2.3.36	100 omy.	_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		_	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information 7.68Mcps	0		9.2.3.51		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		_	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only.	YES	reject
>E-PUCH Information LCR	0		9.2.3.36a		_	
>E-TFCS Information TDD	0		9.2.3.37		_	
>E-DCH MAC-d Flows to Add	0		9.2.3.38		-	
>E-DCH MAC-d Flows to Delete	0		9.2.1.90		_	
>E-DCH TDD Information LCR	0		9.2.3.40a		_	
>E-DCH TDD Information to Modify	0		9.2.3.42		_	
Need for Idle Interval	0		ENUMERAT ED (True, False)	TDD only.	YES	ignore
CPC Information		01	1 4.00)		YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.61		_	,
>Continuous Packet Connectivity DRX Information To Modify LCR	0		9.2.3.62		_	
>HS-DSCH Semi-Persistent scheduling Information LCR	0		9.2.3.64		_	
>HS-DSCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.65		_	
>HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.70		_	
>E-DCH Semi-Persistent scheduling Information LCR	0		9.2.3.66		-	
>E-DCH Semi-Persistent scheduling Information to modify LCR	0		9.2.3.67		_	
>E-DCH Semi-Persistent scheduling Deactivate Indicator LCR	0		9.2.3.71		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RNTI Allocation Indicator	0		ENUMERAT ED (True)	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Type indicator	0		9.2.3.76	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Reconf		01		Applicable for Multi-Carrier E-DCH Operation in 1.28 Mcps TDD only.	YES	reject
>CHOICE continue,Setup or Change	М				_	
>>continue					_	
>>Setup					_	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	М		9.2.3.79		_	
>>>Multi-Carrier E-DCH Information LCR	М		9.2.3.77		_	
>>Change					_	
>>>Multi-Carrier E-DCH Transport Bearer Mode LCR	0		9.2.3.79		_	
>>>Multi-Carrier E-DCH Information LCR	0		9.2.3.77		_	
>>>Removal UL Multi- Carrier info		0 <maxn rOfULCar riersLCR- 1&gt;</maxn 			_	
>>>UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [17].	_	
MU-MIMO Indicator	0		9.2.3.82	1.28 Mcps TDD only.	YES	reject

Range Bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfDCHs	Maximum number of DCHs for one UE.
maxNrOfRLs	Maximum number of RLs for one UE
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier
	E-DCH Operation.

## 9.1.17 RADIO LINK RECONFIGURATION RESPONSE

## 9.1.17.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RL Information Response		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	M		9.2.1.49		_	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		_	
>Not Used	0		NULL		_	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DL Code Information	0		FDD DL Code Information 9.2.2.14A		YES	ignore
>DL Power Balancing Updated Indicator	0		9.2.2.10D		YES	ignore
>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
>Non-Serving RL Preconfiguration Info	0		9.2.2.125		YES	ignore
>F-TPICH Information Response	0		9.2.2.143		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	Ignore
Additional HS Cell Information Response		0 <maxnr OfHSDSC H-1&gt;</maxnr 		For secondary serving HS-DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH-RNTI	M		9.2.1.30P		_	
>HS-DSCH FDD Secondary Serving	М		9.2.2.19ba		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Response						
Additional E-DCH Cell Information Response RLReconf		0 <maxnr OfEDCH- 1&gt;</maxnr 		E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Information Response	0		9.2.2.120	For new E- DCH Radio Links on secondary carrier.	_	
>Additional Modified E- DCH FDD Information Response	0		9.2.2.121		_	

Range Bound	Explanation
maxNrOfRLs	Maximum number of RLs for a UE.
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.1.17.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40	•	YES	reject
Transaction ID	M		9.2.1.59		_	-
RL Information Response		0 <max NrOfRL s&gt;</max 		See note 1 below.	YES	ignore
>RL ID	М		9.2.1.49		-	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69		-	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69		_	
>Maximum DL TX Power	0		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	0		DL Power 9.2.1.21A		-	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DL CCTrCH Information		0 <max NrOfCC TrCHs&gt;</max 		For DCH.	GLOBAL	ignore
>>CCTrCH ID >>DL DPCH To Modify LCR	M	01	9.2.3.2	Applicable to 1.28Mcps TDD only.	YES	ignore
>>>DL Timeslot Information LCR		0 <max NrOfTsL CR&gt;</max 			_	
>>>>Time Slot LCR	М		9.2.3.12a		_	
>>>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	_	
>>>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	_	
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.	YES	ignore
>Uplink Timing Advance Control LCR	0		9.2.3.13K	Applicable to 1.28Mcps TDD only.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
HS-DSCH Information Response	0		HS-DSCH TDD Information Response 9.2.3.3ab		YES	ignore
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore
E-DCH Information Response	0		E-DCH TDD Information	3.84Mcps TDD only.	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Response 9.2.3.41			
E-DCH Information Response 7.68Mcps	0		E-DCH TDD Information Response 7.68Mcps 9.2.3.52	7.68Mcps TDD only.	YES	ignore
E-DCH Information Response 1.28Mcps	0		E-DCH TDD Information Response 1.28Mcps 9.2.3.41a	1.28Mcps TDD only.	YES	ignore
PowerControl GAP	0		INTEGER (1255)	1.28Mcps TDD only.	YES	ignore
Idle Interval Information	0		9.2.3.60	TDD only.	YES	ignore
Continuous Packet Connectivity DRX Information Response LCR	0		9.2.3.63	1.28 Mcps TDD only.	YES	ignore
HS-DSCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.68	1.28 Mcps TDD only.	YES	ignore
E-DCH Semi-Persistent scheduling Information Response LCR	0		9.2.3.69	1.28 Mcps TDD only.	YES	ignore
E-RNTI for FACH	0		E-RNTI 9.2.1.94	1.28 Mcps TDD only.	YES	ignore
H-RNTI for FACH	0		HS-DSCH- RNTI 9.2.1.30P	1.28 Mcps TDD only.	YES	ignore
DCH Measurement Occasion Information	0		9.2.3.75	1.28 Mcps TDD only.	YES	reject
Multi-Carrier E-DCH Information Response LCR	0		9.2.3.78	1.28 Mcps TDD only.	YES	ignore
MU-MIMO Information	0		9.2.3.81	1.28 Mcps TDD only.	YES	reject

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxNrOfRLs are represented by separate ASN.1 structures with different criticalities.

Range bound	Explanation			
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.			
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.			
maxNrOfRLs	Maximum number of RLs for one UE.			

## 9.1.18 RADIO LINK FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
CHOICE Reporting Object	М			Object for which the Failure shall be reported.	YES	ignore
>RL					_	
>>RL Information		1 <maxnrof RLs&gt;</maxnrof 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>RLS				FDD only.	_	
>>RL Set Information		1 <maxnrof RLSets&gt;</maxnrof 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		_	
>>>Cause	M		9.2.1.5		_	
>CCTrCH				TDD only.		
>>RL ID	M		9.2.1.49		_	
>>CCTrCH List		1 <maxnoc CTrCHs&gt;</maxnoc 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.2		_	
>>>Cause	M		9.2.1.5		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfRLSets	Maximum number of RL Sets for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.

## 9.1.19 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
CHOICE Reporting Object	M			Object for which the Restoration shall be reported.	YES	ignore
>RL				TDD only.	ı	
>>RL Information		1 <max NrOfRL s&gt;</max 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>RLS				FDD only.	1	
>>RL Set Information		1 <max NrOfRL Sets&gt;</max 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		-	
>CCTrCH				TDD only.		
>>RL ID	M		9.2.1.49		ı	
>>CCTrCH List		1 <max noCCTr CHs&gt;</max 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.2		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for one UE.
maxNrOfRLSets	Maximum number of RL Sets for one UE.
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.

# 9.1.20 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Power Adjustment Type	М		9.2.2.28		YES	ignore
DL Reference Power	C- Common		DL Power 9.2.1.21A		YES	ignore
Inner Loop DL PC Status	0		9.2.2.21a		YES	ignore
DL Reference Power Information	C- Individual	1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	M		9.2.1.49		_	
>DL Reference Power	M		DL Power 9.2.1.21A		_	
Max Adjustment Step	C- CommonO rIndividual		9.2.2.23		YES	ignore
Adjustment Period	C- CommonO rIndividual		9.2.2.B		YES	ignore
Adjustment Ratio	C- CommonO rIndividual		9.2.2.C		YES	ignore

Condition	Explanation
Common	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common".
Individual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Individual".
CommonOrIndividual	The IE shall be present if the <i>Power Adjustment Type</i> IE is set to "Common" or "Individual".

Range Bound	Explanation		
maxNrOfRLs	Maximum number of RLs for one UE.		

## 9.1.21 PHYSICAL CHANNEL RECONFIGURATION REQUEST

## 9.1.21.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference		\/=0	
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		1	
RL Information		1			YES	reject
>RL ID	М		9.2.1.49		_	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		YES	notify
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
>F-TPICH Reconfiguration Information	0		9.2.2.144		YES	ignore

# 9.1.21.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	,
RL Information		1			YES	reject
>RL ID	М		9.2.1.49		_	,
>UL CCTrCH Information		0 <maxnrof CCTrCHs&gt;</maxnrof 			GLOBAL	reject
>>CCTrCH ID	М	331131132	9.2.3.2			
>>UL DPCH Information	101	1	0.2.0.2		YES	notify
>>>Repetition Period	0		9.2.3.7		-	Houry
>>Repetition Length	Ō		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		_	
>>>UL Timeslot Information		0 <maxnr OfTS&gt;</maxnr 	0.2.0.0.1	Applicable to 3.84Mcps TDD only.	-	
>>>>Time Slot	М		9.2.1.56		-	
>>>>Midamble Shift And Burst Type	0		9.2.3.4		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>>UL Code Information	0		TDD UL Code Information 9.2.3.10A		-	
>>>UL Timeslot Information LCR		0 <maxnr OfTsLCR&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>>>Time Slot LCR	M		9.2.3.12a		_	
>>>>Midamble Shift LCR	0		9.2.3.4C		-	
>>>>TFCI Presence	0		9.2.1.55		_	
>>>>UL Code Information LCR	0		TDD UL Code Information LCR 9.2.3.10B		-	
>>>PLCCH Information	0		9.2.3.17		YES	Reject
>>>UL Timeslot Information 7.68Mcps		0 <maxnr OfTS&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>>>Time Slot	M		9.2.1.56		_	
>>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		ı	
>>>TFCI Presence	0		9.2.1.55		_	
>>>>UL Code Information 7.68Mcps	0		TDD UL Code Information 9.2.3.27		-	
>DL CCTrCH Information		0 <maxnr OfCCTrCH s&gt;</maxnr 			GLOBAL	reject
>>CCTrCH ID	М	5-	9.2.3.2		_	
>>DL DPCH Information	† · · ·	1	5.2.5.2	1	YES	notify
>>Repetition Period	0	1	9.2.3.7		-	,
>>Repetition Length	Ō		9.2.3.6	1	_	
>>>TDD DPCH Offset	Ō		9.2.3.8A		_	
>>>DL Timeslot Information		0 <maxnr OfTS&gt;</maxnr 	0.2.0.071	Applicable to 3.84Mcps TDD only.	-	
>>>Time Slot	М		9.2.1.56	5,	_	
>>>Midamble Shift	0	†	9.2.3.4	1		

And Burst Type				1		
>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code Information	0		TDD DL Code Information		-	
>>>DL Timeslot Information LCR		0 <maxnr OfTsLCR&gt;</maxnr 	9.2.3.8C	Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>>>Time Slot LCR	М		9.2.3.12a	•	_	
>>>Midamble Shift LCR	0		9.2.3.4C		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information LCR	0		TDD DL Code Information LCR 9.2.3.8D		_	
>>>DL Timeslot Information 7.68Mcps		0 <maxnr OfTS&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>>Time Slot	М		9.2.1.56		_	
>>>Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information 7.68Mcps	0		TDD DL Code Information 7.68Mcps 9.2.3.29			
>HS-PDSCH Timeslot Specific Information		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	GLOBAL	reject
>>Time Slot	М		9.2.1.56		_	
>>Midamble Shift And Burst Type	М		9.2.3.4		_	
>HS-PDSCH Timeslot Specific Information LCR		0 <maxnr OfDLTsLC R&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	reject
>>Time Slot LCR	M		9.2.3.12a		_	
>>Midamble Shift LCR	M		9.2.3.4C		-	
>HS-PDSCH Timeslot Specific Information 7.68Mcps		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>Time Slot	М		9.2.1.56	•	_	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only.	YES	ignore

Range bound	Explanation
maxNrOfCCTrCHs	Maximum number of CCTrCHs for a UE.
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD or 7.68Mcps TDD.
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

### 9.1.22 PHYSICAL CHANNEL RECONFIGURATION COMMAND

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
CFN	М		9.2.1.9		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

#### 9.1.23 PHYSICAL CHANNEL RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Cause	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

### 9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

### 9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	igiioio
UC-ID	М		9.2.1.71		YES	ignore
SAI	М		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24	-	YES	ignore
Propagation Delay	M		9.2.2.33		YES	ignore
STTD Support Indicator	M		9.2.2.45		YES	ignore
Closed Loop Mode1 Support Indicator	М		9.2.2.2		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
DPC Mode Change Support Indicator	0		9.2.2.56		YES	ignore
Common Transport Channel Resources Initialisation Not Required	0		9.2.1.12F		YES	Ignore

Cell Capability Container FDD	0		9.2.2.D		YES	ignore
SNA Information	0		9.2.1.52Ca		YES	ignore
Cell Portion ID	0		9.2.2.E		YES	ignore
Active MBMS Bearer Service List		0 <max NrOfActi veMBMS Services</max 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	M		9.2.1.81		_	
Inter-frequency Cell List		0 <max CellsMe as&gt;</max 	0.2.1101		GLOBAL	ignore
>DL UARFCN	М		UARFCN 9.2.1.66		-	
>UL UARFCN	0		UARFCN 9.2.1.66		ı	
>Primary Scrambling Code	M		9.2.1.45		1	
Extended Propagation Delay	0		9.2.2.33a		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
Multiple PLMN List	0		9.2.1.117		YES	ignore
E-RNTI	0		9.2.1.94		YES	ignore
Max UE DTX Cycle	C-DTX- DRXCapab ility		9.2.2.87		YES	ignore
Cell Capability Container Extension FDD	0		9.2.2.123		YES	ignore
Secondary Serving Cell List	0		9.2.2.101		YES	ignore
Dual Band Secondary Serving Cell List	0		Secondary Serving Cell List 9.2.2.101		YES	ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Condition	Explanation
DTX-DRXCapability	The IE shall be present if the Continuous Packet Connectivity DTX-DRX
	Support Indicator IE in Cell Capability Container FDD IE is set to 1.

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in parallel.
maxCellsMeas	Maximum number of inter-frequency cells measured by a UE.

# 9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	J
UC-ID	М		9.2.1.71		YES	ignore
SAI	М		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	Ignore
C-RNTI	М		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.53	If the Extended S-RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
Rx Timing Deviation	M		9.2.3.7A		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
Common Transport Channel Resources Initialisation Not Required	0		9.2.1.12F		YES	ignore
Cell Capability Container TDD	0		9.2.3.1a	Applicable to 3.84Mcps TDD only.	YES	ignore
Cell Capability Container TDD LCR	0		9.2.3.1b	Applicable to 1.28Mcps TDD only.	YES	ignore
SNA Information	0		9.2.1.52Ca	,	YES	ignore
Active MBMS Bearer Service List		0 <max NrOfActi veMBMS Services &gt;</max 			GLOBAL	ignore
>TMGI	M		9.2.1.80			
>Transmission Mode	M		9.2.1.81			
Cell Capability Container 7.68Mcps TDD	0		9.2.3.31	Applicable to 7.68Mcps TDD only.	YES	ignore
Rx Timing Deviation 7.68Mcps	0		9.2.3.30	Applicable to 7.68Mcps TDD only.	YES	ignore
Rx Timing Deviation 3.84Mcps Extended	0		9.2.3.35	Applicable to 3.84Mcps TDD only.	YES	ignore
Multiple PLMN List	0		9.2.1.117		YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
E-RNTI	0		9.2.1.94		YES	ignore
Cell Portion LCR ID	0		9.2.3.73	Applicable to 1.28Mcps TDD only.	YES	ignore
Cell Capability Container Extension TDD LCR	0		9.2.3.80	Applicable to 1.28Mcps TDD only.	YES	ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a	YES	ignore

	valu	e larger	
	than	ı	
	1048	3575.	

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in
	parallel.

### 9.1.24A GERAN UPLINK SIGNALLING TRANSFER INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
UC-ID	M		9.2.1.71	UC-ID may be a GERAN cell identifier.	YES	ignore
SAI	М		9.2.1.52		YES	ignore
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
L3 Information	М		9.2.1.32		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
URA Information	0		9.2.1.70B	URA information may be GRA information.	YES	ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.25 DOWNLINK SIGNALLING TRANSFER REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		I	
C-ID	M		9.2.1.6	May be a GERAN cell identifier.	YES	ignore
D-RNTI	M		9.2.1.24		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
D-RNTI Release Indication	M		9.2.1.25		YES	ignore
URA-ID	0		9.2.1.70		YES	ignore
MBMS Bearer Service List		0 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	М		9.2.1.80		_	
Old URA-ID	0		URA-ID 9.2.1.70		YES	ignore
SRNC-ID	C-URA		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	ignore
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Enhanced PCH Capability	0		9.2.1.132	FDD and 1.28Mcps TDD only.	YES	Ignore

Condition	Explanation
URA	The IE shall be present if the URA-ID IE or Old URA-ID IE is present.

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.26 RELOCATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
D-RNTI	0		9.2.1.24		YES	ignore
RANAP Relocation	0		9.2.1.47		YES	ignore

# 9.1.27 PAGING REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
CHOICE Paging Area	M				YES	ignore
>URA			0.04.70		_	
>>URA-ID	M		9.2.1.70	May be a GRA-ID.	_	
>Cell				UTRAN only.	_	
>>C-ID	M		9.2.1.6		-	
SRNC-ID	M		RNC-ID 9.2.1.50	May be a BSC-ID. If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	ignore
S-RNTI	М		9.2.1.53	If the  Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
IMSI	М		9.2.1.31	-g	YES	ignore
DRX Cycle Length Coefficient	М		9.2.1.26		YES	ignore
CN Originated Page to Connected Mode UE		01			YES	ignore
>Paging Cause	М		9.2.1.41E		1	
>CN Domain Type	M		9.2.1.11A		ı	
>Paging Record Type	M		9.2.1.41F		ı	
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Enhanced PCH Capability	0		9.2.1.132	FDD and 1.28Mcps TDD only.	YES	Ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.28 DEDICATED MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	reject
CHOICE Dedicated Measurement Object Type	М				YES	reject
>RL					_	
>>RL Information		1 <maxn rOfRLs&gt;</maxn 			EACH	reject
>>>RL ID	M		9.2.1.49		_	
>>>DPCH ID	0		9.2.3.3	TDD only.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>HS-SICH Information		0 <maxn rOfHSSI CHs&gt;</maxn 		TDD only.	GLOBAL	reject
>>>HS-SICH ID	M		9.2.3.3ad		_	
>RLS				FDD only.	_	
>>RL Set Information		1 <maxn rOfRLSet s&gt;</maxn 			EACH	reject
>>>RL Set ID	М		9.2.2.35		_	
>ALL RL			NULL		_	
>ALL RLS			NULL	FDD only.	_	
Dedicated Measurement Type	M		9.2.1.18		YES	reject
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
Report Characteristics	M		9.2.1.48		YES	reject
CFN reporting indicator	М		FN reporting indicator 9.2.1.28A		YES	reject
CFN	0		9.2.1.9		YES	reject
Partial Reporting Indicator	0		9.2.1.41Fa		YES	ignore
Measurement Recovery Behavior	0		9.2.1.38A		YES	ignore
Alternative Format Reporting Indicator	0		9.2.1.2D		YES	ignore

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs a measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets a measurement can be started
	on.

# 9.1.29 DEDICATED MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Measurement ID	M		9.2.1.37		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				See Note 1.	_	
>>RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>DPCH ID	0		9.2.3.3	TDD only.	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>Dedicated Measurement Value	М		9.2.1.19		_	
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	-	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only	YES	reject
>>>Multiple Dedicated Measurement Value Information		0 <maxnr OfDPCHsP erRL-1&gt;</maxnr 		Applicable to 3.84Mcps TDD only.	GLOBAL	ignore
>>>DPCH ID	M		9.2.3.3		ı	
>>>Dedicated Measurement Value	М		9.2.1.19		-	
>>>Multiple Dedicated Measurement Value Information LCR		0 <maxnr OfDPCHsL CRPerRL- 1&gt;</maxnr 		Applicable to 1.28Mcps TDD only.	GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		-	
>>>>Dedicated Measurement Value	М		9.2.1.19		-	
>>>Multiple HS-SICH Measurement Value Information		0 <maxnr OfHSSICH s -1&gt;</maxnr 		TDD only.	GLOBAL	ignore
>>>HS-SICH ID	М		9.2.3.3ad		_	
>>>Dedicated	M		9.2.1.19		-	
Measurement Value >>>Multiple Dedicated Measurement Value Information 7.68Mcps		0 <maxnr OfDPCHs7 68PerRL- 1&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	GLOBAL	ignore
>>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>>Dedicated Measurement Value >RLS or ALL RLS	M		9.2.1.19	FDD only	-	
>>RL Set Information		1 <maxnr OfRLSets&gt;</maxnr 		See Note 2.	EACH	ignore
>>>RL Set ID	М	J (2000)	9.2.2.35		_	
>>>Dedicated	M		9.2.1.19		_	

Measurement Value					
>>>CFN	0	9.2.1.9	Dedicated Measuremen t Time Reference.	_	
Criticality Diagnostics	0	9.2.1.13		YES	Ignore
Measurement Recovery Support Indicator	0	9.2.1.38C		YES	ignore

This is a simplified representation of the ASN.1: there are two different choice tags "RL" and "ALL RL" in the ASN.1, each having exactly the same structure.

This is a simplified representation of the ASN.1: there are two different choice tags "RLS" and "ALL RLS" in Note 1:

Note 2: the ASN.1, each having exactly the same structure.

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started on.
maxNrOfDPCHsPerRL	Maximum number of DPCHs per RL a measurement can be started on for 3.84Mcps TDD.
maxNrOfDPCHsLCRPerRL	Maximum number of DPCHs per RL a measurement can be started on for 1.28Mcps TDD.
maxNrOfHSSICHs	Maximum number of HSSICHs per RL a measurement can be started on.
maxNrOfDPCHs768PerRL	Maximum number of DPCHs per RL a measurement can be started on for 7.68Mcps TDD.

# 9.1.30 DEDICATED MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
CHOICÉ Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL					-	
>>Unsuccessful RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	
>>Successful RL Information		0 <maxnr OfRLs-1&gt;</maxnr 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>DPCH ID	0		9.2.3.3	TDD only.	_	
>>>Dedicated Measurement Value	М		9.2.1.19		_	
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	-	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only.	YES	reject
>RLS or ALL RLS				FDD only.	_	
>>Unsuccessful RL Set Information		1 <maxnr OfRLSets&gt;</maxnr 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		-	
>>>Individual Cause	0		Cause 9.2.1.5		_	
>>Successful RL Set Information		0 <maxnr OfRLSets- 1&gt;</maxnr 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>>>Dedicated Measurement Value	М		9.2.1.19		-	
>>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	-	

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started
	on.

### 9.1.31 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
CHOICE Dedicated Measurement Object Type	M			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL				See Note 1.	_	
>>RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>>>RL ID	M		9.2.1.49		-	
>>>DPCH ID	0		9.2.3.3	TDD only.	ı	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only.	_	
>>>Dedicated Measurement Value Information	M		9.2.1.19A		-	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only.	YES	ignore
>RLS or ALL RLS				FDD only See Note 2.	-	
>>RL Set Information		1 <maxnr OfRLSets&gt;</maxnr 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		ı	
>>>Dedicated Measurement Value Information	М		9.2.1.19A		-	
Measurement Recovery Reporting Indicator	0		9.2.1.38B		YES	ignore

Note 1: This is a simplified representation of the ASN.1: there are two different choice tags "RL" and "ALL RL" in the ASN.1, each having exactly the same structure.

Note 2: This is a simplified representation of the ASN.1: there are two different choice tags "RLS" and "ALL RLS" in the ASN.1, each having exactly the same structure.

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started
	on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started on.

### 9.1.32 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore

### 9.1.33 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
Cause	M		9.2.1.5		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with.	YES	ignore
>RL or ALL RL					_	
>>Unsuccessful RL Information		1 <maxnrof RLs&gt;</maxnrof 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Individual Cause	0		Cause 9.2.1.5		1	
>RLS or ALL RLS				FDD only.	_	
>>Unsuccessful RL Set Information		1 <maxnrof RLSets&gt;</maxnrof 			EACH	ignore
>>>RL Set ID	М		9.2.2.35		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of individual RLs the measurement can be started on.
maxNrOfRLSets	Maximum number of individual RL Sets the measurement can be started
	on.

# 9.1.34 COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	•		
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
D-RNTI	M		9.2.1.24		YES	ignore

# 9.1.35 COMMON TRANSPORT CHANNEL RESOURCES REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
D-RNTI	M		9.2.1.24		YES	reject
C-ID	0		9.2.1.6		YES	reject
Transport Bearer Request Indicator	M		9.2.1.61	Request a new transport bearer or to use an existing bearer for the user plane.	YES	reject
Transport Bearer ID	M		9.2.1.60	Indicates the lur transport bearer to be used for the user plane.	YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
MBMS Bearer Service List		0 <max NrOfMB MSServ ices&gt;</max 			GLOBAL	notify
>TMGI	М		9.2.1. 80		_	
TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
Enhanced FACH Support Indicator	0		9.2.1.131	FDD and 1.28Mcps TDD only.	YES	Ignore
Common E-DCH Support Indicator	0		9.2.2.92	FDD only.	YES	Ignore
HS-DSCH Physical Layer Category	0		9.2.1.30Oa		Yes	Ignore
UE with enhanced HS- SCCH support indicator	0		NULL	UE supports enhanced HS-SCCH functionality: - UE supports different HS-SCCH in consecutive TTIs.	YES	ignore

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

# 9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		1	
S-RNTI	M		9.2.1.53	If the Extended S-RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
C-RNTI	0		9.2.1.14		YES	ignore
FACH Info for UE Selected S-CCPCH		1			YES	ignore
>FACH Flow Control Information	M		9.2.1.26C	If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.	YES	ignore
Transport Layer Address	0		9.2.1.62	J	YES	ignore
Binding ID	0		9.2.1.3		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
C-ID	M		9.2.1.6		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveMB MSService s&gt;</maxnr 			GLOBAL	ignore
>TMGI	M		9.2.1.80		_	
>Transmission Mode	M		9.2.1.81		-	
Enhanced FACH Information Response		01			YES	ignore
>Common HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	M		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Dedicated HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Priority Queue Information for Enhanced PCH	0		Priority Queue Information for		_	

		F F 9	9.2.1.133			
>HS-DSCH Initial Capacity Allocation	M	9	9.2.1.30Na		ı	
>HS-DSCH-RNTI	0	9	9.2.1.30P		_	
Common E-DCH MAC-d Flow Specific Information	0	9	9.2.2.93		1	
E-RNTI	0	9	9.2.1.94		YES	ignore
Extended S-RNTI	0	F	Extended RNTI 9.2.1.154	The Extended S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in
	parallel.

# 9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
C-RNTI	0		9.2.1.14		YES	ignore
FACH Info for UE Selected S-CCPCHs		1			YES	ignore
>FACH Flow Control Information	М		9.2.1.26C	If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.	YES	ignore
Transport Layer Address	0		9.2.1.62		YES	ignore
Binding ID	0		9.2.1.3		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
C-ID	М		9.2.1.6		YES	ignore
Active MBMS Bearer Service List		0 <maxnr OfActiveM BMSServic es&gt;</maxnr 			GLOBAL	ignore
>TMGI	M		9.2.1.80		-	
>Transmission Mode	M		9.2.1.81		ı	
Enhanced FACH		0 1			YES	ignore
Information Response			D : ::			
>Common HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		_	
>Dedicated HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PC H 9.2.1.133		-	
>Priority Queue Information for Enhanced PCH	0		Priority Queue Information for Enhanced FACH/PC H		-	

		9.2.1.133			
>HS-DSCH Initial Capacity Allocation	M	9.2.1.30N	а	_	
>HS-DSCH-RNTI	0	9.2.1.30P		_	
Common E-DCH MAC-d Flow Specific Information LCR	0	9.2.3.58		YES	ignore
Extended S-RNTI	0	Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

Range bound	Explanation
maxNrOfActiveMBMSServices	Maximum number of MBMS bearer services that are active in
	parallel.

# 9.1.37 COMMON TRANSPORT CHANNEL RESOURCES FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
S-RNTI	M		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.38 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Booonpalon		Ormounty
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Active Pattern Sequence Information	М		9.2.2.A		YES	ignore

# 9.1.39 ERROR INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	Ğ
Cause	0		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
S-RNTI	0		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall not be included.	YES	ignore
D-RNTI	0		9.2.1.24		YES	ignore
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S- RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	ignore

# 9.1.40 DL POWER TIMESLOT CONTROL REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	-
DL Time Slot ISCP Info	0		9.2.3.2D	Mandatory for 3.84Mcps TDD and 7.68Mcps TDD, not applicable to 1.28Mcps TDD.	YES	ignore
DL Time Slot ISCP Info LCR	0		9.2.3.2F	Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
Primary CCPCH RSCP	0		9.2.3.5		YES	ignore
Primary CCPCH RSCP Delta	0		9.2.3.5a		YES	ignore

# 9.1.41 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
RL Information		0 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	M		9.2.1.49		_	
>E-DCH MAC-d Flow Specific Information		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			EACH	ignore
>>E-DCH MAC-d Flow ID	M		9.2.1.91		ı	
HS-DSCH MAC-d Flow Specific Information		0 <maxnr OfMACdFI ows&gt;</maxnr 			EACH	ignore
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		-	

Range bound	Explanation			
maxNrOfRLs	Maximum number of radio links for one UE.			
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.			
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.			

### 9.1.42 RADIO LINK CONGESTION INDICATION

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Congestion Cause	0		9.2.1.79		YES	ignore
RL Information		1 <maxnr OfRLs&gt;</maxnr 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>DCH Rate Information		1 <maxnr OfDCHs&gt;</maxnr 			EACH	ignore
>>DCH ID	М		9.2.1.16		_	
>>Allowed Rate Information	0		9.2.1.2A		_	
>E-DCH MAC-d Flow Specific Information		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			EACH	ignore
>>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>DCH Indicator For E- DCH-HSDPA Operation	0		9.2.2.67		YES	ignore

Range bound	Explanation		
maxNrOfRLs	Maximum number of Radio Links for one UE.		
maxNrOfDCHs	Maximum number of DCHs for one UE.		
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.		

# 9.1.43 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Officiality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	reject
CHOICE Common	M				YES	reject
Measurement Object Type >Cell					_	
>>Reference Cell	М		UTRAN	May be a		
Identifier			Cell Identifier 9.2.1.71	GERAN Cell Identifier.		
>>Time Slot	0		9.2.1.56	3.84Mcps TDD and 7.68 Mcps TDD only.	-	
>>Time Slot LCR	0		9.2.3.12a	1.28Mcps TDD only	_	
>>Neighbouring Cell Measurement Information		0 <maxnrof MeasNCells &gt;</maxnrof 		UTRAN only.	-	
>>>CHOICE Neighbouring Cell Measurement Information					-	
>>>Neighbourin g FDD Cell Measurement Information				FDD only.	-	
>>>>Neighbo uring FDD Cell Measurement Information	M		9.2.1.41G		-	
>>>Neighbourin g TDD Cell Measurement Information				3.84Mcps TDD only.	-	
>>>>Neighbo uring TDD Cell Measurement Information	М		9.2.1.41H		-	
>>>>Additional Neighbouring Cell Measurement Information					-	
>>>>Neighbo uring TDD Cell Measurement InformationLC R				1.28Mcps TDD only.	-	
>>>>Neig hbouring TDD Cell Measureme nt Information LCR	M		9.2.1.41Dd		YES	reject
>>>>Additional Neighbouring Cell Measurement Information 7.68Mcps					_	
>>>>Neighbo uring TDD Cell				7.68Mcps TDD only.	_	

Measurement						
Information						
7.68 Mcps						
>>>> Neig	M		9.2.3.32		YES	reject
hbouring						
TDD Cell						
Measureme						
nt						
Information						
7.68 Mcps						
>>UARFCN	0		9.2.1.66	Applicable to	YES	ignore
>>OAKI CIV	U		3.2.1.00	1.28Mcps	123	ignore
				TDD only.		
>>UpPCH Position	0		9.2.3.56	Applicable to	YES	ignore
LCR				1.28Mcps		
				TDD only.		
>Additional Common				Applicable to	_	
Measurement Object				1.28Mcps		
Types				TDD only.		
>>GSM Cell					YES	ignore
>>>CGI	М		0.2.1.5D		120	ignore
			9.2.1.5D	-		<b></b> :
Common Measurement	M		9.2.1.12C		YES	reject
Туре	<u> </u>			L		
Measurement Filter	0		9.2.1.36	UTRAN only.	YES	reject
Coefficient	<u> </u>			<u> </u>		
Report Characteristics	M		9.2.1.48		YES	reject
SFN reporting indicator	М		FN		YES	reject
or reperting material			reporting			. 0,001
			indicator			
			9.2.1.28A			
OFN				LITDANI	VE0.	
SFN	0		9.2.1.52A	UTRAN only.	YES	reject
Common Measurement	0		9.2.1.12A	UTRAN only.	YES	reject
Accuracy						
Measurement Recovery	0		9.2.1.38A	UTRAN only.	YES	ignore
Behavior						
GANSS Time ID	0		9.2.1.119a	This IE may	YES	ignore
				only be		Ü
				present if the		
				Common		
				Measuremen		
				t Type IE is		
				set to		
				"UTRAN		
				GANSS		
				Timing of		
				Cell Frames		
				for UE		
				Positioning".		
				If the		
				Common		
				Measuremen		
				t Type IE is		
				set to		
				"UTRAN		
				GANSS		
				Timing of		
				Cell Frames		
				for UE		
				Positioning"		
				and this IE is		
				absent, the		
				GANSS time		
				is Galileo		
	ļ			system time.		
Extension Common	0			Applicable to	YES	ignore
Measurement Object Type				1.28Mcps		
1				TDD only.		
>GsmCellList		1 <maxnoo< td=""><td></td><td></td><td>YES</td><td>ignore</td></maxnoo<>			YES	ignore
	1					

		fGsmCell>			
>>Measurement ID	M		9.2.1.37	_	
>>GSM Cell				_	
>>>CGI	М		9.2.1.5D	_	

Range bound	Explanation
maxNrOfMeasNCell	Maximum number of neighbouring cells on which
	measurements can be performed.
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

### 9.1.44 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE Common Measurement Object Type	0			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement value	М		9.2.1.12D		_	
SFN	0		9.2.1.52A	Common Measuremen t Time Reference, UTRAN only.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Common Measurement Achieved Accuracy	0		Common Measurem ent Accuracy 9.2.1.12A	UTRAN only.	YES	ignore
Measurement Recovery Support Indicator	0		9.2.1.38C	UTRAN only.	YES	ignore
Extension Common Measurement Object Type	0			Applicable to 1.28Mcps TDD only.	YES	ignore
>GsmCellList		1 <maxnoo fGsmCell&gt;</maxnoo 			YES	ignore
>>Measurement ID	M		9.2.1.37		_	
>>Common Measurement value	0		9.2.1.12D		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.45 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	,
Measurement ID	M		9.2.1.37		YES	ignore
Cause	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extension Measurement IdList		0 <maxno0 fGsmCell&gt;</maxno0 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	M		9.2.1.37	•	_	
>Cause	М		9.2.1.5		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

### 9.1.46 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE Common Measurement Object Type	М			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					_	
>>Common Measurement Value Information	M		9.2.1.12E		-	
SFN	О		9.2.1.52A	Common Measuremen t Time Reference, UTRAN only.	YES	ignore
Measurement Recovery Reporting Indicator	0		9.2.1.38B	UTRAN only.	YES	ignore
Extension Common Measurement Object Type	0			Applicable to 1.28Mcps TDD only.	YES	ignore
>GsmCellList		1 <maxnoo fGsmCell&gt;</maxnoo 			YES	ignore
>>Measurement ID	M		9.2.1.37		1	
>>Common Measurement value	0		9.2.1.12D		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.47 COMMON MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Measurement ID	M		9.2.1.37		YES	ignore
Extension Measurement IdList		0 <maxno0 fGsmCell&gt;</maxno0 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	M		9.2.1.37		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

### 9.1.48 COMMON MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Extension Measurement IdList		0 <maxno0 fGsmCell&gt;</maxno0 		Applicable to 1.28Mcps TDD only.	YES	ignore
>Measurement ID	M		9.2.1.37		_	
>Cause	М		9.2.1.5		_	

Range bound	Explanation
maxNoOfGsmCell	Maximum number of GSM Cells in one message.

# 9.1.49 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		1	
Information Exchange ID	M		9.2.1.31A		YES	reject
CHOICE Information	М				YES	reject
Exchange Object Type						
>Cell >>C-ID	M		9.2.1.6	May be a		
	IVI		9.2.1.0	GERAN cell identifier.	_	
>Additional Information Exchange Object Types					_	
>>GSM Cell			00450		_	
>>>CGI >>MBMS Bearer	M		9.2.1.5D		_	
Service		4			-	
>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	reject
>>>>TMGI	M		9.2.1.80		1	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	reject
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			-	
>>>C-ID	M		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure.	-	
>>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			-	
>>>>TMGI	М	01110001	9.2.1.80		_	
>>MBMS Cell				FDD only.	GLOBAL	reject
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			_	
>>>C-ID	M		9.2.1.6	Cell identifier of cell in receiving RNC not initiating Information Exchange Initiation procedure.	Ι	
>>ANR Cell					GLOBAL	reject
>>>ANR Cell List		1 <maxnr OfANRCell sl&gt;</maxnr 			_	
>>>C-ID	M		9.2.1.6			
>>Common E-RGCH Cell					GLOBAL	reject
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>			-	
>>>C-ID	M		9.2.1.6			
Information Type	M	1	9.2.1.31E		YES	reject
Information Report Characteristics	M		9.2.1.31C		YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfANRCells	Maximum number of ANR neighbour cells.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells.

### 9.1.50 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		1	
Information Exchange ID	M		9.2.1.31A		YES	ignore
CHOICE Information Exchange Object Type >Cell	0				YES	ignore
>>Requested Data Value	М		9.2.1.48A		-	
>Additional Information Exchange Object Types					-	
>>MBMS Bearer Service					-	
>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>>>TMGI	M		9.2.1.80		1	
>>>Requested Data Value	М		9.2.1.48A		-	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			ı	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure.	-	
>>>>MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			-	
>>>>TMGI	М		9.2.1.80		_	
>>>>Requested Data Value	M		9.2.1.48A		-	
>>MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			_	
>>>>C-ID	М		9.2.1.6	Cell identifier of cell in sending RNC not initiating Information Exchange Initiation procedure.	-	
>>>Requested	M		9.2.1.48A	procedure.	_	

Data Value					
>>ANR Cell				GLOBAL	ignore
>>>ANR Cell List		1 <maxnr OfANRCell s&gt;</maxnr 		-	
>>>C-ID	M	0,5	9.2.1.6	_	
>>>Requested Data Value	М		9.2.1.48A	-	
>>Common E-RGCH Cell				GLOBAL	ignore
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>		-	
>>>C-ID	М		9.2.1.6	_	
>>>Requested Data Value	М		9.2.1.48A	-	
Criticality Diagnostics	0		9.2.1.13	YES	ignore

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfANRCells	Maximum number of ANR neighbour cells.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells.

# 9.1.51 INFORMATION EXCHANGE INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Information Exchange ID	M		9.2.1.31A		YES	ignore
Cause	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.52 INFORMATION REPORT

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Doodription		Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		ı	•
Information Exchange ID	М		9.2.1.31A		YES	ignore
CHOICE Information Exchange Object Type >Cell	М				YES	ignore
>>Requested Data	M		9.2.1.48B			
Value Information	141		0.2.1.108			
>Additional Information Exchange Object Types					_	
>>MBMS Bearer Service in MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr< td=""><td></td><td></td><td>_</td><td></td></maxnr<>			_	
>>>MDMO Cell List		OfCells>				
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in receiving RNC initiating Information Exchange Initiation procedure.	T	
>>>MBMS Bearer		1 <maxnr< td=""><td></td><td></td><td>-</td><td></td></maxnr<>			-	
Service List		OfMBMSS ervices>				
>>>>TMGI	М	01110002	9.2.1.80		_	
>>>>Requested Data Value Information	М		9.2.1.48B		_	
>>MBMS Cell				FDD only.	GLOBAL	ignore
>>>MBMS Cell List		1 <maxnr OfCells&gt;</maxnr 			-	
>>>C-ID	M		9.2.1.6	Cell identifier of cell in sending RNC not initiating Information Exchange Initiation procedure.	_	
>>>Requested Data Value Information	M		9.2.1.48B		1	
>>Common E-RGCH Cell					GLOBAL	ignore
>>>Common E- RGCH Cell List		1< maxNoOfC ommonRG Cells>			-	
>>>>C-ID	М		9.2.1.6			
>>>Requested Data Value Information	M		9.2.1.48B		-	

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.
MaxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNoOfCommonRGCells	Maximum number of Common E-RGCH cells.

### 9.1.53 INFORMATION EXCHANGE TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Information Exchange ID	M		9.2.1.31A		YES	ignore

### 9.1.54 INFORMATION EXCHANGE FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Information Exchange ID	M		9.2.1.31A		YES	ignore
Cause	M		9.2.1.5		YES	ignore

### 9.1.55 RESET REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantic s Descripti on	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	

RNC-ID	M		9.2.1.50	Identity of the sending RNC. If the Extended RNC-ID IE is included in the message, the RNC-ID IE shall be ignored.	YES	reject
CHOICE Reset Indicator	М			- ig. 1010 sii	YES	reject
>Context						. 0,001
>>Context Information		1 <maxre setContext</maxre 			EACH	reject
>>>CHOICE Context Type	М				_	
>>>SRNTI					_	
>>>>S-RNTI	M		9.2.1.53	If the Extended S-RNTI IE is included in the message, the S-RNTI IE shall not be included.	-	
>>>DRNTI					_	
>>>>D-RNTI	М		9.2.1.24		_	
>>>>Additional Context Type				See Note 1.	\(\sigma\)	
>>>>Extended S-RNTI	M		Extended RNTI 9.2.1.154	The Extende S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject
>All Contexts			NULL	ļ		
>Context Group						
>>Context Group Information		1 <maxre setContext Group&gt;</maxre 			EACH	reject

>>>S-RNTI Group	M	9.2.1.53a	If the Extended S-RNTI	_	
			Group IE		
			is		
			included		
			in the		
			message, the S-		
			RNTI		
			Group IE		
			shall be		
>>>Extended S-RNTI	0	9.2.1.155	ignored. The	YES	reject
Group		9.2.1.133	Extended	123	reject
2.7.0			SRNTI		
			Group		
			IE shall		
			be used for S-		
			RNTI		
			identities		
			that have		
			values		
			larger than		
			1048575.		
Extended RNC-ID	0	9.2.1.50a	Identity of	YES	reject
			the		
			sending		
			RNC. The		
			Extended		
			RNC-ID		
			IE shall		
			be used if		
			the RNC identity		
			has a		
			value		
			larger		
			than		
			4095.		

Note 1: This information element is a simplified representation of the ASN.1. The choice is performed through the use of a ProtocollE-Single-Container and a ProtocolExtensionContainer within the ASN.1.

Range bound	Explanation
maxResetContext	Maximum number of contexts that can be reset by
	one RESET message.
maxResetContextGroup	Maximum number of context groups that can be reset
	by one RESET message.

# 9.1.56 RESET RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
RNC-ID	M		9.2.1.50	Identity of the sending RNC. If the Extended RNC-ID IE is included in the message, the RNC-ID IE shall be ignored.	YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
Extended RNC-ID	0		9.2.1.50a	Identity of the sending RNC. The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

### 9.1.57 RADIO LINK ACTIVATION COMMAND

### 9.1.57.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40	-	YES	ignore
Transaction ID	М		9.2.1.59		_	
Delayed activation		1 <maxnrofrl< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnrofrl<>			EACH	ignore
Information		S>				
>RL ID	M		9.2.1.49		-	
>Delayed Activation Update	М		9.2.1.19Ab		-	

Range bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for one UE.

# 9.1.57.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40	•	YES	ignore
Transaction ID	М		9.2.1.59		_	
Delayed activation		1 <maxnrofrl< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnrofrl<>			EACH	ignore
Information		S>				
>RL ID	M		9.2.1.49		_	
>Delayed Activation Update	M		9.2.1.19Ab		_	

Range bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for one UE.

# 9.1.58 RADIO LINK PARAMETER UPDATE INDICATION

# 9.1.58.1 FDD Message

IE/Group name	Presence	Range	IE Type	Semantic	Criticality	Assigned
			and Reference	Description		Criticality
Message type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59			.g
HS-DSCH FDD Update	0		9.2.2.19c		YES	ignore
Information					_	3
RL Information		0 <max NrOfRL s&gt;</max 			EACH	ignore
>RL ld	М		9.2.1.49		_	
>Phase Reference Update Indicator	0		9.2.2.27B		-	
E-DCH FDD Update Information	0		9.2.2.19e		YES	ignore
Additional HS Cell Information RL Param Upd		0 <max NrOfHS DSCH- 1&gt;</max 		For secondary serving HS- DSCH cell. Max 7 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		-	
>HS-DSCH FDD Secondary Serving Update Information	0		9.2.2.19ca		-	
Additional E-DCH Cell Information RL Param Upd		0 <max NrOfED CH-1&gt;</max 		For E-DCH on multiple frequencies in this DRNS. E-DCH on Secondary uplink frequency – max 1 in this 3GPP release.	EACH	ignore
>Additional E-DCH FDD Update Information	М		9.2.2.122		ı	
CPC Recovery Report	0		ENUMERA TED(Initiat ed,)		YES	ignore
UL CLTD State Update Information	0		9.2.2.134		YES	ignore

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.
maxNrOfRLs	Maximum number of Radio Links for one UE.

## 9.1.58.2 TDD Message

IE/Group name	Presence	Range	IE Type and	Semantic Description	Criticality	Assigned Criticality
			Reference	2000		
Message type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
HS-DSCH TDD Update Information	0		9.2.3.3ac		YES	ignore

# 9.1.59 UE MEASUREMENT INITIATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Allowed Queuing Time	0		9.2.1.2		YES	reject
Measurement ID	M		9.2.1.37		YES	reject
UE Measurement Type	M		9.2.3.13Fh		YES	reject
UE Measurement Timeslot information HCR	0		9.2.3.13Fe	3.84 Mcps TDD only.	YES	reject
UE Measurement Timeslot information LCR	0		9.2.3.13Ff	1.28 Mcps TDD only.	YES	reject
UE Measurement Timeslot information 7.68Mcps	0		9.2.3.33	7.68 Mcps TDD only.	YES	reject
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
UE Measurement Report Characteristics	М		9.2.3.13Fc		YES	reject
UE Measurement Parameter Modification Allowed	0		9.2.3.13Fb		YES	reject

# 9.1.60 UE MEASUREMENT INITIATION RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
UE Measurement Report Characteristics	0		9.2.3.13Fc		YES	reject
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.61 UE MEASUREMENT INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
Cause	М	•	9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

# 9.1.62 UE MEASUREMENT REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
UE Measurement Value Information	M		9.2.3.13Fj		YES	ignore

# 9.1.63 UE MEASUREMENT TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Measurement ID	M		9.2.1.37		YES	ignore

# 9.1.64 UE MEASUREMENT FAILURE INDICATION [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
Cause	M		9.2.1.5		YES	ignore

## 9.1.65 IUR INVOKE TRACE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
D-RNTI	0		9.2.1.24		YES	ignore
Trace Reference	M		9.2.1.58c		YES	ignore
UE Identity	M		9.2.1.66A		YES	ignore
Trace Recording Session Reference	M		9.2.1.58b		YES	ignore
List Of Interfaces To Trace		0maxNrO fInterfaces			EACH	ignore
>Interface	М		ENUMERA TED (lub, lur,)		_	
Trace Depth	M		9.2.1.58a		YES	ignore
MDT Configuration	0		9.2.1.139		YES	ignore
Trace Collection Entity IP Address	0		Transport Layer Address 9.2.1.62		YES	ignore

Range bound	Explanation				
maxNrOfInterfaces	Maximum of Interfaces to be traced.				

# 9.1.66 IUR DEACTIVATE TRACE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
D-RNTI	0		9.2.1.24		YES	ignore
Trace Reference	M		9.2.1.58c		YES	ignore

# 9.1.67 MBMS ATTACH COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		ı	
MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	M		9.2.1.80		1	
CHOICE UE State	0				YES	ignore
>CELL_FACH/CELL_PCH					-	
>>D-RNTI	M		9.2.1.24		ı	
>URA_PCH					1	
>>SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	-	
>>URA-ID	M		9.2.1.70		1	
>>Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.68 MBMS DETACH COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	_
MBMS Bearer Service List		1 <maxnr OfMBMSS ervices&gt;</maxnr 			GLOBAL	ignore
>TMGI	M		9.2.1.80		1	
CHOICE UE State	0				YES	ignore
>CELL_FACH/CELL_PCH					1	
>>D-RNTI	M		9.2.1.24		ı	
>URA_PCH					-	
>>SRNC-ID	M		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	ı	
>>URA-ID	M		9.2.1.70		1	
>>Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can join.

# 9.1.69 DIRECT INFORMATION TRANSFER

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		1	
RNC-ID	M		9.2.1.50	ID of an RNC which initiates the procedure. If the Extended RNC-ID IE is included in the message, the RNC-ID IE shall be ignored.	YES	ignore
Provided Information	M		9.2.1.85		YES	ignore
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

# 9.1.70 ENHANCED RELOCATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	-
Cause	M		9.2.1.5		YES	reject
Permanent NAS UE Identity	M		9.2.1.73		YES	reject
SRNC-ID	0		RNC-ID 9.2.1.50	If the Extended SRNC-ID IE is included in the message, the SRNC-ID IE shall be ignored.	YES	reject
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
S-RNTI	М		9.2.1.53	If the Extended S- RNTI IE is included in the message, the S-RNTI IE shall be ignored.	YES	reject
RANAP Enhanced Relocation Information Request	М		9.2.1.124		YES	reject
Extended S-RNTI	0		Extended RNTI 9.2.1.154	The Extended S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.	YES	reject

# 9.1.71 ENHANCED RELOCATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
RANAP Enhanced Relocation Information Response	М		9.2.1.125		YES	ignore

## 9.1.72 ENHANCED RELOCATION FAILURE

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

## 9.1.73 ENHANCED RELOCATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Cause	M		9.2.1.5		YES	ignore

## 9.1.74 ENHANCED RELOCATION SIGNALLING TRANSFER

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
L3 Information	М		9.2.1.32		YES	ignore

# 9.1.75 ENHANCED RELOCATION RELEASE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Released CN Domain	M		9.2.1.126		YES	ignore

# 9.1.76 MBSFN MCCH INFORMATION (FDD)

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
MBSFN Cluster Identity	M		9.2.1.128		YES	ignore
MCCH Message List		1 <maxnr OfMCCH Messages &gt;</maxnr 			YES	reject
>L3 Information	M		9.2.1.32	See Note1 below.	-	
CFN	M		9.2.1.9		YES	reject
MCCH Configuration Info		01			YES	ignore
>Secondary CCPCH system information MBMS	M		9.2.1.127		-	
MBSFN Scheduling Transmission Time Interval info List		0 <maxnr OfMBMSL 3&gt;</maxnr 			YES	ignore
>TMGI	M		9.2.1.80		_	
>MBSFN Scheduling Transmission Time Interval	M		9.2.1.129		_	

Note 1: The IE Contains one of the following messages defined in TS 25.331 [16]: MBMS MODIFIED SERVICES INFORMATION, MBMS UNMODIFIED SERVICES INFORMATION, MBMS GENERAL INFORMATION, MBMS COMMON P-T-M RB INFORMATION, MBMS CURRENT Cell PTM RB INFORMATION.

Range bound	Explanation
maxNrOfMCCHMessages	Maximum number of MCCH Messages simultaneous sent on MCCH.
maxNrOfMBMSL3	Maximum number of MBMS service in L3 information.

# 9.1.77 SECONDARY UL FREQUENCY REPORT

## 9.1.77.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Activation Information	M		9.2.2.109		YES	ignore

# 9.1.78 SECONDARY UL FREQUENCY UPDATE INDICATION

#### 9.1.78.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Activation Information	M		9.2.2.109		YES	ignore

# 9.1.79 ENHANCED RELOCATION RESOURCE REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
IMSI	0		9.2.1.31		YES	reject
Source ID	M		9.2.1.142		YES	ignore
Target ID	M		9.2.1.143		YES	reject
MS Classmark 2	M		9.2.1.144		YES	reject
MS Classmark 3	M		9.2.1.145		YES	ignore
Speech Version	М		9.2.1.146		YES	ignore

# 9.1.80 ENHANCED RELOCATION RESOURCE RESPONSE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
D-RNTI	M		9.2.1.24		YES	ignore
L3 Information	M		9.2.1.32	The IE contains HANDOVER COMMAND message defined in TS 44.018 [67].	YES	ignore
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
Load Value	0		9.2.1.33A		YES	ignore

# 9.1.81 ENHANCED RELOCATION RESOURCE FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Cause	М		9.2.1.5		YES	ignore
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
Load Value	0		9.2.1.33A		YES	ignore

# 9.1.82 ENHANCED RELOCATION RESOURCE RELEASE COMMAND [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Cause	М		9.2.1.5		YES	ignore

# 9.1.83 ENHANCED RELOCATION RESOURCE RELEASE COMPLETE [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	

#### 9.1.84 INFORMATION TRANSFER CONTROL REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
CHOICE Control Type	M				YES	ignore
>Suspension					_	
>>Controlled Object Scope	М		9.2.1.147		-	
>Resume					_	
>>Controlled Object Scope	M		9.2.1.147		_	

### 9.2 Information Element Functional Definition and Contents

#### 9.2.0 General

Subclause 9.2 presents the RNSAP IE definitions in tabular format. The corresponding ASN.1 definition is presented in subclause 9.3. In case there is a contradiction between the tabular format in subclause 9.2 and the ASN.1 definition, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, in which the tabular format shall take precedence.

When specifying information elements which are to be represented by bitstrings, if not otherwise specifically stated in the semantics description of the concerned IE or elsewhere, the following principle applies with regards to the ordering of bits:

- The first bit (leftmost bit) contains the most significant bit (MSB);
- The last bit (rightmost bit) contains the least significant bit (LSB);
- When importing bitstrings from other specifications, the first bit of the bitstring contains the first bit of the concerned information;

#### 9.2.1 Common Parameters

This subclause contains parameters that are common to FDD and TDD.

#### 9.2.1.1 Allocation/Retention Priority

This parameter indicates the priority level in the allocation and retention of transport channel resources in DRNS. DRNS may use the Allocation/Retention priority information of the transport channels composing the RL to prioritise requests for RL Setup/addition and reconfiguration. In similar way, DRNS may use the allocation/Retention priority information of the transport channels composing the RL to prioritise which RL shall be set to failure, in case prioritisation is possible. See Annex A.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Level	M		INTEGER(0. .15)	This IE indicates the priority of the request.  Usage: Value "0" means "Spare"; It shall be treated as a logical error if received. Values between 1 and 14 are ordered in decreasing order of priority, "1" being the highest and "14" the lowest. Value "15" means "No Priority".
Pre-emption Capability	M		ENUMERAT ED(shall not trigger pre- emption, may trigger pre-emption)	
Pre-emption Vulnerability	M		ENUMERAT ED(not pre- emptable, pre- emptable)	

#### 9.2.1.2 Allowed Queuing Time

This parameter specifies the maximum queuing time that is allowed in the DRNS until the DRNS must start to execute the request.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allowed Queuing Time			INTEGER(160)	Unit: Seconds.

#### 9.2.1.2A Allowed Rate Information

The *Allowed Rate Information* IE indicates the TFI corresponding to the highest allowed bit rate for the uplink and/or the downlink of a DCH. The SRNC is allowed to use any rate being lower than or equal to the rate corresponding to the indicated TFI.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Allowed UL Rate	0		INTEGER(1.	"1": TFI 0,
			.maxNrOfTF	"2": TFI 1,
			s)	"3": TFI 2,
Allowed DL Rate	0		INTEGER(1.	"1": TFI 0,
			.maxNrOfTF	"2": TFI 1,
			s)	"3": TFI 2,

#### 9.2.1.2B Altitude and Direction

This IE contains a description of Altitude and Direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Direction of Altitude	M		ENUMERAT ED(Height, Depth)	
Altitude	M		INTEGER( 02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2&lt;sup">15-1 for which the range is extended to include all grater values of (a).</n+1,>

#### 9.2.1.2C Antenna Co-location Indicator

The Antenna Co-location Indicator indicates whether the antenna of the serving and neighbouring cells are approximately co-located.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Antenna Co-location			ENUMERAT	
Indicator			ED(co-	
			located,)	

#### 9.2.1.2D Alternative Format Reporting Indicator

This IE indicates if DRNS may report a measurement using an alternative format.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alternative Format			ENUMERAT	
Reporting Indicator			ED	
			(Alternative	
			format is	
			allowed,)	

#### 9.2.1.3 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP (TS 25.426 [3]TS 25.424 [35]), this IE contains the identifier that is allocated at the DRNS and that is unique for each transport bearer under establishment to/from the DRNS.

If the Transport Layer Address contains an IP address (IETF RFC 2460 [33]), this IE contains the UDP port (IETF RFC 768 [34]) intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Binding ID			OCTET STRING (14,)	If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2. The first octet of the UDP port field shall be included in the first octet of the Binding ID.

#### 9.2.1.4 BLER

This Block Error Rate defines the target radio interface Transport Block Error Rate of the transport channel . BLER is used by the DRNS to determine the needed SIR targets, for admission control and power management reasons.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
BLER			INTEGER(- 630)	Step 0.1. (Range –6.30). It is the Log10 of the BLER.

#### 9.2.1.4A Block STTD Indicator

Void.

#### 9.2.1.4B Burst Mode Parameters

The Burst Mode Parameters IE provides all the relevant information in order to able IPDL in the Burst mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
Burst Start	М		INTEGER(015)	See TS 25.214 [10] and TS 25.224 [22].
Burst Length	М		INTEGER(1 025)	See TS 25.214 [10] and TS 25.224 [22].
Burst freq	М		INTEGER(116)	See TS 25.214 [10] and TS 25.224 [22].

#### 9.2.1.5 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cause Group	M			
>Radio Network Layer				
CHOICE Cause Group		range	ENUMERATED (Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, Measurement not Supported For The Object, Combining Resources Not Available, Combining Resources Not Available, Reconfiguration not Allowed, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed, Number of DL Codes Not Supported, Dedicated Transport Channel Type not Supported, UL Shared Channel Type not Supported, UL Spreading Factor not Supported, UL Spreading Factor not Supported, CM not Supported, Transaction not Supported by Destination Node B, RL Already Activated/Allocated,, Number of UL Codes Not Supported, Cell reserved for operator use, DPC Mode Change not Supported, Information Provision not supported for the object, Power Balancing status not compatible, Delayed Activation not Supported, RL Timing Adjustment Not Supported, Unknown RNTI, Measurement Repetition Rate not Compatible with Current Measurements, UE not Capable to Implement Measurements, UE not Capable to Implement Measurements, UE not Capable to Implement Measurement, F-DPCH not supported, Continuous Packet Connectivity DTX- DRX operation not supported, Continuous Packet Connectivity DTX- DRX operation not available, Continuous Packet Connectivity UE	Description
			DTX Cycle not available, MIMO not available, SixteenQAM UL not supported, HS-DSCH MAC-d PDU Size Format not supported,	
			F-DPCH Slot Format operation not supported,	

E-DCH MAC-d PDU Size Format not available. E-DPCCH Power Boosting not supported, Trelocprep Expiry, Relocation Cancelled, Traffic Load In The Target Cell Higher Than In The Source Cell, Time critical Relocation, Resource optimisation relocation, Relocation desirable for radio reasons Directed Retry, Reduce Load in Serving Cell, No Iu CS UP relocation, SixtyfourQAM DL and MIMO Combined not available. Multi Cell operation not available, Multi Cell operation not supported, Semi-Persistent scheduling not supported. Continuous Packet Connectivity DRX not supported, Continuous Packet Connectivity DRX not available. Enhanced Relocation not Supported, Relocation Not Supported Due To PUESBINE Feature, Relocation Failure In Target RNC, Relocation Target not allowed, Requested Ciphering and/or Integrity Protection Algorithms not Supported, SixtyfourQAM DL and MIMO Combined not supported. TX diversity for MIMO UE on DL Control Channels not available, Single Stream MIMO not supported, Single Stream MIMO not available, Multi Cell operation with MIMO not available. Multi Cell operation with MIMO not supported, Multi Cell E-DCH operation not available. Multi Cell E-DCH operation not supported, Multi Cell operation with Single Stream MIMO not available, Multi Cell operation with Single Stream MIMO not supported, Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available, Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported, Frequency Specific Compressed Mode Not Available, Uplink Closed Loop Transmit Diversity Operation Not Available, Uplink Closed Loop Transmit Diversity Operation Not Supported, MIMO with four transmit antennas not supported, MIMO with four transmit antennas not available, Dual Stream MIMO with four transmit antennas not supported, Dual Stream MIMO with four transmit antennas not available, Multiflow operation not available, Multiflow operation not supported, SixtyfourQAM UL not available, SixtyfourQAM UL not supported, UL MIMO operation not available, UL MIMO operation not supported, UL MIMO and SixteenQAM operation not available, UL MIMO and SixteenQAM operation not supported, UL MIMO and SixtyfourQAM operation not available, UL MIMO and SixtyfourQAM operation not

		supported)
>Transport Layer		
>>Transport Layer Cause	М	ENUMERATED (Transport Resource Unavailable, Unspecified,)
>Protocol		
>>Protocol Cause	М	ENUMERATED (Transfer Syntax Error, Abstract Syntax Error (Reject), Abstract Syntax Error (Ignore and Notify), Message not Compatible with Receiver State, Semantic Error, Unspecified, Abstract Syntax Error (Falsely Constructed Message),)
>Misc		
>>Miscellaneous Cause	М	ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
Cell not Available	The concerned cell is not available.
Cell reserved for operator use	The concerned cell is reserved for operator use.
Cell Specific Tx Diversity Handling For Multi Cell Operation Not Available	Cell specific tx diversity handling for multi cell operation not available in the concerned cell(s).
Cell Specific Tx Diversity Handling For Multi Cell Operation Not Supported	The concerned cell(s) do not support the cell specific tx diversity handling for multi cell operation.
CM not Supported	The concerned cell(s) do not support Compressed Mode.
Combining not Supported	The DRNS does not support the RL combining for the concerned cells.
Combining Resources Not	The value of the received Diversity Control Field IE was set to "Must", but
Available	the DRNS cannot perform the requested combining.
Common Transport Channel Type	The concerned cell(s) do not support the RACH and/or FACH Common
not Supported	Transport Channel Type.
Continuous Packet Connectivity DTX-DRX operation not available	CPC resources for DTX-DRX operation not available in the concerned cell(s).
Continuous Packet Connectivity DRX not available	HSPA resources for DRX operation not available in the concerned cell(s). (for 1.28Mcps TDD only).
Continuous Packet Connectivity DRX not supported	The concerned cell(s) do not support the Continuous Packet Connectivity DRX operation (for 1.28Mcps TDD only).
Continuous Packet Connectivity DTX-DRX operation not Supported	The concerned cell(s) do not support the Continuous Packet Connectivity DTX-DRX operation.
Continuous Packet Connectivity	The concerned cell(s) do not support the Continuous Packet Connectivity
HS-SCCH less operation not Supported	HS-SCCH less operation.
Continuous Packet Connectivity UE DTX Cycle not available	CPC resources for the UE DTX Cycle not available in the concerned cell(s).
Dedicated Transport Channel Type not Supported	The concerned cell(s) do not support the Dedicated Transport Channel Type.
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs.
Directed Retry	The reason for action is Directed Retry.
DL Radio Resources not Available	The DRNS does not have sufficient DL radio resources available.
DL SF not Supported	The concerned cell(s) do not support the requested DL SF.
DL Shared Channel Type not Supported	The concerned cell(s) do not support the Downlink Shared Channel Type.
DPC Mode Change not Supported	The concerned cells do not support the DPC mode changes.
E-DCH MAC-d PDU Size Format not available	The selected E-DCH MAC-d PDU Size Format is not available in the concerned cell(s).
E-DCH not supported	The concerned cell(s) do not support E-DCH.
E-DCH TTI2ms not supported	The concerned cell(s) do not support the E-DCH 2ms TTI operation.
E-DPCCH Power Boosting not supported	The concerned cell(s) do not support the E-DPCCH Power Boosting.
Enhanced Relocation not Supported	The DRNS does not support the Enhanced Relocation.
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH.
F-DPCH Slot Format operation not supported	The concerned cell(s) do not support the F-DPCH Slot Format operation.
MIMO with four transmit antennas not supported	The concerned cell(s) do not support the MIMO with four transmit antennas operation.
MIMO with four transmit antennas not available	MIMO with four transmit antennas resources not available in the concerned cell(s).
Dual Stream MIMO with four	The concerned cell(s) do not support the Dual Stream MIMO with four
transmit antennas not supported	transmit antennas operation.
Dual Stream MIMO with four transmit antennas not available	Dual Stream MIMO with four transmit antennas resources not available in the concerned cell(s).
Frequency Specific Compressed Mode not available	Frequency Specific Compressed Mode is not available in the concerned cell(s).
HS-DSCH MAC-d PDU Size Format not supported	The concerned cell(s) do not support the selected HS-DSCH MAC-d PDU Size Format.
Information Provision not supported for the object	The RNS doesn't support provision of the requested information for the concerned object types.
Information temporarily not available	The RNS can temporarily not provide the requested information.
Invalid CM Settings	The concerned cell(s) consider the requested Compressed Mode settings invalid.
Measurement not Supported For	At least one of the concerned cell(s) does not support the requested

The Object	measurement on the concerned object type.
Measurement Repetition Rate not	The requested parameters for a forwarded UE measurement are not
Compatible with Current	compatible with the current measurement schedule in the SRNC.
Measurements	
Measurement Temporarily not	The DRNS can temporarily not provide the requested measurement
Available	value.
MIMO not available	MIMO resources not available in the concerned cell(s).
MIMO not supported	The concerned cell(s) do not support the MIMO operation.
Multi Cell E-DCH operation not	Multi cell E-DCH operation is not available in the concerned cell(s).
available	
Multi Cell E-DCH operation not	The concerned cell(s) do not support Multi cell E-DCH operation.
supported	
Multi Cell operation not available	Multi Cell operation resources not available in the concerned cell(s).
Multi Cell operation not supported	The concerned cell(s) do not support Multi Cell operation.
Multi Cell operation with MIMO not	Multi Cell operation with MIMO resources not available in the concerned
available	cell(s).
Multi Cell operation with MIMO not	The concerned cell(s) do not support Multi Cell operationwith MIMO.
supported	
Multi Cell operation with Single	Multi Cell operation with Single Stream MIMO resources not available in
Stream MIMO not available	the concerned cell(s).
Multi Cell operation with Single	The concerned cell(s) do not support Multi Cell operationwith Single
Stream MIMO not supported	Stream MIMO.
No Iu CS UP relocation	The relocation is triggered by CS call and the source RNC has no lu CS
	user plane.
Number of DL Codes not	The concerned cell(s) do not support the requested number of DL codes.
Supported	
Number of UL Codes not	The concerned cell(s) do not support the requested number of UL codes.
Supported	
Power Balancing status not	The power balancing status in the SRNC is not compatible with that of the
compatible	DRNC.
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not
	support.
Reconfiguration CFN not Elapsed	The requested action cannot be performed due to that a COMMIT
	message was received previously, but the concerned CFN has not yet
December 1997	elapsed.
Reconfiguration not Allowed	The SRNC does currently not allow the requested reconfiguration.
Reduce Load in Serving Cell	Load on serving cell needs to be reduced.
Relocation Cancelled	The reason for the action is relocation cancellation.
Relocation Desirable For Radio	The reason for requesting relocation is radio related.
Dagage	
Reasons	
Relocation Failure In Target RNC	Relocation failed due to a failure in target RNC.
Relocation Failure In Target RNC Relocation Not Supported Due To	
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.
Relocation Failure In Target RNC Relocation Not Supported Due To	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed Requested Ciphering And/Or	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).  The DRNS does not support SixtyfourQAM DL and MIMO Combined for
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO Combined not supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).  The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO Combined not supported Synchronisation Failure	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).  The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.  Loss of UL Uu synchronisation.
Relocation Failure In Target RNC Relocation Not Supported Due To PUESBINE Feature Relocation Target not allowed  Requested Ciphering And/Or Integrity Protection Algorithms Not Supported Requested Configuration not Supported Requested Tx Diversity mode not Supported Resource Optimisation Relocation RL Already Activated/ Allocated  RL Timing Adjustment not Supported Semi-Persistent scheduling not supported SixteenQAM UL not Supported SixtyfourQAM DL and MIMO Combined not available SixtyfourQAM DL and MIMO Combined not supported	Relocation failed due to a failure in target RNC.  The DRNS can not support the relocation due to the PUESBINE Feature.  Relocation to the indicated target cell is not allowed for the UE in question.  The DRNS does not support the requested ciphering and/or integrity protection algorithms.  The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,  The concerned cell(s) do not support the requested transmit diversity mode.  The reason for requesting relocation is resource optimisation.  The DRNS has already allocated an RL with the requested RL ID for this UE Context.  The concerned cell(s) do not support adjustments of the RL timing.  The concerned cell(s) do not support the Semi-Persistent scheduling operation (for 1.28Mcps TDD only).  The concerned cell(s) do not support the 16 QAM UL.  SixtyfourQAM DL and MIMO Combined not available in the concerned cell(s).  The DRNS does not support SixtyfourQAM DL and MIMO Combined for the concerned cells.

	dropped if relocation is not performed.
Traffic Load In The Target Cell	Relocation to reduce load in the source cell is rejected, as the target cell's
Higher Than In The Source Cell	traffic load is higher than that in the source cell.
Transaction not Supported by	The requested action cannot be performed due to lack of support of the
Destination Node B	corresponding action in the destination Node B.
T <sub>RELOCprep</sub> Expiry	Relocation Preparation procedure is cancelled when timer T <sub>RELOCprep</sub>
RELOCprep EXPITY	
Single Stream MIMO not supported	expires.
	The concerned cell(s) do not support the Single Stream MIMO.
Single Stream MIMO not available	Single Stream MIMO resources not available in the concerned cell(s).
TX diversity for MIMO UE on DL	The DRNS does not have sufficient radio resources available to support
Control Channels not available	transmit diversity on downlink control channels when the UE is configured
	in MIMO mode with P-CPICH & S-CPICH as phase references (TS
115 10 11 1	25.211 [8]).
UE not Capable to Implement	The UE is not capable to initiate/report a requested measurement due to
Measurement	its current state or capabilities.
UL Radio Resources not Available	The DRNS does not have sufficient UL radio resources available.
UL Scrambling Code Already in	The concerned UL scrambling code is already in use for another UE.
Use	
UL SF not Supported	The concerned cell(s) do not support the requested minimum UL SF.
UL Shared Channel Type not	The concerned cell(s) do not support the Uplink Shared Channel Type.
Supported	
Unknown C-ID	The DRNS is not aware of a cell with the provided C-ID.
Unknown RNTI	The SRNC or DRNC is not aware of a UE indicated with the provided
	RNTI.
Unspecified	Sent when none of the above cause values applies but still the cause is
	Radio Network Layer related.
Uplink Closed Loop Transmit	Uplink Closed Loop Transmit Diversity Operation resources not available
Diversity Operation Not Available	in the concerned cell(s).
Uplink Closed Loop Transmit	The concerned cell(s) do not support UL CLTD Operation.
Diversity Operation Not Supported	
Multiflow operation not available	Multiflow resources not available in the concerned cell(s).
Multiflow operation not supported	The concerned cell(s) do not support Multiflow operation.
SixtyfourQAM UL operation not	SixtyfourQAM UL resources are not available in the concerned cell(s).
available	
SixtyfourQAM UL operation not	The concerned cell(s) do not support SixtyfourQAM UL operation.
supported	
UL MIMO operation not available	UL MIMO resources are not available in the concerned cell(s).
UL MIMO operation not supported	The concerned cell(s) do not support UL MIMO operation.
UL MIMO and SixteenQAM	UL MIMO and SixteenQAM resources are not available in the concerned
operation not available	cell(s).
UL MIMO and SixteenQAM	The concerned cell(s) do not support UL MIMO and SixteenQAM
operation not supported	operation.
UL MIMO and SixtyfourQAM	UL MIMO and SixtyfourQAM resources are not available in the concerned
operation not available	cell(s).
UL MIMO and SixtyfourQAM	The concerned cell(s) do not support UL MIMO and SixtyfourQAM
operation not supported	operation.
οροιαιίστι ποι σαρρύτισα	operation.

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 Laver related.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the
	concerned criticality indicated "reject" (see subclause 10.3).
Abstract Syntax Error (Ignore and	The received message included an abstract syntax error and the
Notify)	concerned criticality indicated "ignore and notify" (see subclause 10.3).
Abstract syntax error (falsely	The received message contained IEs or IE groups in wrong order or with
constructed message)	too many occurrences (see subclause 10.3).
Message not Compatible with	The received message was not compatible with the receiver state (see
Receiver State	subclause 10.4).
Semantic Error	The received message included a semantic error (see subclause 10.4).
Transfer Syntax Error	The received message included a transfer syntax error (see subclause
	10.2).
Unspecified	Sent when none of the above cause values applies but still the cause is
	Protocol related.

Miscellaneous cause	Meaning
Control Processing Overload	DRNS control processing overload.
Hardware Failure	DRNS hardware failure.
Not enough User Plane Processing	DRNS has insufficient user plane processing resources available.
Resources	
O&M Intervention	Operation and Maintenance intervention related to DRNS equipment.
Unspecified	Sent when none of the above cause values applies and the cause is not related to any of the categories Radio Network Layer, Transport Network
	Layer or Protocol.

## 9.2.1.5A Cell Geographical Area Identity (Cell GAI)

The Cell Geographical Area is used to identify the geographical area of a cell. The area is represented as a polygon. See TS 23.032 [25].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell GAI Geographical Co-ordinates		1 <maxnrofpoints></maxnrofpoints>		
>Latitude Sign	M		ENUMERAT ED(North, South)	
>Degrees of Latitude	M		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>23</sup> X /90 < N+1 X being the latitude in degree (0° 90°).
>Degrees of Longitude	M		INTEGER( -2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula:  N≤2 <sup>24</sup> X /360 < N+1  X being the longitude in degree (-180° +180°).

٠	Range bound	Explanation
	maxNrOfPoints	Maximum no. of points in polygon.

## 9.2.1.5B Cell Geographical Area Additional Shapes (Cell GAI Additional Shapes)

This IE is used to provide several descriptions of the geographical area of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cell GAI				
Additional Shapes				
>GA Point With				
Uncertainty				
>>GA Point With	M		9.2.1.30A	Ellipsoid point with
Uncertainty				uncertainty circle.
>GA Ellipsoid point				
with uncertainty Ellipse				
>>GA Ellipsoid	M		9.2.1.30B	Ellipsoid point with
point with uncertainty				uncertainty Ellipse.
Ellipse				
>GA Ellipsoid point				
with altitude				
>>GA Ellipsoid	M		9.2.1.30C	Ellipsoid point with altitude.
point with altitude				
>GA Ellipsoid point				
with altitude and				
uncertainty Ellipsoid				
>>GA Ellipsoid	M		9.2.1.30D	Ellipsoid point with altitude
point with altitude				and uncertainty Ellipsoid.
and uncertainty				
Ellipsoid				
>GA Ellipsoid Arc				
>>GA Ellipsoid Arc	M		9.2.1.30E	Ellipsoid Arc.

#### 9.2.1.5C Cell Capacity Class Value

The Cell Capacity Class Value IE contains the capacity class for both the uplink and downlink. Cell Capacity Class Value IE is the value that classifies the cell capacity with regards to the other cells. Cell Capacity Class Value IE only indicates resources that are configured for traffic purposes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Cell Capacity Class Value	M		INTEGER(1100,)	Value 1 shall indicate the minimum uplink cell capacity, and 100 shall indicate the maximum uplink cell capacity.  There should be linear relation between uplink cell capacity and Uplink Cell Capacity Class Value.
Downlink Cell Capacity Class Value	M		INTEGER(1100,)	Value 1 shall indicate the minimum downlink cell capacity, and 100 shall indicate the maximum downlink cell capacity. There should be linear relation between downlink cell capacity and Downlink Cell Capacity Class Value.

NOTE: Cell capacity class for GERAN cells is defined by the number of configured carriers in specific GERAN cells which ranges from integer 1 to 100. The value 1 shall indicate the minimum cell capacity and the value 100 shall indicate the maximum cell capacity.

#### 9.2.1.5D Cell Global Identifier (CGI)

The Cell Global Identifier IE contains the Cell Global Identity as defined in TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
LAI		1		
>PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
>LAC	M		OCTET STRING (2)	0000 and FFFE not allowed.
CI	M		OCTET STRING (2)	

#### 9.2.1.6 Cell Identifier (C-ID)

The C-ID (Cell Identifier) is the identifier of a cell in one RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER	
			(065535)	

#### 9.2.1.7 Cell Individual Offset

Cell individual offset is an offset that will be applied by UE to the measurement results for a Primary-CPICH[FDD]/ Primary-CCPCH[TDD] or for GSM Carrier RSSI according to TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Cell Individual Offset			INTEGER(	-20 -> -10dB
			-20+20)	-19 -> -9.5dB
				+20 -> +10dB

#### 9.2.1.8 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD and 7.68Mcps TDD – Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD – SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see TS 25.223 [13]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER(0127,)	

#### 9.2.1.9 CFN

Connection Frame Number for the radio connection, see TS 25.402 [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER(0. . 255)	

#### 9.2.1.10 CFN Offset

Void

#### 9.2.1.11 CN CS Domain Identifier

Identification of the CN node in the CS Domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.

## 9.2.1.11A CN Domain Type

Identifies the type of core network domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CN Domain Type			ENUMERAT	See in TS 25.331 [16].
			ED(CS	
			domain, PS	
			domain,	
			Don't	
			care,)	

#### 9.2.1.12 CN PS Domain Identifier

Identification of the CN Node in the PS Domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
LAC	M		OCTET STRING (2)	0000 and FFFE not allowed.
RAC	M		OCTET STRING (1)	

## 9.2.1.12A Common Measurement Accuracy

The Common Measurement Accuracy IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Common Measurement Accuracy	M			
>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GPS</sub> Measurement Accuracy Class	M		T <sub>UTRAN-GPS</sub> Accuracy Class 9.2.1.59B	
>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class				
>>T <sub>UTRAN-GANSS</sub> Measurement Accuracy Class	M		T <sub>UTRAN-GANSS</sub> Accuracy Class 9.2.1.112	

# 9.2.1.12B Common Measurement Object Type

Void.

## 9.2.1.12C Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Common Measurement Type			ENUMERATED (UTRAN GPS Timing of Cell Frames for UE Positioning , SFN-SFN Observed Time Difference, load, transmitted carrier power, received total wide band power, UL timeslot ISCP,, RT Load, NRT Load Information, UpPTS interference, UTRAN GANSS Timing of Cell Frames for UE Positioning)	UL timeslot ISCP shall only be used by TDD. For measurements, which are requested on the lur-g interface, only load, RT Load and NRT Load information are used. "UpPTS interference" is used by 1.28Mcps TDD only "UpPTS interference" means "UpPCH interference" in the whole 25.423, refer to TS 25.225 [14] and TS 25.224 [22].

#### 9.2.1.12D Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common Measurement Value	М				_	
> T <sub>UTRAN-GPS</sub> Measurement Value Information				UTRAN only.	_	
>>T <sub>UTRAN-GPS</sub> Measurement Value Information	M		9.2.1.59D		-	
> SFN-SFN Measurement Value Information				UTRAN only.	_	
>>SFN-SFN Measurement Value Information	M		9.2.1.52C		_	
>Load Value					1	
>>Load Value	M		9.2.1.33A		_	
>Transmitted Carrier Power Value				UTRAN only.	_	
>>Transmitted Carrier Power Value	M		Transmitted Carrier Power 9.2.1.59A		_	
>Received Total Wide Band Power Value				UTRAN only.	_	
>>Received Total Wide Band Power Value	М		Received Total Wide Band Power 9.2.2.35A		-	
>UL Timeslot ISCP Value				TDD Only.	_	
>>UL Timeslot ISCP Value	М		UL Timeslot ISCP 9.2.3.13A		_	
>Additional Common Measurement Values					-	
>>RT Load Value >>>RT Load Value	M		9.2.1.50B		YES	ignore
>>NRT Load Information Value					_	
>>>NRT Load Information Value	М		9.2.1.411		YES	ignore
>>UpPTS interference				1.28Mcps TDD Only.	_	
>>>UpPTS interference Value	М		INTEGER (0127,)	According to mapping in TS 25.123 [24].	YES	reject
>> T <sub>UTRAN-GANSS</sub> Measurement Value Information				UTRAN only.	_	
>>>T <sub>UTRAN-GANSS</sub> Measurement Value Information	M		9.2.1.114		YES	reject

#### 9.2.1.12E Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement	М			
Availability				
>Measurement Available				
>>Common Measurement	М		9.2.1.12D	
Value				
>Measurement not Available			NULL	

#### 9.2.1.12F Common Transport Channel Resources Initialisation Not Required

If present, this IE indicates that as far as the DRNC is concerned, there is no need to initiate a Common Transport Channel Resources Initialisation procedure if the SRNC wants to allocate common transport channel resources in the new cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Transport			ENUMERAT	
Channel Resources			ED(Not	
Initialisation Not Required			Required)	

#### 9.2.1.12G Coverage Indicator

The Coverage Indicator indicates whether the serving and the neighbouring cell are overlapped, i.e. the cells have approximately same coverage area or whether the neighbouring cell covers or contained in the serving cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Coverage Indicator			ENUMERAT	
			ED(Overlap,	
			Covers,	
			Contained	
			in,)	

#### 9.2.1.13 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by an RNC when parts of a received message have not been comprehended or were missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the Criticality Diagnostics IE, see Annex C.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Procedure ID		01		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error.	-	,
>Procedure Code	М		INTEGER(0255		_	
>Ddmode	М		ENUMERATED( FDD, TDD, Common)	Common = common to FDD and TDD. Common Ddmode is also applicable for lurg procedures listed in section 7.	-	
Triggering Message	0		ENUMERATED(i nitiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.	-	
Procedure Criticality	0		ENUMERATED(r eject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).	-	
Transaction ID	0		Transaction ID		_	
Information Element Criticality Diagnostics		0 <max NrOfErr ors&gt;</max 			_	
>IE Criticality	M		ENUMERATED(r eject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "Ignore" shall never be used.	-	
>IE ID	M		INTEGER(0655 35)	The IE ID of the not understood or missing IE as defined in the ASN.1 part of the specification.	-	
>Repetition Number	0		INTEGER(0255 )	The Repetition Number IE gives  In case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence  In case of a missing IE: The number of occurrences up to but not including the missing occurrence.  Note: All the counted	_	

			occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.		
>Message Structure	0	9.2.1.39A	The Message Structure IE describes the structure in which the not understood or missing IE was detected. This IE is included if the not understood IE is not the top level of the message.	YES	ignore
>Type of Error	M	ENUMERATED( not understood, missing,)		YES	ignore

Range bound	Explanation
maxNrOfErrors	Maximum number of IE errors allowed to be reported with a single
	message.

#### 9.2.1.14 C-RNTI

C-RNTI (Cell RNTI) is the UE identifier allocated by the DRNS to be used over the radio interface. It is unique in the cell. One UE Context has one unique C-RNTI value allocated in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-RNTI			INTEGER(0.	
			.65535)	

#### 9.2.1.14A CTFC

The CTFC is an integer number calculated in accordance with TS 25.331 [16], subclause 14.10. Regarding the channel ordering, for all transport channels, 'TrCH1' corresponds to the transport channel having the lowest transport channel identity among all configured transport channels on this CCTrCH. 'TrCH2' corresponds to the transport channel having the next lowest transport channel identity, and so on.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE CTFC Format				
>2 bits long				
>>CTFC value	M		INTEGER (03)	
>4 bits long				
>>CTFC value	M		INTEGER (015)	
>6 bits long				
>>CTFC value	M		INTEGER (063)	
>8 bits long				
>>CTFC value	M		INTEGER (0255)	
>12 bits long				
>>CTFC value	M		INTEGER (04095)	
>16 bits long				
>>CTFC value	M		INTEGER (065535)	
>max nb bits long				
>>CTFC value	M		INTEGER	
			(0maxCTFC)	

Range Bound	Explanation
maxCTFC	Maximum number of the CTFC value is calculated according to the following:
	$\sum_{i=1}^{I} (L_i - 1) P_i$
	with the notation according to TS 25.331 [16].

#### 9.2.1.15 DCH Combination Indicator

Void

#### 9.2.1.16 DCH ID

The DCH ID is the identifier of an active dedicated transport channel. It is unique for each active DCH among the active DCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH ID			INTEGER	
			(0255)	

#### 9.2.1.16A DCH Information Response

The DCH Information IE provides information for DCHs that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH Information Response		1 <maxnr OfDCHs&gt;</maxnr 		Several DCHs belonging to the same set of coordinated DCHs may be included.	I	
>DCH ID	М		9.2.1.16		-	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>Allowed Rate Information	0		9.2.1.2A		YES	ignore
>Transport Bearer Not Setup Indicator	0		9.2.2.4T	FDD Only.	YES	Ignore

Range bound	Explanation		
maxNrOfDCHs	Maximum number of DCHs for one UE.		

#### 9.2.1.17 Dedicated Measurement Object Type

Void.

#### 9.2.1.18 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERAT ED(SIR, SIR Error, Transmitted Code Power, RSCP, Rx Timing Deviation, Round Trip Time,, Rx Timing Deviation LCR, Angle Of Arrival LCR, HS-SICH Reception Quality, Rx Timing Deviation 768, Rx Timing Deviation 768, Rx Timing Deviation 384 Extended, UE transmission power headroom)	RSCP and HS-SICH Receptions Quality are used by TDD only, Rx Timing Deviation and Rx Timing Deviation 384 Extended are used by 3.84 Mcps TDD only, Rx Timing Deviation LCR is used by 1.28 TDD only, Round Trip Time, SIR Error are used by FDD only. Angle Of Arrival LCR is used by 1.28Mcps TDD only. Rx Timing Deviation 768 is used by 7.68Mcps TDD only. UE transmission power headroom is used by FDD, 1.28Mcps TDD, 3.84Mcps TDD and 7.68Mcps TDD.

NOTE: For definitions of the measurement types refer to TS 25.215 [11] and TS 25.225 [14].

#### 9.2.1.19 Dedicated Measurement Value

The Dedicated Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Dedicated Measurement Value	М				-	
>SIR Value					_	
>>SIR Value	M		INTEGER( 063)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	
>SIR Error Value				FDD Only	_	
>>SIR Error Value	М		INTEGER( 0125)	According to mapping in TS 25.133 [23].	-	
>Transmitted Code Power Value					_	
>>Transmitted Code Power Value	M		INTEGER( 0127)	According to mapping in TS 25.133 [23] and TS 25.123 [24] Values 0 to 9 and 123 to 127 shall not be used.	_	
>RSCP				TDD Only.	_	
>>RSCP	M		INTEGER( 0127)	According to mapping in TS 25.123 [24].	-	
>Rx Timing Deviation Value				3.84Mcps TDD Only.	_	
>>Rx Timing Deviation	M		INTEGER( 08191)	According to mapping in TS 25.123 [24].	_	
>Round Trip Time				FDD Only.	_	
>>Round Trip Time	М		INTEGER( 032767)	According to mapping in TS 25.133 [23].	ı	
>Additional Dedicated Measurement Values					I	
>>Rx Timing Deviation Value LCR				1.28Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation LCR	M		INTEGER( 0511)	According to mapping in TS 25.123 [24].	-	
>>Angle of Arrival Value LCR				1.28Mcps TDD only.	YES	reject
>>>AOA LCR	М		INTEGER( 0719)	According to mapping in TS 25.123 [24].	-	
>>>AOA LCR Accuracy Class	М		ENUMER ATED(A, B, C, D, E, F, G, H,)	According to mapping in TS 25.123 [24]	-	
>>HS-SICH reception quality				Applicable to TDD only.	YES	reject
>>>HS-SICH reception quality Value		1		155 Offig.	_	
>>>Failed HS-SICH	М		INTEGER (020)	According to mapping in	_	

			TS 25.123 [24].		
>>>Missed HS-SICH	M	INTEGER (020)	According to mapping in TS 25.123 [24].	-	
>>>Total HS-SICH	M	INTEGER (020)	According to mapping in TS 25.123 [24].	-	
>>Rx Timing Deviation Value 7.68Mcps			7.68Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 7.68Mcps	M	INTEGER( 065535)	According to mapping in TS 25.123 [24].	-	
>>Rx Timing Deviation Value 3.84Mcps Extended			3.84 Mcps TDD Only.	YES	reject
>>>Rx Timing Deviation 3.84Mcps Extended	M	INTEGER( 032767)	According to mapping in TS 25.123 [24].	-	
>>Extended Round Trip Time			FDD Only.	YES	ignore
>>>Extended Round Trip Time Value	М	INTEGER (3276710 3041)	Continuation of intervals with step size as defined in TS 25.133 [23].	-	
>>UE transmission power headroom				YES	reject
>>>UE transmission power headroom	M	INTEGER (031)	According to mapping in TS 25.133 [23] and TS 25.123 [24].	-	-

#### 9.2.1.19A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Availability Indicator	М				-	
>Measurement Available					_	
>>Dedicated Measurement Value	M		9.2.1.19		_	
>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference.	_	
>Measurement not Available			NULL		_	

## 9.2.1.19Aa Delayed Activation

The *Delayed Activation* IE indicates that the activation of the DL power shall be delayed until an indicated CFN or until a separate activation indication is received.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	M			
>CFN				
>>Activation CFN	M		CFN 9.2.1.7	
>Separate Indication			NULL	

## 9.2.1.19Ab Delayed Activation Update

The Delayed Activation Update IE indicates a change of the activation of the DL power for a specific RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	M			
Update				
>Activate				
>>CHOICE Activation Type	M			
>>>Synchronised				
>>>Activation CFN	M		CFN 9.2.1.7	
>>>Unsynchronised			NULL	
>>Initial DL TX Power	M		DL Power	
			9.2.1.21	
>>First RLS Indicator	0		9.2.2.16A	FDD Only.
>>Propagation Delay	0		9.2.2.33	FDD Only.
>>Extended Propagation Delay	0		9.2.2.33a	FDD Only.
>Deactivate				
>>CHOICE Deactivation type	M			
>>>Synchronised				
>>>>Deactivation CFN	M		CFN 9.2.1.7	
>>>Unsynchronised			NULL	

#### 9.2.1.19B DGPS Corrections

The *DGPS Corrections* IE contains DGPS information used by the UE Positioning A-GPS method. For further details on the meaning of parameters, see RTCM-SC104 [31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
GPS TOW	M		INTEGER(060479 9)	Time in seconds. This field indicates the baseline time for which the corrections are valid.	-	•
Status/Health	M		ENUMERATED (UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections.	-	
Satellite DGPS		1 <ma< td=""><td>,</td><td></td><td>-</td><td></td></ma<>	,		-	
Corrections		xNoSa				
Information		t>				
>SatID	М		SAT ID 9.2.1.50A		-	
>IODE	M		BIT STRING(8)	This IE is the sequence number for the ephemeris for the particular satellite. It can be used to determine if new ephemeris is used for calculating the corrections that are provided. This eight-bit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.	-	
>UDRE	M		ENUMERATED (UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE,)	User Differential Range Error. This field provides an estimate of the uncertainty (1-σ) in the corrections for the particular satellite. The value in this field shall be multiplied by the UDRE Scale Factor in the common Corrections Status/Health field to determine the final UDRE estimate for the particular satellite.	-	
>PRC	М		INTEGER( -20472047)	Scaling factor 0.32 meters.	-	
>Range Correction Rate	М		INTEGER(-127 127)	Scaling factor 0.032 m/s.	-	
>DGNSS Validity Period	0		9.2.1.138		YES	ignore

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be
	provided.

## 9.2.1.19C Discard Timer

The *Discard Timer* IE defines the time to live for a MAC-hs SDU starting from the instant of its arrival into an HSDPA Priority Queue. The DRNS shall use this information to discard out-of-date MAC-hs SDUs from the HSDPA Priority Queues.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
Discard Timer			ENUMERAT	Unit: ms
			ED (20, 40,	
			60, 80, 100,	
			120, 140,	
			160, 180,	
			200, 250,	
			300, 400,	
			500, 750,	
			1000, 1250,	
			1500, 1750,	
			2000, 2500,	
			3000, 3500,	
			4000, 4500,	
			5000, 7500,	
			)	

### 9.2.1.20 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Diversity Control Field			ENUMERAT ED(May, Must, Must not, )	

### 9.2.1.21 Diversity Indication

Void.

### 9.2.1.21A DL Power

The *DL Power* IE indicates a power level relative to the [FDD – primary CPICH power] [TDD – PCCPCH power] configured in a cell. [FDD – If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols. If referred to an F-DPCH, it indicates the Reference F-DPCH TX Power.] If Transmit Diversity is applied to a downlink physical channel, the *DL Power* IE indicates the power offset between the linear sum of the power for this downlink physical channel on all branches and the [FDD – primary CPICH power] [TDD – PCCPCH power] configured in a cell.

[TDD – If referred to a DPCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			INTEGER (- 350150)	Value = DL Power /10 Unit dB Range –35.0 +15.0 Step 0.1dB

### 9.2.1.22 Downlink SIR Target

Void

### 9.2.1.23 DPCH Constant Value

DPCH Constant Value is the power margin used by a UE to set the proper uplink power.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH Constant Value			INTEGER (-	Unit dB
			1010)	Granularity 1 dB.

### 9.2.1.24 D-RNTI

The D-RNTI identifies the UE Context in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
D-RNTI			INTEGER(0.	
			.2^20 -1)	

#### 9.2.1.25 D-RNTI Release Indication

The D-RNTI Release Indication indicates whether or not a DRNC shall release the D-RNTI allocated for a particular UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
D-RNTI Release Indication			ENUMERAT	
			ED(Release	
			D-RNTI, not	
			Release	
			D-RNTI)	

# 9.2.1.26 DRX Cycle Length Coefficient

The DRX Cycle Length Coefficient is used as input for the formula to establish the paging occasions to be used in DRX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DRX Cycle Length			INTEGER	Refers to 'k' in the formula as
Coefficient			(39)	specified in TS 25.304 [15],
			, ,	Discontinuous Reception.

9.2.1.26A DSCH ID

Void.

9.2.1.26Aa DSCH Initial Window Size

Void.

9.2.1.26B DSCH Flow Control Information

Void.

9.2.1.26Ba DSCH-RNTI

Void.

#### 9.2.1.26Bb Extended GSM Cell Individual Offset

Extended GSM Cell individual offset is an offset that will be applied by UE to the measurement results for GSM carrier RSSI according to TS 25.331 [16]. It shall be used when the offset exceeds the range of values that can be indicated using the *Cell Individual Offset* IE (Subclause 9.2.1.7).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended GSM Cell Individual			INTEGER (-	Unit in dB. Step size is 1 dB.
Offset			5011	
			1150)	

### 9.2.1.26C FACH Flow Control Information

The FACH Flow Control Information IE provides flow control information for each scheduling priority class for the FACH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
FACH Flow Control Information		116			_	
>FACH Scheduling Priority	М		Scheduling Priority Indicator 9.2.1.51A		-	
>MAC-c/sh SDU Length		1 <maxnr OfMACcsh SDU- Length&gt;</maxnr 			-	
>>MAC-c/sh SDU Length	M	_	9.2.1.34		_	
>FACH Initial Window Size	M		9.2.1.27		_	

Range bound	Explanation
maxNrOfMACcshSDU-Length	Maximum number of different MAC-c/sh SDU lengths.

#### 9.2.1.27 FACH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before an acknowledgement is received from the DRNC.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
FACH Initial Window Size			INTEGER(0255)	Number of frames (MAC-c/sh SDUs).
			.233)	/
				255 = Unlimited number of
				FACH data frames.

#### 9.2.1.28 FACH Priority Indicator

Void

### 9.2.1.28A FN Reporting Indicator

Frame Number reporting indicator.

Indicates if the SFN or CFN shall be included together with the reported measurement value.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
FN reporting indicator			ENUMERAT	
			ED(FN	
			reporting	
			required, FN	
			reporting not	
			required)	

### 9.2.1.29 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH, [TDD – DSCH] for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER	0=Lowest Priority,
			(015)	
			, ,	15=Highest Priority.

### 9.2.1.30 Frame Offset

Frame Offset is the required offset between the dedicated channel downlink transmission frames (CFN, Connection Frame Number) and the broadcast channel frame offset (Cell Frame Number). The Frame Offset is used in the translation between Connection Frame Number (CFN) on Iub/Iur and least significant 8 bits of SFN (System Frame Number) on Uu. The Frame Offset is UE and cell specific.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Offset			INTEGER (0255)	Frames.

### 9.2.1.30A GA Point with Uncertainty

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Uncertainty Code	М		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^k-1)$ .

### 9.2.1.30B GA Ellipsoid Point with Uncertainty Ellipse

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Uncertainty Ellipse	M		9.2.1.68A	
Confidence	М		INTEGER( 0127)	

### 9.2.1.30C GA Ellipsoid Point with Altitude

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Altitude and direction	M		9.2.1.2B	

### 9.2.1.30D GA Ellipsoid Point with Altitude and Uncertainty Ellipsoid

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Geographical Coordinates	M		9.2.1.30F	
Altitude and direction	M		9.2.1.2B	
Uncertainty Ellipse	M		9.2.1.68A	
Uncertainty Altitude	M		INTEGER(	
-			0127)	
Confidence	M		INTEGER(	
			0127)	

# 9.2.1.30E GA Ellipsoid Arc

This IE contains one of the possible descriptions of a Cell Geographical Area.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Geographical Coordinates	M		9.2.1.30F	
Inner radius	M		INTEGER( 02 <sup>16</sup> -1)	The relation between the value (N) and the radius I in meters it describes is 5N≤ r <5(N+1), except for N=2 <sup>16</sup> -1 for which the range is extended to include all grater values of I.
Uncertainty radius	М		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by r = 10x(1.1 <sup>k</sup> -1)
Offset angle	М		INTEGER( 0179)	The relation between the value (N) and the angle (a) in degrees it describes is 2N≤ a <2(N+1).
Included angle	М		INTEGER( 0179)	The relation between the value (N) and the angle (a) in degrees it describes is 2N< a ≤2(N+1).
Confidence	M		INTEGER( 0127)	

### 9.2.1.30F Geographical Coordinates

This IE contains the description of geographical coordinates.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERAT ED(North, South)	
Degrees Of Latitude	М		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>23</sup> X /90 < N+1 X being the latitude in degree (0° 90°).
Degrees Of Longitude	M		INTEGER( -2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>24</sup> X /360 < N+1 X being the longitude in degree (-180°+180°).

# 9.2.1.30Fa GERAN Cell Capability

The GERAN Cell Capability IE is used to transfer the capabilities of a certain GERAN cell via the Iur interface.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
GERAN Cell Capability	M		BIT STRING (16)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: A/Gb mode. The second bit: lu mode. Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.1.30Fb GERAN Classmark

The GERAN Classmark IE is used to transfer the capabilities of a certain GERAN Iu-mode capable cell via the Iur interface.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
GERAN Classmark	М		OCTET STRING	Contents defined in TS 48.008 [38].

### 9.2.1.30Fc GERAN System Information

The GERAN System Information IE provides GERAN specific information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GERAN System Info		1 <maxnrofger ANSI&gt;</maxnrofger 	Kelefelice	
>GERAN System Info Block	М		OCTET STRING (123)	The first octet contains octet 1 of the GERAN system information block, the second octet contains octet 2 of the GERAN system information block and so on.

Range bound	Explanation
maxNrOfGERANSI	Maximum number of GERAN SI blocks that can be provided as
	part of NACC information.

# 9.2.1.30G GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
WNa	M		BIT STRING(8)		_	
Satellite Almanac Information	M	1 <maxn rOfSatAI manac- maxNoS at&gt;</maxn 		See Note 1.	1	
>DataID	М		INTEGER (03)		_	
>SatID	М		SAT ID 9.2.1.50A		-	
>e	M		BIT STRING(16)		-	
>t <sub>oa</sub>	M		BIT STRING(8)		1	
>δi	M		BIT STRING(16)		ı	
>OMEGADOT	M		BIT STRING(16)		ı	
>SV Health	M		BIT STRING(8)		1	
>A <sup>1/2</sup>	M		BIT STRING(24)		1	
>OMEGA <sub>0</sub>	M		BIT STRING(24)		1	
>M <sub>0</sub>	M		BIT STRING(24)		1	
>00	M		BIT STRING(24)		_	
>af <sub>0</sub>	M		BIT STRING(11)		_	
>af <sub>1</sub>	M		BIT STRING(11)		1	
SV Global Health	0		BIT STRING(364)		-	
Complete Almanac Provided	0		BOOLEAN	This field indicates whether almanac is provided for the full GPS constellation or not. TRUE means complete GPS almanac is provided.	YES	ignore
Note 1: This information element is a simplified representation of the ASN.1 description. Repetitions 1 through maxNoSat and repetitions maxNoSat+1 through maxNrOfSatAlmanac-maxNoSat are represented by separate ASN.1 structures with different criticality.						

Range Bound	Explanation
maxNrOfSatAlmanac-maxNoSat	Maximum number of satellite almanacs for which information
	can be provided.

# 9.2.1.30H GPS Ionospheric Model

This IE provides the information regarding the GPS Ionospheric Model. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
$\alpha_0$	M		BIT	
			STRING(8)	
α <sub>1</sub>	M		BIT	
			STRING(8)	
$\alpha_2$	M		BIT	
			STRING(8)	
α <sub>3</sub>	M		BIT	
			STRING(8)	
βο	M		BIT	
•			STRING(8)	
β1	M		BIT	
•			STRING(8)	
$\beta_2$	M		BIT	
•			STRING(8)	
β3	M	•	BIT	
			STRING(8)	

# 9.2.1.30I GPS Navigation Model and Time Recovery

This IE contains subframes 1 to 3 of the GPS navigation message. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxnosat></maxnosat>	11010101100	200011011
>Transmission TOW	M		INTEGER010485	Time of the Week
			75)	when the message is
				broadcast.
>SatID	M		SAT ID	
			9.2.1.50A	
>TLM Message	M		BIT STRING(14)	
>Tlm Revd I	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			DIT 070 (0)	
>SV Health	M		BIT STRING(6)	
>IODC	M		BIT STRING(10)	
>L2 P Data Flag	M		BIT STRING(1)	
>SF 1 Reserved	M		BIT STRING(87)	
>T <sub>GD</sub>	M		BIT STRING(8)	
>t <sub>oc</sub>	M		BIT STRING(16)	
>af <sub>2</sub>	M		BIT STRING(8)	
>af₁	М		BIT STRING(16)	
>af <sub>0</sub>	М		BIT STRING(22)	
>C <sub>rs</sub>	M		BIT STRING(16)	
>∆n	M		BIT STRING(16)	
>M <sub>0</sub>	M		BIT STRING(32)	
>C <sub>uc</sub>	M		BIT STRING(16)	
>e	M		BIT STRING(32)	
>C <sub>us</sub> >(A) <sup>1/2</sup>	M		BIT STRING(16)	
>(A) <sup>1/2</sup>	M		BIT STRING(32)	
>t <sub>oe</sub>	M		BIT STRING(16)	
>Fit Interval Flag	M		BIT STRING(1)	
>AODO	M		BIT STRING(5)	
>C <sub>ic</sub>	M		BIT STRING(16)	
>OMEGA <sub>0</sub>	M		BIT STRING(32)	
>C <sub>is</sub>	M		BIT STRING(16)	
>i <sub>0</sub>	M		BIT STRING(32)	
>C <sub>rc</sub>	M		BIT STRING(16)	
>ω	M		BIT STRING(32)	
>OMEGAdot	M		BIT STRING(24)	
>ldot	M		BIT STRING(14)	
>Spare/zero fill	M		BIT STRING(20)	

Range Bound	Explanation
maxNoSat	Maximum number of satellites for which information can be
	provided.

# 9.2.1.30J GPS Real-Time Integrity

This IE provides the information regarding the status of the GPS constellation. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE Bad Satellites Presence	M			
>Bad Satellites				
>>Satellite Information		1 <maxn< td=""><td></td><td></td></maxn<>		
		oSat>		
>>>BadSatID	M		SAT ID	
			9.2.1.50A	
>No Bad Satellites			NULL	•

Range Bound	Explanation
MaxNoSat	Maximum number of satellites for which information can be
	provided.

### 9.2.1.30K GPS Receiver Geographical Position (GPS RX Pos)

The GPS Receiver Geographical Position is used to identify the geographical coordinates of a GPS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Altitude and direction	М		9.2.1.2B	

#### 9.2.1.30L GPS UTC Model

This IE provides the information regarding the GPS UTC Model. For further details on the meaning of parameters, see ICD-GPS-200 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
A <sub>1</sub>	M		BIT STRING(24)	
A <sub>0</sub>	M		BIT STRING(32)	
tot	M		BIT STRING(8)	
$\Delta t_{LS}$	M		BIT STRING(8)	
WN <sub>t</sub>	M		BIT STRING(8)	
WN <sub>LSF</sub>	M		BIT STRING(8)	
DN	M		BIT STRING(8)	
$\Delta t_{LSF}$	M		BIT STRING(8)	

#### 9.2.1.30M Guaranteed Rate Information

The *Guaranteed Rate Information* IE indicates the TFI corresponding to the guaranteed bit rate for the uplink and/or the downlink of a DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Guaranteed UL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, 
Guaranteed DL Rate	0		INTEGER(1. .maxNrOfTF s)	"1": TFI 0, "2": TFI 1, "3": TFI 2, 

#### 9.2.1.30N HCS Prio

The HCS Prio is the characteristics of the cell as defined in TS 25.304 [15].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HCS Prio			INTEGER	0=Lowest Priority,
			(07)	
				7=Highest Priority.

### 9.2.1.30NA HS-DSCH Information To Modify Unsynchronised

The *HS-DSCH Information To Modify Unsynchronised* IE is used for modification of HS-DSCH information in a UE Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxn rOfMACd Flows&gt;</maxn 			_	
>HS-DSCH MAC-d Flow ID	М	1100032	9.2.1.300		_	
>Allocation/Retention Priority	O		9.2.1.1		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>Traffic Class	0		9.2.1.58A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxn rOfPrioQ ueues&gt;</maxn 			_	
>Priority Queue ID	М	232007	9.2.1.45A		_	
>Scheduling Priority Indicator	Ö		9.2.1.51A		-	
>Discard Timer	0		9.2.1.19C		_	
>MAC-hs Guaranteed Bit Rate	Ō		9.2.1.34Aa		_	
CQI Power Offset	0		9.2.2.24b	For FDD only.	_	
ACK Power Offset	0		9.2.2.b	For FDD only.	_	
NACK Power Offset	0		9.2.2.26a	For FDD only.	_	
HS-SCCH Power Offset	0		9.2.2.19d	For FDD only.	_	
TDD ACK NACK Power Offset	0		9.2.3.71	For TDD only.	_	
HARQ Preamble Mode	0		9.2.2.57	For FDD only.	YES	ignore
MIMO Mode Indicator	0		9.2.1.135	For FDD and 1.28Mcps TDD only.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For FDD only.	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMERAT ED (Abort Enhanced HS Serving CC,)	For FDD only.	YES	reject
UE Support Indicator Extension	0		9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105	For FDD only.	YES	ignore
Single Stream MIMO Mode Indicator	0		9.2.2.107	For FDD only.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Reconfiguration	0	<u> </u>	9.2.2.151	For FDD only	YES	reject

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.

# 9.2.1.30Na HS-DSCH Initial Capacity Allocation

The HS-DSCH Initial Capacity Allocation IE provides flow control information for each scheduling priority class for the HS-DSCH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH Initial Capacity Allocation		1< maxNrOf PrioQueu es>			-	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>Maximum MAC-d PDU Size	М		MAC-d PDU Size 9.2.1.34A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>HS-DSCH Initial Window Size	М		9.2.1.30Nb		_	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	ignore

Range Bound	Explanation
maxNrOfPrioQueues	Maximum number of Priority Queues.

### 9.2.1.30Nb HS-DSCH Initial Window Size

Indicates the initial number of MAC-d PDUs (or octets in case *HS-DSCH MAC-d PDU Size Format* = "Flexible MAC-d PDU Size") that may be transmitted before new credits are received from the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-DSCH Initial Window Size			INTEGER (1255)	Number of MAC-d PDUs If HS-DSCH MAC-d PDU Size Format = "Flexible MAC-d PDU Size" the credit shall be determined in octets: credit (in octets) = Maximum MAC-d PDU Size extended* HS-DSCH Initial Window Size.

### 9.2.1.300 HS-DSCH MAC-d Flow ID

HS-DSCH MAC-d Flow ID is the unique identifier for one MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flow ID			INTEGER (07)	

### 9.2.1.30OA HS-DSCH MAC-d Flows Information

The *HS-DSCH MAC-d Flows Information* IE is used for the establishment of HS-DSCH MAC-d flows for a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1 <maxn rOfMACd</maxn 			_	,
>HS-DSCH MAC-d Flow ID	M	Flows>	9.2.1.300		_	
>Allocation/Retention Priority	М		9.2.1.1		_	
>Traffic Class	M		9.2.1.58A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TrCH Source Statistics Descriptor	0		9.2.1.65		YES	ignore
Priority Queue Information		1 <maxn rOfPrioQ ueues&gt;</maxn 			_	
>Priority Queue ID	M		9.2.1.45A		_	
>Associated HS-DSCH MAC-d Flow	М		HS-DSCH MAC-d Flow ID 9.2.1.30O	The HS-DSCH MAC-d Flow ID shall be one of the flow IDs defined in the HS-DSCH MAC-d Flow Specific Information of this IE. Multiple Priority Queues can be associated with the same HS- DSCH MAC-d Flow ID.		
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>T1	M		9.2.1.54A		_	
>Discard Timer	0		9.2.1.19C		_	
>MAC-hs Window Size >MAC-hs Guaranteed Bit Rate	M O		9.2.1.34C 9.2.1.34Aa		_	
>MAC-d PDU Size Index		1 <maxn rOfPDUIn dexes&gt;</maxn 			_	
>>SID	М		9.2.1.52D	Shall be ignored if Maximum MAC-d PDU Size extended IE is present.	-	
>>MAC-d PDU Size	М		9.2.1.34A	Shall be ignored if Maximum MAC-d PDU Size extended	-	

			IE is present.		
>RLC Mode	М	9.2.1.48D		_	
>Maximum MAC-d PDU	0	MAC PDU		YES	reject
Size extended		Size			
		Extended			
		9.2.1.34D			
>DL RLC PDU Size	0	9.2.1.136		YES	ignore
Format					_
>UE Aggregate Maximum	0	NULL		YES	ignore
Bit Rate Enforcement					-
Indicator					

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.
maxNrOfPDUIndexes	Maximum number of different MAC-d PDU SIDs.

#### 9.2.1.30OB HS-DSCH MAC-d Flows To Delete

The HS-DSCH MAC-d Flows To Delete IE is used for the removal of HS-DSCH MAC-d flows from a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d Flows To Delete		1 <maxnr OfMACdFl ows&gt;</maxnr 		
>HS-DSCH MAC-d Flow ID	М		9.2.1.300	

Range Bound	Explanation
maxNrOfMACdFlows	Maximum number of HS-DSCH MAC-d flows.

#### 9.2.1.30OC HS-DSCH MAC-d PDU Size Format

The *HS-DSCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format used for HS-DSCH. "Indexed MAC-d PDU Size" uses MAC-d PDU sizes based on *SID* IE and *MAC-d PDU Size* IE of *MAC-d PDU Size* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size extended* IE of *Priority Queue Information* IE. The actual MAC-d PDU size is determined as specified in TS 25.425 [32] and TS 25.321 [41].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d PDU Size			ENUMERATED	
Format			(Indexed MAC-d	
			PDU Size, Flexible	
			MAC-d PDU Size)	

### 9.2.1.30Oa HS-DSCH Physical Layer Category

The *HS-DSCH Physical Layer Category* IE defines a set of UE radio access capabilities related to HSDPA, as defined in TS 25.306 [42].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Physical Layer Category			INTEGER (164,)	

### 9.2.1.30P HS-DSCH-RNTI

The HS-DSCH-RNTI is needed for the UE-specific CRC in HS-SCCH and HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH-RNTI			INTEGER (065535)	

# 9.2.1.30Q HS-DSCH Information To Modify

The HS-DSCH Information To Modify IE is used for modification of HS-DSCH information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		0 <maxn rOfMACd Flows&gt;</maxn 			_	
>HS-DSCH MAC-d Flow ID	M		9.2.1.300		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>Traffic Class	0		9.2.1.58A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	-	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
Priority Queue Information		0 <maxn rOfPrioQ ueues&gt;</maxn 			_	
>CHOICE Priority Queue	М				_	
>>Add Priority Queue					_	
>>>Priority Queue ID	М		9.2.1.45A		_	
>>>Associated HS-DSCH MAC-d Flow  >>>Scheduling Priority	M		HS-DSCH MAC-d Flow ID 9.2.1.30O	Shall only refer to a HS- DSCH MAC-d flow already existing in the old configuration. Multiple Priority Queues can be associated with the same HS-DSCH MAC-d Flow ID.	_	
Indicator	IVI		9.2.1.31A		_	
>>>T1	М		9.2.1.54A		_	
>>>Discard Timer	0		9.2.1.19C		_	
>>>MAC-hs Window Size	M		9.2.1.34C		_	
>>>MAC-hs Guaranteed Bit Rate	0		9.2.1.34Aa		_	
>>>MAC-d PDU Size Index		1 <maxn rOfPDUIn dexes&gt;</maxn 			_	
>>>SID	M		9.2.1.52D	Shall be ignored if Maximum MAC-d PDU Size extended IE is present.	-	
>>>>MAC-d PDU Size	M		9.2.1.34A	Shall be ignored if Maximum MAC-d PDU	_	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
			Reference	Size extended		
				IE is present.		
>>>RLC Mode	M		9.2.1.48D		_	
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size Extended			
			9.2.1.34D			
>>>DL RLC PDU Size	0		9.2.1.136		Yes	ignore
Format						3
>>Modify Priority Queue					_	
>>>Priority Queue ID	M		9.2.1.45A	Shall only	_	
				refer to a		
				Priority Queue already		
				existing in the		
				old		
				configuration.		
>>>Scheduling Priority	0		9.2.1.51A		_	
Indicator			0.04.544			
>>>T1 >>>Discard Timer	0		9.2.1.54A		_	
>>> MAC-hs Window Size	0		9.2.1.19C 9.2.1.34C		_	
>>>MAC-hs Guaranteed	0		9.2.1.34Aa		_	
Bit Rate						
>>>MAC-d PDU Size		0 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Index		rOfPDUIn				
>>>SID	M	dexes>	9.2.1.52D	Shall be		
>>>>OID	IVI		9.2.1.320	ignored if	_	
				Maximum		
				MAC-d PDU		
				Size extended		
				IE is present.		
>>>MAC-d PDU Size	M		9.2.1.34A	Shall be	_	
				ignored if <i>Maximum</i>		
				MAC-d PDU		
				Size extended		
				IE is present.		
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size			
			Extended 9.2.1.34D			
>>>DL RLC PDU Size	0		9.2.1.136		Yes	ignore
Format						.9
>>Delete Priority Queue					_	-
>>>Priority Queue ID	M		9.2.1.45A	Shall only	_	
				refer to a Priority Queue		
				already		
				existing in the		
				old		
				configuration.		
MAC-hs Reordering Buffer Size	0		9.2.1.34Ab		_	
for RLC-UM CQI Feedback Cycle k	0		9.2.2.24a	For FDD only.	_	
CQI Repetition Factor	0		9.2.2.24a 9.2.2.24c	For FDD only.	_	
ACK-NACK Repetition Factor	0		9.2.2.a	For FDD only.	_	
CQI Power Offset	0		9.2.2.24b	For FDD only.	_	
ACK Power Offset	0		9.2.2.b	For FDD only.	_	
NACK Power Offset	0		9.2.2.26a	For FDD only.	_	
HS-SCCH Power Offset	0		9.2.2.19d	For FDD only.	_	
HS-SCCH Code Change Grant TDD ACK NACK Power Offset	0		9.2.1.30S 9.2.3.7I	For TDD only.	_	
120 MON NATON I OMEI OIISEL		Ĺ	0.2.0.71	יווט טטו וט טוווע.		

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HARQ Preamble Mode	0		9.2.2.57	For FDD only.	YES	ignore
HS-PDSCH Code Change Grant	0		9.2.1.30W	For FDD only.	YES	ignore
MIMO Mode Indicator	0		9.2.1.135	For FDD and 1.28Mcps TDD only.	YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30O C	-	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For FDD only.	YES	ignore
UE Capabilities Information	0				YES	ignore
>HS-DSCH Physical Layer Category	М		9.2.1.30O a		_	
>1.28 Mcps TDD uplink physical channel capability	0		9.2.3.10D	Applicable to 1.28Mcps TDD only.	YES	ignore
>Number of Supported Carriers	0		ENUMER ATED ( One-one carrier, One-three carrier, Three-three carrier, Tree-six carrier, Tree-six carrier, Six-six carrier, Discontigu ous, Two-Two carrier Discontigu ous, One-Two carrier Contiguous, Two-Two carrier	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier that UE can support at the same time, where " One-three carrier" means the number of supported carrier is one for the uplink, and three for the downlink. One-Two carrier Discontiguous and Two-Two carrier Discontiguous mean that the UE is capable of supporting two non- adjacent carriers. One-Two carrier Contiguous and Two-Two carrier Contiguous mean that the UE is only capable of supporting two adjacent carriers.	YES	reject
>MIMO SF Mode Supported For HS-PDSCH dual stream	0		ENUMER ATED (SF1,	Applicable to 1.28Mcps TDD only.	YES	ignore
>Multi-carrier HS-DSCH Physical Layer Category	0		SF1/SF16) 9.2.1.300 a	Applicable to 1.28Mcps	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>UE TS0 Capability LCR	0		ENUMER ATED (TS0 Capable, TS0 Non- Capable)	Applicable to 1.28Mcps TDD only.	YES	ignore
>UE RF Band Capability LCR	C- NofSupport edCarriers		9.2.3.84	Applicable to 1.28Mcps TDD only.	YES	ignore
Enhanced HS Serving CC Abort	0		ENUMER ATED (Abort Enhanced HS Serving CC,)	For FDD only.	YES	reject
UE Support Indicator Extension	0		9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105	For FDD only.	YES	ignore
Single Stream MIMO Mode Indicator	0		9.2.2.107	For FDD only.	YES	reject
MIMO with four transmit antennas Mode Indicator	0		9.2.2.146	For FDD only	YES	reject
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Reconfiguration	0		9.2.2.151	For FDD only	YES	reject

Condition	Explanation
NofSupportedCarriers	This IE shall be present if the Number of Supported Carriers IE is equal
	to "One-Two carrier Discontiguous" or "Two-Two carrier Discontiguous"
	and the concerned cell and the UE support more than one RF band.

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfPrioQueues	Maximum number of Priority Queues.
maxNrOfPDUIndexes	Maximum number of MAC-d PDU Size Indexes (SIDs).

### 9.2.1.30R HS-SCCH Code Change Indicator

The HS-SCCH Code Change Indicator indicates whether the HS-SCCH Code change is needed or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-SCCH Code Change			ENUMERAT	
Indicator			ED (HS-	
			SCCH Code	
			Change	
			needed)	

### 9.2.1.30S HS-SCCH Code Change Grant

The HS-SCCH Code Change Grant IE indicates that modification of HS-SCCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-SCCH Code Change			ENUMERAT	
Grant			ED(Change	
			Granted)	

### 9.2.1.30T IMEI

The IMEI is a permanent UE Equipment Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMEI			OCTET STRING (SIZE (8))	- hexadecimal digits 0 to F, two hexadecimal digits per octet, - each hexadecimal digit encoded 0000 to 1111, - 1111 used as filler for bits 8 to 5 of last octet bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2n.  Number of hexadecimal digits shall be 15.

#### 9.2.1.30U IMEISV

The IMEISV is a permanent UE Equipment Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMEISV			OCTET STRING (SIZE (8))	- hexadecimal digits 0 to F, two hexadecimal digits per octet, - each hexadecimal digit encoded 0000 to 1111, - 1111 used as filler for bits 8 to 5 of last octet bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2n.
				Number of hexadecimal digits shall be 16.

# 9.2.1.30V HS-PDSCH Code Change Indicator [FDD]

The HS-PDSCH Code Change Indicator indicates whether the HS-PDSCH Code change is needed or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
HS-PDSCH Code Change			ENUMERATED (HS-	
Indicator			PDSCH Code	
			Change needed)	

### 9.2.1.30W HS-PDSCH Code Change Grant [FDD]

The HS-PDSCH Code Change Grant IE indicates that modification of HS-PDSCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH Code Change			ENUMERATED(Chan	
Grant			ge Granted)	

### 9.2.1.31 IMSI

The IMSI is the permanent UE user Identity, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMSI			OCTET STRING (SIZE(38))	-Decimal digits coded in BCD"1111" used as fillerbit 4 to 1 of octet n is encoding digit 2n-1bit 8 to 5 of octet n is encoding digit 2n.

### 9.2.1.31A Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	М		INTEGER(0 2^20-1)	

### 9.2.1.31B Information Exchange Object Type

Void.

### 9.2.1.31C Information Report Characteristics

The information report characteristics define how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Information Report Characteristics Type	M			
>On Demand			NULL	
>Periodic				
>>CHOICE Information Report Periodicity Scale	M			The frequency with which the Node B shall send information reports.
>>>minute				
>>>Report Periodicity Value	M		INTEGER (160,)	
>>>hour				
>>>Report Periodicity Value	M		INTEGER (124,)	
>On Modification				
>>Information Threshold	0		9.2.1.31D	

### 9.2.1.31D Information Threshold

The Information Threshold indicates which kind of information shall trigger the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Information Type Item	M				_	
>DGPS Corrections						
>>PRC Deviation	M		ENUMERATED( 1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report.	_	
>DGANSS						
>>PRC Deviation	М		ENUMERATED (1, 2, 5, 10,)	PRC deviation in meters from the previously reported value, which shall trigger a report.	_	

# 9.2.1.31E Information Type

The Information Type indicates which kind of information the RNS shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Information Type Item	M		ENUMERATED (UTRAN Access Point Position with Altitude, UTRAN Access Point Position, IPDL Parameters, GPS Information, DGPS Corrections, GPS RX Pos, SFN-SFN Measurement Reference Point Position,, Cell Capacity Class, NACC Related Data, MBMS Bearer Service Full Address, Inter-frequency Cell Information, GANSS Information, DGANSS Corrections, GANSS RX Pos, MBMS Counting Information, MBMS Transmission Mode, MBMS Neighbouring Cell Information, MBMS RLC Sequence Number, ANR Cell Information, Common E- RGCH Cell Information)	For information exchange on the lur-g interface, only the Cell Capacity Class is used.  MBMS Counting Information, MBMS Transmission Mode, MBMS Neighbouring Cell Information and MBMS RLC Sequence Numbe shall only be used by FDD.		
GPS Information	C-GPS	1 <max NoGPST ypes&gt;</max 			_	
>GPS Information Item			ENUMERATED (GPS Navigation Model and Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity,)		_	
GANSS Information	C-GANSS		,		YES	Ignore
>GANSS Common Data		01			_	
>>Ionospheric Model	0		BOOLEAN	True means requested.	_	
>>Additional lonospheric Model	0		Additional lonospheric Model Request 9.2.1.122d	Presence means requested.	YES	Ignore

>>Earth	0		Earth Orientation		YES	Ignore
Orientation Parameters			Parameters Request			
			9.2.1.122e			
>GANSS Generic Data		0 <max NoGANS S&gt;</max 			-	
>>GANSS ID	0		9.2.1.119		_	
>>GANSS	0		BOOLEAN	True means	_	
Navigation				requested.		
Model And Time						
Recovery >>GANSS Time	0		BIT STRING(9)	Defines the time		
Model GNSS-			BIT STRING(9)	model required.	_	
GNSS				model required.		
				Bit 1 is the MSB and		
				bit 9 is the LSB (see		
				section 9.2.0).		
				D:: 4 ODO		
				Bit 1:GPS,		
				Bit 2:Galileo, Bit 3:QZSS,		
				Bit 4:GLONASS.		
				Other bits are		
0.45100.1170			20012411	reserved.		
>>GANSS UTC Model	0		BOOLEAN	True means requested.	_	
>>GANSS	0		BOOLEAN	True means		
Almanac			20022741	requested.		
>>GANSS Real	0		BOOLEAN	True means	_	
Time Integrity				requested.		
>>GANSS Data		01			_	
Bit Assistance >>>GANSS	M		INTEGER	The GANSS Time Of		
TOD			(086399)	Day for which the		
				data bits are		
D. ( . D')				requested.		
>>>Data Bit Assistance		1			_	
>>>DGANS	М		BIT STRING(8)	Defined in TS 25.331	_	
S Signal ID			,	[16].		
>>>GANSS	М		INTEGER (015)	Defined in TS 25.331	_	
Data Bit				[16].		
Interval >>>>Satellite		0				
Information		0 <max GANSS</max 			_	
mormation		Sat>				
>>>Sat ID	М		INTEGER(063)	Identifies the satellite	_	
				and is equal to (SV ID		
L CANICO			CANCO	No – 1).	VEC	less ser-
>>GANSS Additional	0		GANSS Additional		YES	Ignore
Navigation			Navigation			
Models And			Models And			
Time Recovery			Time Recovery			
			Request			
0.11100			9.2.1.122f		\/=c	<u> </u>
>>GANSS Additional UTC	0		GANSS Additional UTC		YES	Ignore
Models			Models Request			
540.0			9.2.1.122g			
>>GANSS	0		GANSS Auxiliary		YES	Ignore
Auxiliary			Information			
Information			Request			
>>SBAS ID	C-GANSS-		9.2.1.122h 9.2.1.122b		YES	Ignore
55, 15 15	ID					.9.1070

DGANSS Corrections Req	C- DGANSS Correction s	1			YES	ignore
>DGANSS Signal ID	М		BIT STRING(8)	Defined in TS 25.331 [16].	-	
>GANSS ID	0		9.2.1.119		YES	Ignore
MBMS RLC Sequence Number Information	C- MBMSRL CSequenc eNumber			FDD only.	YES	Ignore
>MBMS Cell List		1 <max NrOfCel Is&gt;</max 			-	
>>C-ID	M		9.2.1.6		_	
>>MBMS Bearer Service List		1 <max NrOfMB MSServi ces&gt;</max 			1	
>>>TMGI	М		9.2.1.80		_	
>>>Time Stamp	М		9.2.2.98		_	

Condition	Explanation
DGANSSCorrections	The IE shall be present if the Information Type Item IE
	indicates "DGANSS Corrections".
GPS	This IE shall be present if the Information Type Item IE
	indicates "GPS Information".
GANSS	This IE shall be present if the Information Type Item IE
	indicates "GANSS Information".
GANSS-ID	This IE shall be present if the GANSS ID IE indicates "SBAS".
MBMSRLCSequenceNumber	This IE shall be present if the Information Type Item IE
	indicates " MBMS RLC Sequence Number ".

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the
	IE.
maxNoGPSTypes	Maximum number of GPS Information Types supported in one
	Information Exchange.
maxNoGANSS	Maximum number of GANSS Systems.
maxNrOfMBMSServices	Maximum number of MBMS bearer services that a UE can
	join.
MaxNrOfCells	Maximum number of cells that can be indicated in the
	corresponding IE.

### 9.2.1.31F IPDL Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE IPDL Parameters					-	
>IPDL FDD Parameters						
>>IPDL FDD parameters	M		9.2.2.21B		_	
>IPDL TDD Parameters				Applicable to 3.84Mcps TDD and 7.68Mcps TDD only.		
>>IPDL TDD parameters	M		9.2.3.4B		_	
>Additional IPDL Parameters						
>>IPDL TDD Parameters LCR				Applicable to 1.28Mcps TDD only.	_	
>>>IPDL TDD parameters LCR	М		9.2.3.4Bb		YES	reject

# 9.2.1.31G Inter-frequency Cell Information

This IE contains the inter-frequency cell information of a cell in the DRNS broadcased in SIB11 or SIB12.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIB11		02		
>Inter-frequency Cell Indication- SIB11	M		Integer(01)	Value tag in 10.3.7.45 in TS 25.331 [16] with the same IE name.
>Inter-frequency Cell List in SIB11		0 <maxcellsib11 OrSIB12&gt;</maxcellsib11 		
>>Inter-frequency Cell Id	M		Integer(031)	The order of the inter- frequency cell in SIB11.
>>DL UARFCN	M		UARFCN 9.2.1.66	
>>UL UARFCN	0		UARFCN 9.2.1.66	If this IE is not present, the default duplex distance defined for the operating frequency band shall be used (TS 25.101 [43]).
>>Primary Scrambling Code	М		9.2.1.45	
SIB12		02		
>Inter-frequency Cell Indication- SIB12	М			Value tag in 10.3.7.45 in TS 25.331 [16] with the same IE name.
>Inter-frequency Cell List in SIB12		0 <maxcellsib11 OrSIB12&gt;</maxcellsib11 		
>>Inter-frequency Cell Id			Integer(031)	The order of the inter- frequency cell in SIB12.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>UL UARFCN	0		UARFCN 9.2.1.66	If this IE is not present, the default duplex distance defined for the operating frequency band shall be used (TS 25.101 [43]).
>>Primary Scrambling Code	M		9.2.1.45	

Range bound	Explanation
maxCellSIB11OrSIB12	Maximum number of inter-frequency cells broadcased in SIB11 or
	SIB12.

#### 9.2.1.32 L3 Information

This parameter contains the Layer 3 Information from a Uu message as received from the UE over the Uu interface or the Layer 3 Information for a Uu message to be sent to a UE by the DRNC, as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
L3 Information			BIT STRING	The content is defined in TS 25.331 [16].

#### 9.2.1.33 Limited Power Increase

Void.

#### 9.2.1.33A Load Value

The *Load Value* IE contains the total load on the measured object relative to the maximum planned load for both the uplink and downlink. It is defined as the load percentage of the Cell Capacity Class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink Load Value	M		INTEGER(0100)	Value 0 shall indicate the minimum load, and 100 shall indicate the maximum load. Load should be measured on a linear scale.
Downlink Load Value	M		INTEGER(0100)	Value 0 shall indicate the minimum load, and 100 shall indicate the maximum load. Load should be measured on a linear scale.

### 9.2.1.34 MAC-c/sh SDU Length

Indicates the MAC-c/sh SDU Length. Which is used for FACH, [TDD – DSCH and USCH]. There may be multiple MAC-c/sh SDU Lengths per priority class.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-c/sh SDU Length			INTEGER(15000)	Size of the MAC-c/sh SDU in number of bits.

#### 9.2.1.34A MAC-d PDU Size

The MAC-d PDU Size IE provides the size in bits of the MAC-d PDU.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-d PDU Size			INTEGER (15000)	In case of E-DCH, value 8 and values not multiple of 8
			(10000,)	shall not be used.

#### 9.2.1.34Aa MAC-hs Guaranteed Bit Rate

The MAC-hs Guaranteed Bit Rate IE indicates the guaranteed number of bits per second that Node B should deliver over the air interface under normal operating conditions (provided there is data to deliver). If the MAC-hs Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-hs Guaranteed Bit			INTEGER (02^24-1,,	Unit: bit/s.
Rate			2^241,000,000,000)	

### 9.2.1.34Ab MAC-hs Reordering Buffer Size for RLC-UM

The *MAC-hs Reordering Buffer Size for RLC-UM* IE indicates the portion of the buffer in the UE that can be used for RLC-UM traffic (i.e. for Priority Queues whose *RLC Mode* IE is set to "RLC-UM").

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reordering Buffer			INTEGER	Unit: kBytes
Size for RLC-UM			(0300,)	And N kBytes = N*1024
				Bytes.
				The DRNS shall use this
				value to avoid the overflow of the UE buffer.

#### 9.2.1.34B MAC-hs Reset Indicator

The MAC-hs Reset Indicator IE indicates that a reset of the MAC-hs is not required.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
MAC-hs Reset Indicator			ENUMERATED	
			(MAC-hs	
			Not Reset)	

#### 9.2.1.34C MAC-hs Window Size

The MAC-hs Window Size IE is used for MAC-hs/MAC-ehs PDU retransmission as defined in TS 25.321 [41]. [FDD – the values 64, 128 and 256 is only allowed when the MAC header type is MAC-ehs and under conditions defined in TS 25.425 [32]].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-hs Window Size			ENUMERAT ED (4, 6, 8, 12, 16, 24, 32,64, 128, 256)	

### 9.2.1.34D MAC PDU Size Extended

The MAC PDU Size Extended IE provides the size in octets of the MAC level PDU when an extended MAC level PDU size is required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC PDU Size Extended			INTEGER (11504,,1505)	In case of E-DCH, value 1 shall not be used.

#### 9.2.1.35 Maximum Allowed UL Tx Power

Maximum Allowed UL Tx Power is the maximum power that a UE in a particular cell is allowed to transmit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Allowed UL Tx Power			INTEGER(- 50+33)	dBm.

### 9.2.1.35A Measurement Availability Indicator

Void

### 9.2.1.35B Measurement Change Time

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Change Time	M		INTEGER	Unit: ms
_			(16000,)	Range: 1060000 ms.
			·	Step: 10 ms.

#### 9.2.1.36 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Filter			ENUMERAT	
Coefficient			ED(0, 1, 2,	
			3, 4, 5, 6, 7,	
			8, 9, 11, 13,	
			15, 17,	
			19,)	

#### 9.2.1.36A Measurement Hysteresis Time

The Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the Measurement Reporting procedure to be triggered.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Hysteresis Time			INTEGER	Unit: ms
			(16000,)	Range: 1060000 ms.
				Step: 10 ms.

### 9.2.1.37 Measurement ID

The Measurement ID uniquely identifies a dedicated measurement within a UE Context or a common measurement within a Distant RNC Context [TDD – or a UE measurement within a UE Context].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement ID			INTEGER(0	
			2^20-1)	

#### 9.2.1.38 Measurement Increase/Decrease Threshold

 $The\ Measurement\ Increase/Decrease\ Threshold\ defines\ the\ threshold\ that\ shall\ trigger\ Event\ C\ or\ D.$ 

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Increase/Decrease	М			J. J	_	
Threshold						
<i>&gt;SIR</i> >>SIR	M		INTEGER(062)	0: 0 dB 1: 0.5 dB 2: 1 dB	_	
				62: 31dB		
>SIR Error				FDD Only		
>>SIR Error	M		INTEGER(0124 )	0: 0 dB 1: 0.5 dB 2: 1 dB  124: 62 dB	_	
>Transmitted Code Power				124. 02 UB		
>>Transmitted Code Power	М		INTEGER(0112 ,)	0: 0 dB 1: 0.5 dB 2: 1 dB	-	
				112: 56 dB		
>RSCP >>RSCP	M		INTEGER(0126	TDD Only 0: 0 dB 1: 0.5 dB 2: 1 dB	_	
				 126: 63 dB		
>Round Trip Time			1117777	FDD Only		
>>Round Trip Time	M		INTEGER(0327 66)	0: 0 chips 1: 0.0625 chips 2: 0.1250 chips  32766: 2047.875 chips	_	
>Additional Measurement Thresholds				Спр		
>>Load						
>>>Load	M		INTEGER(0100 )	Units are the same as for the Uplink Load Value IE and Downlink Load Value IE.	_	
>>Transmitted						
Carrier Power >>>Transmitted Carrier Power	M		INTEGER(0100 )	According to mapping in TS 25.133 [23] and TS 25.123 [24].	YES	reject
>>Received Total Wide Band Power						
>>>Received Total Wide Band Power	М		INTEGER(0620 )	0: 0dB 1: 0.1dB 2: 0.2dB	YES	reject
>>UL Timeslot ISCP				620: 62dB TDD Only		
>>>UL Timeslot ISCP	M		INTEGER(0126	0: 0dB 1: 0.5dB 2: 1dB	YES	reject
				 126: 63dB		

>>RT Load					
>>>RT Load	М	INTEGER(0100 )	Units are the same as for the <i>Uplink RT</i> <i>Load Value</i> IE and <i>Downlink RT Load</i> <i>Value</i> IE.	YES	reject
>>NRT Load Information					
>>>NRT Load Information	M	INTEGER(03)		YES	reject
>>UpPTS interference			1.28Mcps TDD Only.		
>>>UpPTS interference Value	М	INTEGER (0127,)	According to mapping in TS 25.123 [24].	YES	reject

# 9.2.1.38A Measurement Recovery Behavior

This IE controls the Measurement Recovery Behavior.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery			NULL	
Behavior				

# 9.2.1.38B Measurement Recovery Reporting Indicator

This IE indicates the Measurement Recovery Reporting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Reporting Indicator			NULL	

### 9.2.1.38C Measurement Recovery Support Indicator

This IE indicates the Measurement Recovery Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Support Indicator			NULL	

### 9.2.1.39 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE				•	-	-
Measurement						
Threshold						
>SIR						
>>SIR	М		INTEGER(063)	According to mapping	_	
				in TS 25.133 [23] and		
				TS 25.123 [24].		
>SIR Error				FDD Only		
>>SIR Error	M		INTEGER(0125	According to mapping	_	
			)	in TS 25.133 [23].		
>Transmitted						
Carrier Power						
>>Transmitted	M		INTEGER(0127	According to mapping	_	
Code Power			)	in TS 25.133 [23] and		
				TS 25.123 [24].		
>RSCP				TDD Only.		
>>RSCP	M		INTEGER(0127	According to mapping	_	
			)	in TS 25.123 [24].		
>Rx Timing				Applicable to		
Deviation				3.84Mcps TDD Only.		
>>Rx Timing	M		INTEGER(0819	According to mapping	_	
Deviation			1)	in TS 25.123 [24].		
>Round Trip Time				FDD Only.		
>>Round Trip	М		INTEGER(0327	According to mapping	_	
Time			67)	in TS 25.133 [23].		
>Additional						
Measurement						
Thresholds						
>>Tutran-gps					YES	reject
Measurement						
Threshold						
Information						
>>>Tutran-gps	М		9.2.1.59C		_	
Measurement						
Threshold						
Information						
>>SFN-SFN					YES	reject
Measurement						
Threshold						
Information						
>>>SFN-SFN	М		9.2.1.52B		_	
Measurement						
Threshold						
Information						
>>Load					YES	reject
>>>Load	М		INTEGER(0100	0 is the minimum	_	
· <del>-</del>	1		)	indicated load, and		
			<b>'</b>	100 is the maximum		
				indicated load.		
>>Transmitted					YES	reject
Carrier Power	<u> </u>	<u> </u>			<u></u>	
>>>Transmitted	М		INTEGER(0100	According to mapping	_	
Carrier Power			)	in TS 25.133 [23] and		
	<u> </u>			TS 25.123 [24].		
>>Received					YES	reject
Total Wide Band	1					
Power	<u> </u>					
>>>Received	М		INTEGER(0621	According to mapping	_	
Total Wide			)	in TS 25.133 [23] and		
Band Power	<u>                                      </u>	<u> </u>		TS 25.123 [24].	<u></u>	
>>UL Timeslot				TDD Only.	YES	reject
ISCP	<u>                                      </u>	<u> </u>		,	<u></u>	
>>>UL	М		INTEGER(0127	According to mapping	_	
Timeslot ISCP			)	in TS 25.123 [24].		
>>RT Load					YES	reject

>>>RT Load	М	INTEGER(0100		_	
>>NRT Load		)		YES	reject
Information					1
>>>NRT Load	M	INTEGER(03)		_	
Information					
			Applicable to	YES	reject
>>Rx Timing			1.28Mcps TDD Only.		
Deviation LCR					
>>>Rx Timing	M	INTEGER(0511	According to mapping	_	
Deviation LCR		)	in TS 25.123 [24].		
>>HS-SICH			Applicable to TDD	YES	reject
reception quality			Only.		
>>>HS-SICH	M	INTEGER (020)	According to mapping	_	
reception			in TS 25.123 [24].		
quality					
>>UpPTS			1.28Mcps TDD Only.	YES	reject
interference	1.4	INITEGES	1		
>>>UpPTS	M	INTEGER	According to mapping	_	
interference		(0127,)	in TS 25.123 [24].		
Value .			A 11 11 1	\/=0	
>>Rx Timing			Applicable to	YES	reject
Deviation 768	N 4	INTEGED/O OFF	7.68Mcps TDD Only.		
>>>Rx Timing	M	INTEGER(0655	According to mapping	_	
Deviation 768		35)	in TS 25.123 [24].	VEC	
>>Rx Timing Deviation 384			Applicable to 3.84Mcps TDD Only.	YES	reject
Extended			3.64 Micps 100 Offity.		
>>>Rx Timing	M	INTEGER(0327	According to mapping	_	
Deviation 384	IVI	67)	in TS 25.123 [24].	_	
Extended		01)	111 10 23.123 [24].		
>>Extended			FDD Only.	YES	reject
Round Trip Time			1 22 31y.	120	10,000
>>>Extended	М	INTEGER	Continuation of	_	
Round Trip	"	(32767103041)	intervals with step		
Time Value		(0_10111100111)	size as defined in TS		
			25.133 [23].		
>> Tutran-ganss				YES	reject
Measurement					
Threshold					
Information					
>>>T <sub>UTRAN</sub> -	M	9.2.1.113		_	
GANSS					
Measurement					
Threshold					
Information				\/==	
>>UE				YES	reject
transmission					
power headroom	N.4	INITEGED (0.04)	A		
>>>UE	M	INTEGER (031)	According to mapping	_	_
transmission			in TS 25.133 [23] and		
power			TS 25.123 [24].		
headroom					

### 9.2.1.39A Message Structure

The *Message Structure* IE gives information for each level with assigned criticality in an hierarchical message structure from top level down to the lowest level above the reported level for the occurred error (reported in the *Information Element Criticality Diagnostics* IE).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message structure		1 <maxnr OfLevels&gt;</maxnr 		The first repetition of the Message Structure IE corresponds to the top level of the message. The last repetition of the Message Structure IE corresponds to the level above the reported level for the occurred error of the message.	-	
>IE ID	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 hierarchical message structure of IEs with assigned criticality above them.	_	

Range bound	Explanation
maxNrOfLevels	Maximum no. of message levels to report. The value for
	maxNrOfLevels is 256.

# 9.2.1.40 Message Type

The Message Type uniquely identifies the message being sent.

>Procedure ID >Procedure Code		IE Type and Reference	Semantics Description
>Procedure Code   N	1		
	M 1		"0" = Common Transport Channel Resources Initialisation. "1" = Common Transport Channel Resources Release. "2" = Compressed Mode Command. "3" = Downlink Power Control. "4" = Downlink Power Timeslot Control. "5" = Downlink Signalling Transfer. "6" = Error Indication. "7" = Dedicated Measurement Failure. "8" = Dedicated Measurement Reporting. "10" = Dedicated Measurement Termination. "11" = Paging. "10" = Dedicated Measurement Termination. "11" = Paging. "12" = Physical Channel Reconfiguration. "14" = Radio Link Addition. "15" = Radio Link Failure. "17" = Radio Link Failure. "17" = Radio Link Restoration. "19" = Radio Link Restoration. "19" = Radio Link Setup. "20" = Relocation Commit. "21" = Synchronised Radio Link Reconfiguration Cancellation. "22" = Synchronised Radio Link Reconfiguration Commit. "23" = Synchronised Radio Link Reconfiguration Preparation. "24" = UnSynchronised Radio Link Reconfiguration Preparation. "25" = Uplink Signalling Transfer. "26" = Common Measurement Failure. "27" = Common Measurement Initiation. "28" = Common Measurement Failure. "27" = Common Measurement Termination. "30" = Information Exchange Failure. "31" = Information Exchange Failure. "31" = Information Exchange Failure. "32" = Radio Link Congestion. "32" = Radio Link Congestion. "33" = Reset. "36" = Radio Link Activation. "37" = GERAN Uplink Signalling Transfer. "38" = Radio Link Parameter Update. "39" = UE Measurement Failure. "40" = UE Measurement Failure. "40" = UE Measurement Failure. "41" = UE Measurement Reporting. "42" = UE Measurement Failure. "43" = UE Measurement Failure. "44" = UE Measurement Failure. "45" = MBMS Attach. "46" = MBMS Detach.

			"54" = Secondary UL Frequency Reporting. "55" = Secondary UL Frequency Update. "56" = Information Transfer Control. "60" = Enhanced Relocation Resource Allocation. "61" = Enhanced Relocation Resource Release.
>Ddmode	М	ENUMERATED(FDI TDD, Common,	, I
Type of Message	М	ENUMERATED(Initi ng Message, Successful Outcome, Unsuccessful Outcome, Outcome	ati

# 9.2.1.41 Multiple URAs Indicator

The Multiple URAs Indicator indicates whether the accessed cell has multiple URAs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiple URAs Indicator			ENUMERAT	
			ED(Multiple	
			URA s exist,	
			Single URA	
			Exists)	

## 9.2.1.41a NACC Related Data

The NACC related data IE provides NACC related information for the indicated GSM cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE GERAN System Info Type	М			
>SI				
>>SI	M		9.2.1.30Fc	GERAN system information SI3, SI13, SI1 (TS 44.060 [47]).
>PSI				
>>PSI	M		9.2.1.30Fc	GERAN system information PSI1, PSI2, PSI4 (TS 44.060 [47]).

# 9.2.1.41A Neighbouring UMTS Cell Information

The *Neighbouring UMTS Cell Information* IE provides information for UMTS Cells that are neighbouring cells to a cell in the DRNC. The neighbouring cell information is provided for each RNC (including the DRNC) that has cells that are neighbouring cells to the cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring UMTS Cell Information		1 <maxnro fNeighbouri ngRNCs&gt;</maxnro 			EACH	ignore
>RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the Neighbourin g UMTS Cell Information IE, the RNC-ID IE shall be ignored.	-	
>CN PS Domain Identifier	0		9.2.1.12		_	
>CN CS Domain Identifier	0		9.2.1.11		_	
>Neighbouring FDD Cell Information	0		9.2.1.41B		_	
>Neighbouring TDD Cell Information	0		9.2.1.41D		_	
>Neighbouring TDD Cell Information LCR	0		9.2.1.72		YES	ignore
>Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxNrOfNeighbouringRNCs	Maximum number of neighbouring RNCs.

# 9.2.1.41B Neighbouring FDD Cell Information

The *Neighbouring FDD Cell Information* IE provides information for FDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring FDD Cell Information		1 <max NrOfFD DNeighb oursPer RNC&gt;</max 			-	
>C-ID	M		9.2.1.6		_	
>UL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].	_	
>DL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].	_	
>Frame Offset	0		9.2.1.30		_	
>Primary Scrambling Code	M		9.2.1.45		_	
>Primary CPICH Power	0		9.2.1.44		_	
>Cell Individual Offset	0		9.2.1.7		_	
>Tx Diversity Indicator	M		9.2.2.50			
>STTD Support Indicator	0		9.2.2.45		_	
>Closed Loop Mode1 Support Indicator	0		9.2.2.2		_	
>Not Used	0		NULL		_	
>Restriction State Indicator	0		9.2.1.48C		YES	ignore
>DPC Mode Change Support Indicator	0		9.2.2.56		YES	ignore
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container FDD	0		9.2.2.D		YES	ignore
>SNA Information	0		9.2.1.52Ca		YES	ignore
>Frequency Band Indicator	0		9.2.2.59		YES	ignore
>Max UE DTX Cycle	C-CPC- DTX- DRXCapab le		9.2.2.87		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore
>Secondary Serving Cell List	C-MC- Capable		9.2.2.101		YES	ignore
>Dual Band Secondary Serving Cell List	C-DB- Capable		Secondary Serving Cell List 9.2.2.101		YES	ignore
>Cell Capability Container Extension FDD	0		9.2.2.123		YES	ignore
>Cell List Validity Indicator	0		ENUMERAT ED (Ignore Secondary Serving Cell List, Ignore Dual Band Secondary Serving Cell List, Ignore Both)		YES	ignore

Range bound	Explanation		
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.		

Condition	Explanation			
CPC-DTX-DRXCapable	The IE shall be present if the the fifteenth bit Continuous Packet			
	Connectivity DTX-DRX Support Indicator in the Cell Capability Container			
	FDD IE is set to the value "1".			
MC-Capable	The IE shall be present if the the Multi Cell Support Indicator in the Cell			
	Capability Container FDD IE is set to the value "1".			
DB-Capable	The IE shall be present if the the Dual Band Support Indicator in the Cell			
	Capability Container FDD IE is set to the value "1".			

# 9.2.1.41C Neighbouring GSM Cell Information

The *Neighbouring GSM Cell Information* IE provides information for all GSM Cells that are a neighbouring cell to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring GSM Cell Information		1 <max NrOfGS MNeighb oursPer RNC&gt;</max 			GLOBAL	ignore
>CGI		1		Cell Global Identity as defined in TS 23.003 [1].	_	
>>LAI		1		20.000 [.].	_	
>>>PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2nThe PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).		
>>>LAC	М		OCTET STRING (2)	0000 and FFFE not allowed.	_	
>>CI	М		OCTET STRING (2)		_	
>Cell Individual Offset	0	1	9.2.1.7	The Cell Individual Offset to be used for Ues using DCHs. If the Extended GSM Cell Individual Offset IE is present, the Cell Individual Offset IE shall be set to a) -10dB if the Extended GSM Cell Individual Offset IE is < -10dB and b) 10dB if the Extended GSM Cell Individual Offset IE is > 10dB. Base Station Identity	-	
>BSIC		1		Base Station Identity Code as defined in TS 23.003 [1].	_	
>>NCC	M		BIT STRING(3)	Network Colour Code.	_	
>>BCC	М		BIT STRING(3)	Base Station Colour Code.	-	
>Band Indicator	M		ENUMERAT ED(DCS 1800 band, PCS 1900 band,)	Indicates whether or not the BCCH ARFCN belongs to the 1800 band or 1900 band of GSM frequencies.	-	
>BCCH ARFCN	М		INTEGER(01023)	BCCH Frequency as defined in TS 45.005 [69].	-	
>Coverage Indicator	0		9.2.1.12G		YES	ignore

>Antenna Co-location	0	9.2.1.2C		YES	ignore
Indicator					
>HCS Prio	0	9.2.1.30N		YES	ignore
> SNA Information	0	9.2.1.52Ca		YES	ignore
>GERAN Cell Capability	0	9.2.1.30Fa		YES	ignore
>GERAN Classmark	0	9.2.1.30Fb		YES	ignore
>Extended GSM Cell Individual Offset	0	9.2.1.26Bb	The Extended GSM Cell Individual Offset to be used for Ues using DCHs, for values that exceed the range of the Cell Individual Offset IE.	YES	ignore

Range bound	Explanation		
maxNrOfGSMNeighboursPerRNC	Maximum number of neighbouring GSM cells for one cell.		

# 9.2.1.41D Neighbouring TDD Cell Information

The *Neighbouring TDD Cell Information* IE provides information for 3.84Mcps TDD or 7.68Mcps TDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information		1 <maxnr OfTDDNeig hboursPerR NC&gt;</maxnr 			-	
>C-ID	M		9.2.1.6		_	
>UARFCN	M		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Frame Offset	0		9.2.1.30		_	
>Cell Parameter ID	M		9.2.1.8		_	
>Sync Case	M		9.2.1.54		_	
>Time Slot For SCH	C-Case1		Time Slot 9.2.1.56		_	
>SCH Time Slot	C-Case2		9.2.1.51		_	
>SCTD Indicator	M		9.2.1.78		_	
>Cell Individual Offset	0		9.2.1.7		_	
>DPCH Constant Value	0		9.2.1.23		_	
>PCCPCH Power	0		9.2.1.43		_	
>Restriction State Indicator	0		9.2.1.48C		YES	ignore
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container TDD	0		9.2.3.1a		YES	ignore
>Cell Capability Container 7.68Mcps TDD	0		9.2.3.31		YES	ignore
> SNA Information	0		9.2.1.52Ca		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore

Condition	Explanation				
Case1	The IE shall be present if the Sync Case IE is set to "Case1".				
Case2	The IE shall be present if the Sync Case IE is set to "Case2".				

Range bound	Explanation
maxNrOfTDDNeighboursPerRNC	Maximum number of neighbouring 3.84Mcps TDD or 7.68Mcps TDD
	cell for one cell.

# 9.2.1.41Dd Neighbouring TDD Cell Measurement Information LCR

This IE provides information on the 1.28Mcps TDD neighbouring cells used for the purpose of Measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time slot LCR* IE and *Midamble shift LCR* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UTRAN Cell Identifier	M		9.2.1.71	
UARFCN	M		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	M		9.2.1.8	
Time Slot LCR	0		9.2.3.12a	
Midamble shift LCR	0		9.2.3.4C	

# 9.2.1.41De Neighbouring E-UTRA Cell Information

The *Neighbouring E-UTRA Cell Information* IE provides information for all E-UTRA Cells that are a neighbouring cell to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring E-UTRA Cell Information		1 <max NrOfEU TRANeig hboursP erRNC &gt;</max 			-	
>ECGI		1		EUTRAN Cell Global Identity as defined in TS 36.401 [61].	-	
>>PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).	_	
>>E-UTRAN Cell Identifier	М		BIT STRING (28)	The leftmost bits of the E-UTRAN Cell Identifier IE value correspond to the value of the eNB ID.	1	
>CHOICE EARFCN Information	M				1	
>>FDD						
>>>EARFCN-FDD >>>UL EARFCN	M	1	9.2.1.41Df	Corresponds to NuL	_	
>>>DL EARFCN	M		9.2.1.41Df EARFCN	in TS 36.104 [62].  Corresponds to NdL in TS 36.104 [62].	_	
>>TDD			LAKI ON	111 10 30.104 [02].		
>>>EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NdL in TS 36.104 [62].	-	
>>FDD-Extended				This choice is only used when atleast one the EARFCN's need to use the extended coding.		
>>>EARFCN-FDD- Extended		1			YES	ignore
>>>UL EARFCN	M		9.2.1.41Dg EARFCN- Extended	Corresponds to NuL in TS 36.104 [62]	_	
>>>DL EARFCN	М		9.2.1.41Dg EARFCN- Extended	Corresponds to NdL in TS 36.104 [62]	ı	
>>TDD-Extended				This choice is only used when the EARFCN need to use the extended coding.	YES	ignore
>>>EARFCN	М		9.2.1.41Dg EARFCN- Extended	Corresponds to NdL in TS 36.104 [62]	_	
>PCI	0		INTEGER (0503,)	Physical Cell Identifier of the neighbour cell.	YES	ignore

>TAC	0		OCTET STRING (2)	Tracking Area Code of the neighbour cell.	YES	ignore
>PLMN List		0 <maxnr OfBroad castPLM Ns&gt;</maxnr 	3 · · · · · · · · · · · · · · · · · · ·	List of Broadcast PLMNs of the neighbour cell. This field contains the list of identities starting from the second entry of PLMN Identities in the broadcast information	GLOBAL	ignore
>>PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, encoded 0000 to 1001, - 1111 used as filler digit, two digits per octet, - bits 4 to 1 of octet n encoding digit 2n-1 - bits 8 to 5 of octet n encoding digit 2n  -The PLMN identity consists of 3 digits from MCC followed by either -a filler digit plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).	1	

Range bound	Explanation	
maxNrOfEUTRANeighboursPerRNC	Maximum number of neighbouring LTE cells for one cell.	
maxNrOfBroadcastPLMNs	Maximum number of additional PLMN identitys that can be	
	broadcasted in a cell involved in a MOCN or GWCN Shared Netwo	
	configuration. The value for maxNrOfBroadcastPLMNs is 5.	

# 9.2.1.41Df EARFCN

The EARFCN (E-UTRA Absolute Radio Frequency Channel Number) defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
EARFCN			INTEGER	Defined in TS 36.104 [62].
			(0maxEAR	
			FCN)	

# 9.2.1.41Dg EARFCN-Extended

The EARFCN-Extended (E-UTRA Absolute Radio Frequency Channel Number) defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
EARFCN-Extended			INTEGER	Defined in TS 36.104 [62].
			(0maxEARFCN-	
			Extended,)	

# 9.2.1.41E Paging Cause

Cause for a CN originated page.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Cause			ENUMERAT ED( Terminating Conversatio nal Call, Terminating Streaming Call, Terminating Interactive Call, Terminating Background Call, Terminating Low Priority Signalling, , Terminating High Priority Signalling, Terminating - cause unknown	See in TS 25.331 [16].

# 9.2.1.41F Paging Record Type

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Paging Record Type			ENUMERAT	See TS 25.331 [16].
			ED(IMSI	
			(GSM-MAP),	
			TMSI (GSM-	
			MAP), P-	
			TMSI (GSM-	
			MAP), IMSI	
			(DS-41),	
			TMSI (DS-	
			41))	

# 9.2.1.41Fa Partial Reporting Indicator

This IE indicates if DRNS may report partially successful measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Partial Reporting Indicator			ENUMERAT ED(partial reporting allowed)	

# 9.2.1.41G Neighbouring FDD Cell Measurement Information

This IE provides information on the FDD neighbouring cells used for the purpose of Measurements.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UTRAN Cell Identifier	М		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nd TS 25.104 [6].
Primary Scrambling Code	M		9.2.1.45	

## 9.2.1.41H Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of Measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time slot* IE and *Midamble shift and burst type* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UTRAN Cell Identifier	M		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	M		9.2.1.8	
Time slot	0		9.2.1.56	
Midamble Shift And Burst Type	0		9.2.3.4	

## 9.2.1.41I NRT Load Information Value

The NRT Load Information IE indicates the load situation on the cell for the Non Real-Time traffic. Non Real Time traffic corresponds to the Interactive and Background traffic classes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink NRT Load Information Value	М		INTEGER(03)	Mapping of the status: 0: low: The Uplink NRT load is low. 1: medium: The Uplink NRT load is medium. 2: high: Uplink NRT load is high. Probability to admit a new user is low. 3: overloaded: Uplink NRT overload. The probability to admit a new user is low, packets are discarded and the source is recommended to reduce the data flow.
Downlink NRT Load Information Value	М		INTEGER(03)	Mapping of the status: 0: low: The Downlink NRT load is low. 1: medium: The Downlink NRT load is medium. 2: high: Downlink NRT load is high. Probability to admit a new user is low. 3: overloaded: Downlink NRT overload. The probability to admit a new user is low, packets are discarded and the source is recommended to reduce the data flow.

# 9.2.1.42 Payload CRC Present Indicator

This parameter indicates whether FP payload 16 bit CRC is used or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Payload CRC Presence			ENUMERAT	
Indicator			ED(CRC	
			Included,	
			CRC not	
			included)	

### 9.2.1.43 PCCPCH Power

Primary CCPCH power is the power that shall be used for reference power value in a TDD cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the PCCPCH Power is the linear sum of the power that is used for transmitting the PCCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
PCCPCH Power			INTEGER (-	Unit dBm Range –15.0 to 40.0
			150400,)	dBm,
				Step size 0.1 dB.
				-15.0 shall indicate P< -15dBm
				+40.0 shall indicate P>
				40dBm.

# 9.2.1.44 Primary CPICH Power

Primary CPICH power is the power that is used for transmitting the Primary CPICH in a cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CPICH, the Primary CPICH Power is the linear sum of the power that is used for transmitting the Primary CPICH on all branches.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power			INTEGER (- 100500)	Value = Primary CPICH Power/10. Unit dBm. Range –10.0+50.0. Step 0.1 dB.

## 9.2.1.45 Primary Scrambling Code

The Primary scrambling code to be used in the cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary Scrambling Code			INTEGER(0 511)	

## 9.2.1.45A Priority Queue ID

The *Priority Queue ID* IE provides the identity of the Priority Queue. The Priority Queue ID is unique across all MAC-d flows that are currently allocated for one UE Context or across all Common MAC flows within a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER	
			(07)	

# 9.2.1.45B Process Memory Size

The *Process Memory Size* IE is the size of an HARQ process in the DRNS expressed in bits. It provides the maximum number of soft channel bits in the virtual IR buffer (TS 25.212 [9]) or (TS 25.222 [46]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Process Memory Size			ENUMERATED (	
			800, 1600, 2400, 3200,	
			4000, 4800, 5600, 6400,	
			7200, 8000, 8800, 9600,	
			10400, 11200, 12000,	
			12800, 13600, 14400,	
			15200, 16000, 17600,	
			19200, 20800, 22400,	
			24000, 25600, 27200,	
			28800, 30400, 32000,	
			36000, 40000, 44000,	
			48000, 52000, 56000,	
			60000, 64000, 68000,	
			72000, 76000, 80000,	
			88000, 96000, 104000,	
			112000, 120000, 128000,	
			136000, 144000, 152000,	
			160000, 176000, 192000,	
			208000, 224000, 240000,	
			256000, 272000, 288000,	
			304000,)	

## 9.2.1.46 Puncture Limit

The maximum amount of puncturing for a transport channel in rate matching.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Puncture Limit			INTEGER	0: 40%
			(015)	1: 44 %
				 14: 96% 15: 100% (no puncturing) [FDD – Value 0 is not applicable for E-DPCH.].

### 9.2.1.46A QE-Selector

The QE-Selector indicates from which source the value for the quality estimate (QE) shall be taken.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
QE-Selector			ENUMERAT	
			ED(selected,	
			non-	
			selected)	

## 9.2.1.47 RANAP Relocation Information

This parameter is transparent to the RNSAP. The parameter contains information for the Relocation procedure as defined in TS 25.413 [2].

Reference	
BIT STRING	The content is defined in TS 25.413 [2].
	1101010100

# 9.2.1.48 Report Characteristics

The Report Characteristics, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report	М			•	_	•
Characteristics >On Demand			NULL		_	
>Periodic			NOLL		_	
>>Report Periodicity	М		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	-	
>Event A						
>>Measurement Threshold	M		9.2.1.39	The threshold for which the DRNS shall trigger a measurement report.	_	
>>Measurement Hysteresis Time	0		9.2.1.36A		_	
>Event B						
>>Measurement Threshold	M		9.2.1.39	The threshold for which the DRNS shall trigger a measurement report.	_	
>>Measurement Hysteresis Time	0		9.2.1.36A		_	
>Event C >Measurement	M		9.2.1.38			
>>Measurement Increase/Decrease Threshold	IVI		9.2.1.38		_	
>>Measurement Change Time	M		9.2.1.35B	The time within which the measurement entity shall rise, in order to trigger a measurement report.	-	
>Event D						
>>Measurement Increase/Decrease Threshold	М		9.2.1.38		_	
>>Measurement Change Time	M		9.2.1.35B	The time within which the measurement entity shall fall, in order to trigger a measurement report.	_	
>Event E						
>>Measurement Threshold 1	M		Measureme nt Threshold 9.2.1.39		_	
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.39		_	
>>Measurement Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.		
>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	-	
>Event F						
>>Measurement Threshold 1	М		Measureme nt Threshold 9.2.1.39		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.39		-	
>>Measurement Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.	_	
>>Report Periodicity	O		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	-	
>Additional Report Characteristics						
>>On Modification						
>>>On Modification		1			YES	reject
>>>Measurem ent Threshold	М		9.2.1.39			
>>Event H						
>>>Event H		1			YES	reject
>>>Measurem ent Threshold 1	M		Measureme nt Threshold 9.2.1.39		_	
>>>Measurem ent Threshold 2	0		Measureme nt Threshold 9.2.1.39		_	
>>>Measurem ent Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms.	-	
>>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measurement reports.	_	
>>>Measurem ent Fluctuation Range	0	0-100			_	

# 9.2.1.48a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity	М			
Scale				
>millisecond				
>>Report Periodicity Value	M		INTEGER	Unit: ms.
			(16000,)	Range: 1060000 ms.
				Step: 10 ms.
>minute				
>>Report Periodicity Value	M		INTEGER (160,)	Unit: min.
				Range: 160 min.
				Step: 1 min.

# 9.2.1.48A Requested Data Value

The Requested Data Value contains the relevant data concerned the ongoing information exchange. *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UTRAN Access Point Position with Altitude	0		9.2.1.75		_	
IPDL Parameters	0		9.2.1.31F		_	
DGPS Corrections	0		9.2.1.19B		_	
GPS Navigation Model and	0		9.2.1.30I		_	
Time Recovery			3.2.1.301			
GPS Ionospheric Model	0		9.2.1.30H		_	
GPS UTC Model	0		9.2.1.30L		_	
GPS Almanac	0		9.2.1.30G		_	
	0				_	
GPS Real-Time Integrity			9.2.1.30J		_	
GPS RX Pos	0		9.2.1.30K		_	
SFN-SFN Measurement	0		9.2.1.74		_	
Reference Point Position					\/=0	
Cell Capacity Class Value	0		9.2.1.5C		YES	ignore
NACC Related Data	0		9.2.1.41a		YES	ignore
MBMS Bearer Service Full Address	0		9.2.1.84		YES	ignore
Inter-frequency Cell Information	0		9.2.1.31G		YES	ignore
GANSS Common Data		01			YES	ignore
>GANSS Ionospheric Model	0	3	9.2.1.105		-	19.7010
>GANSS RX Pos	0		9.2.1.109		_	
>GANSS Additional	0		9.2.1.105 9.2.1.105a		YES	Ignore
Ionospheric Model						_
>GANSS Earth Orientation Parameters	0		9.2.1.122a		YES	Ignore
GANSS Generic Data		0 <maxno GANSS&gt;</maxno 			GLOBAL	ignore
>GANSS ID	0		9.2.1.119		_	
>DGANSS Corrections	0		9.2.1.102		_	
>GANSS Navigation Model	0		9.2.1.120		_	
And Time Recovery						
>GANSS Time Model	0		9.2.1.110		_	
>GANSS UTC Model	0		9.2.1.111		_	
>GANSS Almanac	0		9.2.1.103		_	
>GANSS Real Time Integrity	0		9.2.1.108		_	
>GANSS Data Bit	0		9.2.1.118		_	
Assistance			9.2.1.110		_	
>GANSS Additional Time	0		9.2.1.110a		YES	Ignore
Models >GANSS Additional	0		9.2.1.120a		YES	lanara
Navigation Models And Time			9.2.1.120a		YES	Ignore
>GANSS Additional UTC	0		9.2.1.111a		YES	Ignore
Models >GANSS Auxiliary	0		9.2.1.122c		YES	Ignore
Information >SBAS ID	C-GANSS-		9.2.1.122b		YES	Ignore
	ID					
Counting Information	0		9.2.2.94	FDD only.	YES	ignore
Transmission Mode Information	0		9.2.2.95	FDD only.	YES	ignore
MBMS Neighbouring Cell Information	0		9.2.2.96	FDD only.	YES	ignore
RLC Sequence Number	0		9.2.2.97	FDD only.	YES	ignoro
	0			וווט טטיי.	YES	ignore
ANR Cell Information	0		9.2.1.149	EDD only	YES	ignore
Common E-RGCH Cell Information			9.2.1.156	FDD only	150	ignore

Condition	Explanation		
GANSS-ID	This IE shall be present if the <i>GANSS ID</i> IE indicates "SBAS".		

Range Bound	Explanation
maxNoGANSS	Maximum number of GANSS Systems.

## 9.2.1.48B Requested Data Value Information

The *Requested Data Value Information* IE provides information on whether or not the Requested Data Value is available in the message and also the Requested Data Value itself if available. In case of "Periodic" and "On Modification" reporting, "Information Not Available" shall be used when at least one part of the requested information was not available at the moment of initiating the Information Reporting procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Information Availability Indicator	M				_	
>Information Available					_	
>>Requested Data Value	М		9.2.1.48A		ı	
>Information not Available			NULL		_	

#### 9.2.1.48C Restriction State Indicator

The Restriction state indicator is the identifier indicates whether the cell is "Cell Reserved for Operator Use" or not. It is provided by DRNS and reported to SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Restriction state indicator			ENUMERAT	
			ED(Cell Not	
			Reserved for	
			Operator	
			Use, Cell	
			Reserved for	
			Operator	
			Use)	

### 9.2.1.48D RLC Mode

The RLC Mode IE indicates the RLC Mode used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RLC Mode			ENUMERAT ED ( RLC-AM, RLC-UM,)	

## 9.2.1.49 RL ID

The RL ID is the unique identifier for one RL associated with a UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL ID			INTEGER (031)	

# 9.2.1.49A RL Specific DCH Information

The *RL Specific DCH Information* IE provides RL Specific DCH Information for DCHs. In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur, the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE shall be included only for one of the DCHs in the set of co-ordinated DCHs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RL Specific DCH Information		1 <maxnr OfDCHs&gt;</maxnr 			I	
>DCH ID	M		9.2.1.16		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	T.	
>Transport Bearer Not Requested Indicator	0		9.2.2.4S	FDD Only.	YES	Ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

## 9.2.1.50 RNC-ID

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-ID			INTEGER(0.	
			.4095)	

#### 9.2.1.50a Extended RNC-ID

This is the identifier of one RNC in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended RNC-ID			INTEGER(4	Note: Application of the
			09665535)	Extended RNC-ID IE to very
				large networks is FFS.

## 9.2.1.50A SAT ID

The SAT ID indicates the identity of the satellite.

<ol> <li>Identifies the satellite and is equal to (SV ID No – 1) where SV ID No is defined in ICD-GPS- 200 [30].</li> </ol>

#### 9.2.1.50B RT Load Value

The *RT Load Value* IE indicates in percents the ratio of the load generated by Real Time traffic, relative to the measured Load Value. Real Time traffic corresponds to the Conversational and Streaming traffic classes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink RT Load Value	М		INTEGER(0100)	
Downlink RT Load Value	М		INTEGER(0100)	

#### 9.2.1.51 SCH Time Slot

The SCH Time Slot IE represents the first time slot (k) of a pair of time slots inside a Radio Frame that is assigned to the Physical Channel SCH. The SCH Time Slot IE is only applicable if the value of Sync Case IE is Case 2 since in this case the SCH is allocated in TS#k and TS#k+8.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCH Time Slot			INTEGER(0.	

## 9.2.1.51A Scheduling Priority Indicator

Indicates the relative priority of the FACH, [TDD – DSCH, USCH,] HS-DSCH [FDD – or E-DCH] data frame. Used by the DRNC when scheduling FACH, [TDD – DSCH, USCH,] HS-DSCH [FDD – or E-DCH] traffic.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Scheduling Priority Indicator			INTEGER(0.	Relative priority of the FACH,
			.15)	[TDD – DSCH, USCH,] HS-
				DSCH [FDD – or E-DCH]
				data frame:
				0=Lowest Priority.
				15=Highest Priority.

## 9.2.1.52 Service Area Identifier (SAI)

This information element is used to identify an area consisting of one or more cells belonging to the same Location Area. Such an area is called a Service Area and can be used for indicating the location of a UE to the CN. For this protocol, only a Service Area that is defined to be applicable to the PS and CS domains shall be used.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
PLMN Identity	M		Reference OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
LAC	M		OCTET STRING (2)	0000 and FFFE not allowed
SAC	М		OCTET STRING (2)	

### 9.2.1.52A SFN

System Frame Number of the cell, see TS 25.402 [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER(0.	
			.4095)	

## 9.2.1.52B SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN-SFN Change Limit	0		INTEGER(1256)	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(1256)	Deviation the Predicted SFN- SFN from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

## 9.2.1.52C SFN-SFN Measurement Value Information

The *SFN-SFN Measurement Value Information* IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements as well as other related information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1 <maxnrofmeasn Cell&gt;</maxnrofmeasn 		
>UTRAN Cell Identifier	M		9.2.1.71	
>SFN-SFN Value	М		9.2.1.77	
>SFN-SFN Quality	0		INTEGER(0255)	Indicates the standard deviation (std) of the SFN-SFN otd (observed time difference) measurements in 1/16 chip. SFN-SFN Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Value, where x is the reported SFN-SFN Value and $\mu = E[x]$ is the expectation value of x.
>SFN-SFN Drift Rate	М		INTEGER(- 100100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	0		INTEGER(0100)	Indicates the standard deviation (std) of the SFN-SFN drift rate measurements in 1/256 chip per second. SFN-SFN Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported SFN-SFN Drift Rate, where x is the reported SFN-SFN Drift Rate and $\mu$ = $E[x]$ is the expectation value of x.
>SFN-SFN Measurement Time Stamp	М		9.2.1.76	,
Unsuccessful Neighbouring cell SFN- SFN Observed Time Difference Measurement Information		0 <maxnrofmeasn Cell-1&gt;</maxnrofmeasn 		
>UTRAN Cell Identifier	М		9.2.1.71	

Range bound	Explanation		
maxNrOfMeasNCell	Maximum number of neighbouring cells on which		
	measurements can be performed.		

# 9.2.1.52Ca Shared Network Area (SNA) Information

This information element contains a list of Shared Network Areas, identified by the Shared Network Area Code (SNAC, see TS 23.003 [1]) which a certain cell belongs to. For a broader description of the SNA access control see TS 25.401 [40].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
List of SNAs		0 <maxnrofsna s&gt;</maxnrofsna 		
> SNAC	М		INTEGER (0 65535)	

Range bound	Explanation
maxNrOfSNAs	Maximum number of SNAs one cell can be part of.

### 9.2.1.52D SID

The SID IE provides the identity of the Size Index.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SID			INTEGER	
			(07)	

## 9.2.1.53 S-RNTI

The S-RNTI identifies the UE in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-RNTI			INTEGER(0.	
			.2^20 -1)	

# 9.2.1.53a S-RNTI Group

The S-RNTI Group identifies a group of Ues in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-RNTI	M		9.2.1.53	
S-RNTI bit mask index	M		Enumerated(	
			b1,	
			b2,b19,)	

The S-RNTI group is identified by all S-RNTI values whose bits starting from the most significant bit down to, and including, the bit indicated by S-RNTI bit mask index, are equal to the corresponding bits of the S-RNTI in this IE.

The bits of the S-RNTI in this IE that are less significant than the bit position indicated by the S-RNTI bit mask index shall be ignored.

### 9.2.1.54 Sync Case

The SCH and PCCPCH in a TDD cell are mapped on one or two downlink slots per frame. There are two cases of Sync Case as follows:

Case 1) SCH and PCCPCH allocated in a single TS#k

Case 2) SCH allocated in two TS: TS#k and TS#k+8

PCCPCH allocated in TS#k

[1.28Mcps TDD – There is no Sync Case indication needed for 1.28Mcps TDD. If the *Sync Case* IE must be included in a message from DRNC to SRNC used for 1.28Mcps TDD, the DRNC shall indicate Sync Case 1 and the SRNC shall ignore it.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case			INTEGER	
			(12,)	

### 9.2.1.54A T1

The T1 IE is used as described in TS 25.321 [41] subclause 11.6.2.3.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
T1			ENUMERAT ED (10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 140, 160, 200, 300, 400,)	Unit: ms Node B may use this value to stop the re-transmission of the corresponding MAC-hs PDU.

#### 9.2.1.55 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. [TDD – If it is present in the timeslot, it will be mapped to the channelisation code defined by TS 25.221 [12].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Presence			ENUMERATE	
			D(Present,	
			not present)	

#### 9.2.1.56 Time Slot

The Time Slot represents the time interval assigned to a Physical Channel referred to the start of a Radio Frame.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot			INTEGER	
			(014)	

### 9.2.1.56A TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the DS field IE is used, the value of this IE is configurable by the operator.

When the Generic Traffic Category IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the Generic Traffic Category IE is configurable by the operator, as well as the mapping of this value to DS field (IETF RFC 2474 [44]) at the DRNS side.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TNL QoS type	M			
>DS Field				
>>DS field	M		BIT STRING (8)	DS field as defined in IETF RFC 2474 [44]. Typically used when the DRNS and its SRNC are in the same DS domain as defined in IETF RFC 2475 [45].
>Generic Traffic				
Category				
>>Generic Traffic Category	M		BIT STRING (8)	

#### 9.2.1.57 ToAWE

ToAWE is the window endpoint. DL data frames are expected to be received before this window endpoint. ToAWE is defined with a positive value relative Latest Time of Arrival (LtoA). A data frame arriving after ToAWE gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWE			INTEGER (02559)	Unit: msec.

### 9.2.1.58 ToAWS

ToAWS is the window startpoint. DL data frames are expected to be received after this window startpoint. ToAWS is defined with a positive value relative Time of Arrival Window Endpoint (ToAWE). A data frame arriving before ToAWS gives a Timing Adjustment Control frame response.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
ToAWS			INTEGER (01279)	Unit: msec.

#### 9.2.1.58a Trace Depth

The Trace Depth IE is Trace Configuration Parameter what should be traced by the DRNC on the indicated interfaces.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Depth			ENUMERATED ( Minimum,	Meaning of this parameter is described in TS 32.422 [49].
			Medium, Maximum)	

# 9.2.1.58b Trace Recording Session Reference

The *Trace Recording Session Reference* IE provides a Trace Recording Session Reference allocated by the triggering entity.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Recording Session Reference			INTEGER (065535)	

#### 9.2.1.58c Trace Reference

The Trace Reference IE provides a Trace Reference allocated by the triggering entity.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Trace Reference			OCTET STRING	
			(SIZE(23))	

## 9.2.1.58A Traffic Class

This IE indicates the type of application the Radio Bearer is optimised for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Traffic Class			ENUMERATED (conversational, streaming, interactive, background, )	

#### 9.2.1.59 Transaction ID

The Transaction ID is used to associate all the messages belonging to the same procedure. Messages belonging to the same procedure shall use the same Transaction ID.

The Transaction ID is determined by the initiating peer of a procedure.

For procedures addressed to a specific UE Context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures for the same UE using the same procedure code, and initiated by the same protocol peer.

For procedures not addressed to a specific UE Context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures using the same procedure code, and initiated by the same protocol peer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Transaction ID Length				The Transaction ID shall be interpreted for its integer value, not for the type of encoding ("short" or "long").
>Short				
>>Transaction ID Value	M		INTEGER (0127)	
>Long				
>>Transaction ID Value	M		INTEGER (032767)	

#### 9.2.1.59A Transmitted Carrier Power

The *Transmitted Carrier Power* IE contains the Transmitted Carrier Power in a cell, as defined in TS 25.215 [11] & TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmitted Carrier Power			INTEGER(0100)	According to mapping in TS 25.133 [23] and TS 25.123 [24].

## 9.2.1.59B T<sub>UTRAN-GPS</sub> Accuracy Class

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T <sub>UTRAN-GPS</sub> Accuracy Class			ENUMERAT	More information about
			ED(Accuracy	Measurement Accuracy Class is
			Class A,	included in TS 25.133 [23].
			Accuracy	
			Class B,	
			Accuracy	
			Class C,)	

# 9.2.1.59C T<sub>UTRAN-GPS</sub> Measurement Threshold Information

The  $T_{UTRAN-GPS}$  Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for UE Positioning measurements shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps Change Limit	0		INTEGER(1256)	Change of T <sub>UTRAN-GPS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GPS</sub> Deviation Limit	0		INTEGER(1256)	Deviation of the Predicted  T <sub>UTRAN-GPS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

# 9.2.1.59D T<sub>UTRAN-GPS</sub> Measurement Value Information

The  $T_{UTRAN-GPS}$  *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps		1		Indicates the UTRAN GPS Timing of Cell Frames for UE Positioning. According to mapping in TS 25.133 [23] and TS 25.123 [24]; significant values range from 0 to 37158911999999.
>MS	M		INTEGER (016383)	Most Significant Part.
>LS	М		INTEGER (04294967 295)	Least Significant Part.
Tutran-gps Quality	0		INTEGER(0. .255)	Indicates the standard deviation (std) of the $T_{UTRAN-GPS}$ measurements in 1/16 chip. $T_{UTRAN-GPS}$ Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN-GPS}$ Value, where x is the reported $T_{UTRAN-GPS}$ Value and $\mu$ = $E[x]$ is the expectation value of x.
Tutran-gps Drift Rate	M		INTEGER(- 5050)	Indicates the T <sub>UTRAN-GPS</sub> drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
Tutran-gps Drift Rate Quality	0		INTEGER(0. .50)	Indicates the standard deviation (std) of the $T_{UTRAN-GPS}$ drift rate measurements in 1/256 chip per second. $T_{UTRAN-GPS}$ Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN-GPS}$ Drift Rate, where x is the reported $T_{UTRAN-GPS}$ Drift Rate and $\mu$ = $E[x]$ is the expectation value of x.

# 9.2.1.60 Transport Bearer ID

The Transport Bearer ID uniquely identifies an Iur transport bearer.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer ID			INTEGER(04095)	

# 9.2.1.61 Transport Bearer Request Indicator

Indicates whether a new Iur transport bearer needs to be established for carrying the corresponding data stream(s), or whether an existing transport bearer will be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Request			ENUMERAT	
Indicator			ED(Bearer	
			Requested,	
			Bearer not	
			Requested,	
			)	

# 9.2.1.62 Transport Layer Address

In case of transport bearer establishment with ALCAP (TS 25.426 [3] TS 25.424 [35]), this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to TS 25.426 [3], TS 25.424 [35].

In order to allow transport bearer establishment without ALCAP, this IE contains the address of the transport bearer to be used for the user plane transport.

For details on the Transport Address used see TS 25.426 [3].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Layer Address			BIT	
			STRING(11	
			60,)	

# 9.2.1.63 Transport Format Combination Set (TFCS)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable to DL Transport Channels.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE TFCS Values	М			
>Always Used				This choice is always made.
>>TFCS		1 <maxnroftfcs &gt;</maxnroftfcs 		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on.  [TDD – The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		9.2.1.14A	
>>>CHOICE Gain	C-			
Factors	PhysChan			
>>>Signalled Gain Factors				
>>>>Gain Factor β <sub>c</sub>	M		INTEGER(0 15)	[FDD – For UL DPCCH or control part of PRACH TS 25.213 [21].] [TDD - β for UL DPCH mapping in accordance to TS 25.223 [13].]
>>>>Gain Factor β <sub>D</sub>	М		INTEGER(0 15)	[FDD – For UL DPDCH or data part of PRACH TS 25.213 [21].] [TDD – Should be set to 0 by the sender, and shall be ignored by the receiver.]
>>>>Reference TFC nr	0		INTEGER(0 15)	If this TFC is a reference TFC, this IE indicates the reference number.
>>>Computed Gain Factors			_	
>>>>Reference TFC nr	М		INTEGER(0 15)	Indicates the reference TFC to be used to calculate the gain factors for this TFC.
>Not Used			NULL	This choice shall never be made by the SRNC and the DRNC shall consider the procedure as failed if it is received.

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH
	[FDD – or PRACH channel].

Range bound	Explanation		
maxNrOfTFCs	The maximum number of Transport Format Combinations.		

# 9.2.1.64 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

[TDD – The Transport Format Set for each transport channel within the same CCTrCH shall have the same value for the  $2^{nd}$  Interleaving Mode IE.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dynamic Transport Format Information		1 <maxnroftfs></maxnroftfs>		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	М		INTEGER (0512)	
>Transport Block Size	C – Blocks		INTEGER (05000)	Unit: Bits.
>CHOICE Mode	M		,	
>>TDD				
>>>Transmission Time Interval Information	C- TTIdynamic	1 <maxtti- Count&gt;</maxtti- 		
>>>>Transmission Time Interval	M		ENUMERAT ED(10, 20, 40, 80,)	Unit: msec.
Semi-static Transport Format Information		1		
>Transmission Time Interval	M		ENUMERAT ED (10, 20, 40, 80, dynamic, )	Unit: msec. Value "dynamic" for TDD only. For FDD DCH, the value "80" is applicable only when DL DPCH Slot Format IE indicates a slot format with SF=512.
>Type of Channel Coding	М		ENUMERAT ED (No codingTDD, Convolutiona I, Turbo,)	[FDD – The value "No codingTDD" shall be treated as logical error if received].
>Coding Rate	C – Coding		ENUMERAT ED (1/2, 1/3,)	
>Rate Matching Attribute	M		INTEGER (1maxRate Matching)	
>CRC size	М		ENUMERAT ED (0, 8, 12, 16, 24,)	
>CHOICE Mode	M			
>>TDD  >>>2 <sup>nd</sup> Interleaving  Mode	M		ENUMERAT ED(Frame related, Timeslot related,)	

Condition	Explanation
Blocks	The IE shall be present if the Number of Transport Blocks IE is set
	to a value greater than 0.
Coding	The IE shall be present if Type of Channel Coding IE is set to
	"Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the Transmission Time Interval IE in the
	Semi-static Transport Format Information IE is set to "dynamic".

Range bound	Explanation
maxNrOfTFs	The maximum number of different transport formats that can be
	included in the Transport format set for one transport channel.
maxRateMatching	The maximum number that could be set as rate matching attribute
	for a transport channel.
maxTTI-Count	The amount of different TTI that are possible for that transport
	format is.

## 9.2.1.65 TrCH Source Statistics Descriptor

Defines the statistics of the data transmitted in the transport channel. This information may be used in reserving resources in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TrCH Source Statistics			ENUMERAT	"Speech" = Statistics of the
Descriptor			ED(Speech, RRC, Unknown, )	data corresponds to speech.  "RRC" = Statistics of the data corresponds to RRC signalling.  "Unknown" = The statistics of the data is unknown.

## 9.2.1.66 UARFCN

The UTRA Absolute Radio Frequency Channel Number defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UARFCN			INTEGER(016383,)	Corresponds to: 0.0Hz 3276.6MHz see TS 25.104 [6] and TS 25.105 [7].

## 9.2.1.66A UE Identity

The UE Identity IE identifies the UE by one of its Permanent NAS Identifier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Identity	М			
>IMSI				
>>IMSI	M		9.2.1.31	
>IMEI				
>>IMEI	M		9.2.1.30T	
>IMEISV				
>>IMEISV	M		9.2.1.30U	

## 9.2.1.67 UL FP Mode

This parameter defines if normal or silent mode of the Frame Protocol shall be used for the UL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERAT	
			ED(Normal,	
			Silent,)	

## 9.2.1.68 UL Interference Level

Void

# 9.2.1.68A Uncertainty Ellipse

This IE contains the uncertainty ellipse used to describe a possible shape of the geographical area of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uncertainty semi-major	M		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by r = 10x(1.1 <sup>k</sup> -1).
Uncertainty semi-minor	M		INTEGER( 0127)	The uncertainty "r" is derived from the "uncertainty code" k by $r = 10x(1.1^k-1)$ .
Orientation of major axis	M		INTEGER( 0179)	The relation between the IE value (N) and the angle (a) in degrees it describes is 2N≤ a <2(N+1). The values 90179 shall not be used.

## 9.2.1.68B Unidirectional DCH Indicator

The Unidirectional DCH Indicator IE indicates that the DCH is unidirectional.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Unidirectional DCH Indicator			ENUMERATED	
			(Downlink DCH only,	
			Uplink DCH only)	

# 9.2.1.69 Uplink SIR

The UL SIR indicates a received UL SIR.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink SIR			INTEGER (- 82173)	Value = Uplink SIR/10. Unit dB. Range -8.2+17.3. Step 0.1 dB.

## 9.2.1.70 URA ID

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
URA ID			INTEGER(0. .65 535)	

## 9.2.1.70A UTRAN Access Point Position

The UTRAN Access Point Position indicates the exact geographical position of the base station antenna.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	M		ENUMERAT ED(North, South)	
Degrees of Latitude	М		INTEGER( 02 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>23</sup> X /90 < N+1 X being the latitude in degree (0° 90°).
Degrees of Longitude	М		INTEGER( -2 <sup>23</sup> 2 <sup>23</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>24</sup> X /360 < N+1 X being the longitude in degree (-180°+180°).

## 9.2.1.70B URA Information

The URA Information IE contains URA Information for one cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
URA ID	М		9.2.1.70		_	
Multiple URAs Indicator	М		9.2.1.41		_	
RNCs with Cells in the Accessed URA		0 <maxrncin URA-1&gt;</maxrncin 		Other RNCs having at least one cell in the URA identified by the URA ID IE.	-	
>RNC-ID	М		9.2.1.50	If the Extended RNC-ID IE is included in the URA Information IE, the RNC-ID IE shall be ignored.	-	
>Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range Bound		Explanation	
	maxRNCinURA	Maximum number of RNC in one URA.	

# 9.2.1.70C User Plane Congestion Fields Inclusion

The *User Plane Congestion Fields Inclusion* IE is used by the DRNC to indicate to the SRNC to include in the HS-DSCH Data Frames the User Plane fields related to TNL Congestion Control for HSDPA (namely the Frame Sequence Number and the DRT, see TS 25.425 [32]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
User Plane Congestion Fields			ENUMERATED (	
Inclusion			Shall be included)	

# 9.2.1.71 UTRAN Cell Identifier (UC-ID)

The UC-ID (UTRAN Cell identifier) is the identifier of a cell in one UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the UC-ID IE, the RNC-ID IE shall be ignored.
C-ID	М		9.2.1.6	
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.

# 9.2.1.72 Neighbouring TDD Cell Information LCR

The *Neighbouring TDD Cell Information LCR* IE provides information for 1.28Mcps TDD cells that are neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information LCR		1 <maxnr OfLCRTD DNeighbo ursPerRN C&gt;</maxnr 			-	
>C-ID	M		9.2.1.6		_	
>UARFCN	М		9.2.1.66	Corresponds to Nt in TS 25.105 [7].	_	
>Frame Offset	0		9.2.1.30		_	
>Cell Parameter ID	M		9.2.1.8		-	
>SCTD Indicator	M		9.2.1.78		_	
>Cell Individual Offset	0		9.2.1.7		_	
>DPCH Constant Value	0		9.2.1.23		-	
>PCCPCH Power	0		9.2.1.43		_	
>Restriction State Indicator	0		9.2.1.48C		-	
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell Capability Container TDD LCR	0		9.2.3.1b		YES	ignore
>SNA Information	0		9.2.1.52Ca		YES	ignore
>Multiple PLMN List	0		9.2.1.117		YES	ignore
>Cell Capability Container Extension TDD LCR	0		9.2.3.80		YES	ignore

Range bound	Explanation
maxNrOfLCRTDDNeighboursPerRNC	Maximum number of neighbouring 1.28Mcps TDD cell for one cell.

# 9.2.1.73 Permanent NAS UE Identity

This element is used to identify the UE in UTRAN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Choice Permanent NAS UE				
Identity				
>IMSI				
>>IMSI	M		9.2.1.31	

#### 9.2.1.74 SFN-SFN Measurement Reference Point Position

The SFN-SFN Measurement Reference Point Position indicates the exact geographical position of the SFN-SFN measurement reference point. The altitude shall be included when available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Altitude and direction	0		9.2.1.2B	

#### 9.2.1.75 UTRAN Access Point Position with Altitude

The UTRAN Access Point Position with Altitude indicates the exact geographical position of the base station antenna. The altitude shall be included when available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Geographical Coordinates	M		9.2.1.30F	
Altitude and direction	0		9.2.1.2B	

# 9.2.1.76 SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN	M		9.2.1.52A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	M		9.2.1.52A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	M		9.2.1.56	Indicates the Time Slot of the reference cell at which this measurement has been performed.

#### 9.2.1.77 SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE Mode	M			
>FDD				
>>SFN-SFN	M		INTEGER(0.	According to mapping in TS
			. 614399)	25.133 [23].
>TDD				1.28Mcps or 3.84Mcps TDD
>>SFN-SFN	M		INTEGER(0.	According to mapping in TS
			. 40961)	25.123 [24].
>TDD 7.68Mcps				
>>SFN-SFN	M		INTEGER(0.	According to mapping in TS
			. 81923)	25.123 [24].

#### 9.2.1.78 SCTD Indicator

Indicates if SCTD antenna diversity is applied or not to the PCCPCH and PICH [3.84Mcps TDD].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SCTD Indicator			ENUMERAT ED(active, inactive)	

### 9.2.1.79 Congestion Cause

The Congestion Cause IE indicates the cause of a congestion situation:

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Congestion Cause			ENUMERATED (UTRAN Dynamic Resources, UTRAN Semistatic Resources,)	

The meaning of the different congestion cause values is described in the following table:

Congestion cause	Meaning
UTRAN Dynamic Resources	UL and/or DL resource congestion situation mainly caused by the UL
	and/or DL UTRAN Dynamic Resources. This type of congestion situation
	is, e.g. related to the limitation of the DL transmitted carrier power of the
	cell(s), or the UL Interference situation in the concerned cell(s).
UTRAN Semistatic Resources	UL and/or DL resource congestion situation mainly related to UTRAN
	Semistatic Resources (e.g. channelisation codes, Node-B resources,).

#### 9.2.1.80 TMGI

The TMGI is the unique identifier for an MBMS bearer service, see TS 23.003 [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	M		OCTET STRING (3)	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
Service ID	M		OCTET STRING (3)	

#### 9.2.1.81 Transmission Mode

The Transmission Mode IE indicates the transmission mode used for MBMS data transmission in one cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Mode			ENUMERAT ED(PTP, PTM, Not Provided).	PTP: The MBMS data is transmitted through point to point channel. PTM: The MBMS data is transmitted through point to multipoint channel. Not Provided: The MBMS data is not transmitted in the DRNC.

#### 9.2.1.82 Access Point Name

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
APN	М		OCTET STRING	
			(1255)	

### 9.2.1.83 IP Multicast Address

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Multicast Address	М		OCTET STRING (416)	

#### 9.2.1.84 MBMS Bearer Service Full Address

This IE provides the full address of an MBMS Bearer Service otherwise identified by its TMGI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Access Point Name	M		9.2.1.82	
IP Multicast Address	M		9.2.1.83	

#### 9.2.1.85 Provided Information

This IE contains the relevant data concerned the direct information transfer procedure. *Provided Information* IE shall include at least one of the following IEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
MBMS Channel Type Information	0		9.2.1.86			
MBMS Preferred Frequency Layer Information	0		9.2.1.87			
UpPCH Information LCR	0		9.2.3.55	Applicable to 1.28Mcps TDD only .	YES	ignore
ANR Report Indication	0		9.2.1.148		YES	ignore

### 9.2.1.86 MBMS Channel Type Information

This IE contains the channel types of a MBMS Bearer Service indicated by *TMGI* IE in one or more cells. *MBMS Channel Type Information* IE shall include at least one *C-ID* IE and *Affected UE Information for MBMS* IE in the *PTM Cell List* IE, the *PTP Cell List* IE and/or *Not Provided Cell List* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TMGI	M		9.2.1.80		_	
PTM Cell List		0 <maxnrofcells></maxnrofcells>				
>C-ID	M		9.2.1.6		_	
>Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		This IE should not be included if the ExtendedAff ected UE Information for MBMS IE is included in the message.		
>>S-RNTI	M		9.2.1.53		_	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	M		Extended RNTI 9.2.1.154		YES	ignore
PTP Cell List	1	0 <maxnrofcells></maxnrofcells>				
>C-ID	M		9.2.1.6		_	
>Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		This IE should not be included if the ExtendedAff ected UE Information for MBMS IE is included in the message.		
>>S-RNTI	M		9.2.1.53		_	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	M		Extended RNTI 9.2.1.154		YES	ignore
Not Provided Cell List		0 <maxnrofcells></maxnrofcells>				
>C-ID	М		9.2.1.6		_	
>Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		This IE should not be included if the ExtendedAff		

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
TMGI	M		9.2.1.80		_	
				ected UE		
				Information		
				for MBMS IE		
				is included in		
				the		
				message.		
>>S-RNTI	M		9.2.1.53		_	
>Extended Affected UE Information for MBMS		0 <maxnrofues></maxnrofues>		The ExtendedAff ected UE Information S-RNTI IE shall be used if the S-RNTI identity has a value larger than 1048575.		
>>Extended S-RNTI	М		Extended RNTI 9.2.1.154		YES	ignore

Range Bound	Explanation
maxNrOfCells	Maximum number of cells that can be indicated in the corresponding IE.
maxNrOfUEs	Maximum number of S-RNTIs that can be indicated per cell in the respective IEs.

# 9.2.1.87 MBMS Preferred Frequency Layer Information

This IE contains the preferred frequency layer of a MBMS Bearer Service indicated by *TMGI* IE in one or more cells that host at least one CELL\_DCH UE whose UE Link contains the concerned MBMS Bearer Service and whose SRNC is different from the CRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TMGI	M		9.2.1.80	
Preferred Frequency Layer Information				
>Default Preferred	M		UARFCN	
Frequency			9.2.1.66	
>Additional Preferred Frequency		0 <maxnrofaddfr eq&gt;</maxnrofaddfr 		Preferred frequencies different from default preferred frequency.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>Corresponding Cells		1 <maxnrofcellsp erFreq&gt;</maxnrofcellsp 		
>>>C-ID	M		9.2.1.6	

Range Bound	Explanation
maxNrOfAddFreq	Maximum number of additional preferred frequencies different from default preferred frequency in an RNC.
maxNrOfCellsPerFreq	Maximum number of cells whose preferred frequency is the same.

#### 9.2.1.88 E-DCH DDI Value

The *E-DCH DDI Value* IE is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER	
			(062)	

#### 9.2.1.89 E-DCH MAC-d Flow Multiplexing List

The E-DCH MAC-d Flow Multiplexing List indicates which E-DCH MAC-d flows are allowed to be multiplexed within a MAC-e PDU with the MAC-d flow it is associated to. If the E-DCH MAC-d Flow Multiplexing List is signalled for an E-DCH MAC-d flow it indicates that E-DCH MAC-d PDUs of this E-DCH MAC-d flow are the first E-DCH MAC-d PDU in the MAC-e PDU. If an E-DCH MAC-d Flow Multiplexing List was already received within a previous Radio Link related procedure and no E-DCH MAC-d Flow Multiplexing List is signalled for a E-DCH MAC-d flow, the DRNS shall continue to use the previously received one. If no E-DCH MAC-d Flow Multiplexing List was ever received for an E-DCH MAC-d flow no restrictions shall be assumed for the related E-DCH MAC-d flow for multiplexing E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Multiplexing List			BIT STRING (8)	The first Bit corresponds to E-DCH MAC-d flow 0, the second bit corresponds to E-DCH MAC-d flow 1, etc.  For 1.28Mcps TDD, if the IE is included in the IE Common E-DCH MAC-d Flow Specific Information LCR, the first Bit corresponds to E-DCH MAC-d with the lowest E-DCH MAC-d Flow ID within the same frequency, the second bit corresponds to E-DCH MAC-d flow with the second lowest E-DCH MAC-d Flow ID within the same frequency, etc.

#### 9.2.1.90 E-DCH MAC-d Flows To Delete

The E-DCH MAC-d Flows To Delete IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d Flows To		1 <maxnrofedch< td=""><td></td><td></td></maxnrofedch<>		
Delete		MACdFlows>		
>E-DCH MAC-d Flow ID	M		9.2.1.91	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

#### 9.2.1.91 E-DCH MAC-d Flow ID

The *E-DCH MAC-d Flow ID* IE is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d Flow ID			INTEGER	
			(0	
			maxNrOfED	
			CHMACdFlo	
			ws-1)	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

#### 9.2.1.91A E-DCH MAC-d PDU Size Format

The *E-DCH MAC-d PDU Size Format* IE provides information about the type of MAC-d PDU Size Format thet shall be used for the E-DCH in the new configuration. "Fixed MAC-d PDU Size" uses MAC-d PDU sizes defined in *MAC-d PDU Size List* IE of the *E-DCH Logical Channel Information* IE. "Flexible MAC-d PDU Size" uses a flexible MAC-d PDU size with a maximum PDU size as defined by *Maximum MAC-d PDU Size Extended* IE of *E-DCH Logical Channel Information* IE. The actual MAC-d PDU size is determined as specified in TS 25.123 [24] and TS 25.425 [32].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d PDU Size			ENUMERATED	
Format			(Fixed MAC-d PDU	
			Size, Flexible MAC-d	
			PDU Size)	

### 9.2.1.92 E-DCH Logical Channel Information

The E-DCH Logical Channel Information IE is used for the establishment of E-DCH Logical Channels.

IE/Group Name	Presenc e	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
E-DCH Logical Channel Information		1 <maxnoof LogicalChan nels&gt;</maxnoof 			_	
>Logical Channel ID	М		9.2.1.97		_	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>Scheduling Information	М		9.2.1.101		_	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		_	
>E-DCH DDI Value	M		9.2.1.88	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value "0x3F" is reserved. Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	_	
>MAC-d PDU Size List		1< maxNrOfMA CdPDUSize		ie is present.	_	
>>MAC-d PDU Size	М		9.2.1.34A	Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.59	1.28Mcps TDD only.	YES	ignore
>UE Aggregate Maximum Bit Rate Enforcement Indicator	0		NULL		YES	ignore

Range Bound	Explanation		
maxNoOfLogicalChannels	Maximum number of logical channels.		
maxNrOfMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels.		

# 9.2.1.93 E-DCH Logical Channel To Modify

The E-DCH Logical Channel To Modify IE is used for the reconfiguration of E-DCH Logical Channels.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxnoof LogicalChan nels&gt;</maxnoof 			ı	
>Logical Channel ID	M		9.2.1.97		1	
>Scheduling Priority Indicator	0		9.2.1.51A		I	
>Scheduling Information	0		9.2.1.101		-	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		ı	
>E-DCH DDI Value	0		9.2.1.88	If more than 1 MAC-d PDU size is configured for this Logical Channel, the different sizes will use subsequent DDI values starting from this DDI value. Value "0x3F" is reserved. Shall be ignored if Maximum MAC-d PDU Size Extended IE is present.	-	
>MAC-d PDU Size List		0< maxNrOfMA CdPDUSize			_	
>>MAC-d PDU Size	M		9.2.1.34A		-	
>Maximum MAC-d PDU Size Extended	0		MAC PDU Size Extended 9.2.1.34D		YES	reject
>MAC-es Maximum Bit Rate LCR	0		9.2.3.59	1.28Mcps TDD only.	YES	ignore

Range Bound	Explanation		
maxNoOfLogicalChannels	Maximum number of logical channels.		
maxNrOfMACdPDUSize	Maximum number of MAC-d PDU size per Logical Channels.		

#### 9.2.1.94 E-RNTI

The *E-RNTI* IE is needed for the UE (or UE group) specific CRC in E-AGCH, see TS 25.319 [52].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER	
			(065535)	

# 9.2.1.95 E-DCH Processing Overload Level

The *E-DCH Processing Overload Level* IE defines the threshold that determines when DRNS shall indicate processing issue problems to the SRNC.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
E-DCH Processing Overload			INTEGER	Number of consecutive
Level			(010,)	TTIs.
				The value "0" is a special
				value, that means infinity,
				i.e. when this value is used,
				the DRNS shall never
				indicate processing issue to
				the RNC.

### 9.2.1.96 E-DCH Power Offset for Scheduling Info

The E-DCH Power Offset for Scheduling Info is used to calculate the [FDD – E-DPDCH][TDD – E-PUCH] power for transmision of scheduling information without any MAC-d PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Power Offset for			INTEGER	Unit: dB.
Scheduling Info			(06)	Step: 1 dB.

### 9.2.1.97 Logical channel ID

The Logical Channel ID IE is used to identify a E-DCH logical channel in Scheduling Information that is sent over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Logical Channel ID		INTEGER (115)		

#### 9.2.1.98 MAC-es Guaranteed Bit Rate

The MAC-es Guaranteed Bit Rate IE indicates the guaranteed number of bits per second to be delivered over the air interface under normal operating conditions (provided there is data to deliver) for which the Node B shall provide sufficient UL resources. If the MAC-es Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-es Guaranteed Bit Rate			INTEGER (02^24-1,, 2^24256,000, 000)	Unit: bit/s.

#### 9.2.1.99 MAC-e Reset Indicator

Indicates the MAC-e (or MAC-i) Reset is performed in UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-e Reset Indicator			ENUMERAT ED (MAC-e Reset)	Means MAC-I Reset in case Maximum MAC-d PDU Size Extended is configured for an E-DCH Logical Channel.

#### 9.2.1.100 Maximum Number of Retransmissions for E-DCH

The *Maximum Number of Retransmissions for E-DCH* IE specifies the upper boundary for retransmissions for a single MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Retransmissions for E-DCH			INTEGER (015)	

#### 9.2.1.101 Scheduling Information

The *Scheduling Information* IE indicates whether the scheduling information is included for the E-DCH logical channel or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Scheduling Information			ENUMERAT ED ( Included, Not Included)	

#### 9.2.1.102 DGANSS Corrections

This IE contains DGANSS corrections.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
DGANSS Reference Time	M		INTEGER(035 70 by step of 30)	Seconds. Time in GNSS system time (modulo 3600 s) when the DGANSS corrections were calculated.	-	
DGANSS Information		1 to <maxsg nType&gt;</maxsg 			-	
>GANSS Signal ID	0		9.2.1.121		-	
>Status/Health	M		ENUMERATED (UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.2, UDRE scale 0.1, no data, invalid data)		-	
>DGANSS Signal Information	C- Status/He alth	1 to <maxg ANSSS at&gt;</maxg 		If the Cipher information is included these fields are ciphered.	-	
>>Sat ID	М		INTEGER(063	Defined in TS 25.331 [16].	-	
>>IOD	М		BIT STRING(10)		-	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
>>UDRE	M		ENUMERATED (UDRE ≤ 1.0 m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE)	The value in this field shall be multiplied by the UDRE Scale Factor in the IE Status/Health to determine the final UDRE estimate for the particular satellite.	-	
>>PRC	М		INTEGER(- 20472047)	Scaling factor 0.32 meters.	-	
>>RRC	М		INTEGER(- 127127)	Scaling factor 0.032 meters/sec.	-	
>>DGNSS Validity Period	0		9.2.1.138		YES	ignore

Condition	Explanation		
Status/Health	This IE shall be present if the Status/Health IE value		
	is not equal to "no data" or "invalid data".		

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE.
maxSgnType	Maximum number of signals for which data is included in the IE.

### 9.2.1.103 GANSS Almanac

This IE contains a reduced-precision subset of the ephemeris and clock correction parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
Week Number	M		INTEGER(02 55)	Almanac reference week, number of weeks since the beginning of GANSS specific system time (mod 256).	-	
CHOICE Almanac Model	M				ı	
>Keplerian Parameters				Model 1		
>>T <sub>oa</sub>	M		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base.	_	
>>IOD <sub>a</sub>	М		INTEGER(03	Issue-Of –Data, common to all satellites.	_	
>>Satellite Information KP		1 to <maxga NSSSatA Imanac&gt;</maxga 		Almanacs are in the order of the SV IDs, the smallest ID first.	-	
>>>Sat ID	М		INTEGER(06 3)	Defined in TS 25.331 [16].	-	
>>>e	М		BIT STRING(11)	Eccentricity, dimensionless (OS SIS ICD [53]).	-	
>>>δi	М		BIT STRING(11)	semi-circles (OS SIS ICD [53]).	_	
>>>OMEGADOT	M		BIT STRING(11)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi- circles/sec) (OS SIS ICD [53]).	П	
>>>SV Health KP	M		BIT STRING(4)	Dimensionless.	_	
>>delta A <sup>1/2</sup>	M		BIT STRING(17)	Semi-Major Axis delta (meters) <sup>1/2</sup> (OS SIS ICD [53]).	_	
>>>OMEGA <sub>0</sub>	М		BIT STRING(16)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) (OS SIS ICD [53]).	1	
>>>M <sub>0</sub>	M		BIT STRING(16)	Mean Anomaly at Reference Time (semi-circles) (OS SIS ICD [53]).	ı	
>>0	M		BIT STRING(16)	Argument of Perigee (semi-circles) (OS SIS ICD [53]).	-	
>>>af <sub>0</sub>	М		BIT STRING(14)	Seconds (OS SIS ICD [53]).	_	
>>>af <sub>1</sub>	М		BIT STRING(11)	sec/sec (OS SIS ICD [53]).	_	
>NAV Keplerian Parameters				Model 2.		
>>Keplerian NAV Almanac	М				YES	ignore
>>>T <sub>oa</sub>	М		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week	-	

				in GANSS TOD time base.		
>>>Satellite information NAV-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	_	
>>>e	М		BIT STRING(16)	Eccentricity, dimensionless (IS- QZSS [59]).	_	
>>>δi	M		BIT STRING (16)	Correction to inclination, semi-circles (IS-QZSS [59]).	_	
>>>OMEGADOT	M		BIT STRING (16)	Rate of right ascension, semi-circles/sec (IS-QZSS [59]).	-	
>>>SV Health	М		BIT STRING (8)	Satellite health (IS-QZSS [59]).	_	
>>>A <sup>1/2</sup>	M		BIT STRING (24)	Square root of the semi-major axis, meters <sup>1/2</sup> (IS-QZSS [59]).	_	
>>>OMEGA <sub>0</sub>	M		BIT STRING (24)	Longitude of ascending node of orbit plane at weekly epoch, semi-circles (IS-QZSS [59]).	_	
>>>0	M		BIT STRING (24)	Argument of perigee semi-circles (IS-QZSS [59]).	-	
>>>M <sub>0</sub>	M		BIT STRING (24)	Mean anomaly at reference time semi-circles (IS-QZSS [59]).	_	
>>>af <sub>0</sub>	M		BIT STRING (11)	Apparent satellite clock correction seconds (IS-QZSS [59]).	-	
>>>af <sub>1</sub>	M		BIT STRING (11)	Apparent satellite clock correction sec/sec (IS-QZSS [59]).	-	
>Reduced Keplerian Parameters				Model 3.		
>>Keplerian Reduced Almanac	М				YES	ignore
>>>T <sub>oa</sub>	M		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base.	_	
>>>Satellite information RED-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			-	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	_	
>>>δ <sub>A</sub>	M		BIT STRING(8)	meters (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS- QZSS [59]).	-	
$>>>>\Omega_0$	М		BIT STRING (7)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57],	_	

		1		10.0700 (50)		
>>> <b>A</b>	M		BIT STRING	IS-QZSS [59]). semi-circles (IS-GPS-		
>>>>Φ <sub>0</sub>	IVI		(7)	200 [55], IS-GPS-705 [56], IS-GPS-800 [57],	_	
			5.5.655.0.6	IS-QZSS [59]).		
>>>L1 Health	M		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>>>L2 Health	M		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>>>L5 Health	M		BIT STRING (1)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	-	
>Midi Keplerian Parameters				Model 4.		
>> Keplerian Midi Almanac	М				YES	ignore
>>>T <sub>oa</sub>	M		INTEGER(02 55)	Scaling factor 2 <sup>12</sup> s Reference time of almanac within week in GANSS TOD time base.	_	
>>>Satellite information MIDI-KP		1 <maxga NSSSatA Imanac&gt;</maxga 			_	
>>>Sat ID	М		INTEGER (063)	Defined in TS 25.331 [16].	_	
>>>e	M		BIT STRING(11)	dimensionless (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>>>δ <sub>i</sub>	M		BIT STRING (11)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>Ω_dot	M		BIT STRING (11)	semi-circles/sec (IS- GPS-200 [55], IS- GPS-705 [56], IS- GPS-800 [57], IS- QZSS [59]).	_	
>>>sqrtA	M		BIT STRING (17)	meters <sup>1/2</sup> (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	_	
>>>Ω <sub>0</sub>	M		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	_	
>>>(i)	M		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>M <sub>0</sub>	M		BIT STRING (16)	semi-circles (IS-GPS- 200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	-	
>>>afo	М		BIT STRING (11)	seconds (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-	_	

		1				1
			DIT OTDING	QZSS [59]).		
>>>a <sub>f1</sub>	М		BIT STRING	sec/sec (IS-GPS-200	_	
			(10)	[55], IS-GPS-705 [56], IS-GPS-800 [57], IS-		
				QZSS [59]).		
>>>L1 Health	М		BIT STRING	Dimensionless (IS-	_	
			(1)	GPS-200 [55], IS-		
				GPS-705 [56], IS-		
				GPS-800 [57], IS-		
				QZSS [59]).		
>>>L2 Health	M		BIT STRING	dimensionless (IS-	_	
			(1)	GPS-200 [55], IS-		
				GPS-705 [56], IS-		
				GPS-800 [57], IS-		
>>>L5 Health	M		BIT STRING	QZSS [59]). dimensionless (IS-		
>>>L5 Health	IVI		(1)	GPS-200 [55], IS-	_	
			(1)	GPS-200 [55], IS-		
				GPS-800 [57], IS-		
				QZSS [59]).		
>GLONASS Keplerian	1		1	Model 5.		1
Parameters						
>> Keplerian GLONASS	М				YES	ignore
>>>Satellite		1			_	
information GLO-KP		<maxga< td=""><td></td><td></td><td></td><td></td></maxga<>				
		NSSSatA				
N.A		Imanac>	DIT	1 1001		
>>>N <sup>A</sup>	М		BIT STRING(44)	days [60].	_	
>>>n <sup>A</sup>	M		STRING(11) BIT STRING	dimensionless [60].		
>>>11	IVI		(5)	differisionless [00].	_	
>>>H <sub>n</sub> <sup>A</sup>	М		BIT STRING	dimensionless [60].	_	
	'''		(5)			
>>>λ <sub>n</sub> <sup>A</sup>	M		BIT STRING	semi-circles [60].	_	
-			(21)			
>>>t <sub>λn</sub> <sup>A</sup>	M		BIT STRING	seconds [60].	_	
			(21)			
>>>>Δi <sub>n</sub> <sup>A</sup>	M		BIT STRING	semi-circles [60].	_	
1 m A			(18)	/ 1:: 1:001		
>>>>\DT_n^A	М		BIT STRING	sec/orbit period [60].	_	
AT DOT A	M		(22) BIT STRING	sec/orbit period <sup>2</sup> [60.]		
>>>ΔT_DOT <sub>n</sub> A	IVI		(7)	sec/orbit period [60.]	_	
>>>>ε <sub>n</sub> A	М		BIT STRING	dimensionless [60].		
	'''		(15)			
>>>∞ <sub>n</sub> <sup>A</sup>	М		BIT STRING	semi-circles [60].	_	
	<u>                                      </u>	<u>L</u>	(16)			<u> </u>
>>>>t <sub>n</sub> <sup>A</sup>	M		BIT STRING	seconds [60].	_	
			(10)			
>>>l	M		BIT STRING	dimensionless [60].	_	
		ļ	(1)	<u> </u>		
>>>M <sub>n</sub> <sup>A</sup>	0		BIT STRING	dimensionless [60].	_	
, CDAC FOFF D	1		(2)	Madal C		
>SBAS ECEF Parameters >> ECEF SBAS	M	1		Model 6.	YES	ianoro
>> ECEF SBAS Almanac	l ivi				150	ignore
>>>Satellite		1			_	
information SBAS-	1	<maxga< td=""><td></td><td></td><td></td><td></td></maxga<>				
ECEF	1	NSSSatA				
		lmanac>				
>>>Data ID	M		BIT	Dimensionless	_	
	1		STRING(2)	(DTFA01-96-C-00025		
				[58]).		
>>>SV ID	M		INTEGER	Defined in TS 25.331	_	
11 11			(063)	[16]		
>>>Health	M		BIT STRING	Dimensionless	_	
	L		(8)	(DTFA01-96-C-00025		

			[58]).		
>>>X <sub>G</sub>	M	BIT STRING (15)	meters (DTFA01-96- C-00025 [58]).	_	
>>>Y <sub>G</sub>	M	BIT STRING (15)	meters (DTFA01-96- C-00025 [58]).	_	
>>>Z <sub>G</sub>	M	BIT STRING (9)	meters (DTFA01-96- C-00025 [58]).	_	
>>>X <sub>G</sub> Rate-of- Change	M	BIT STRING (3)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>Y <sub>G</sub> Rate-of- Change	M	BIT STRING (3)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>Z <sub>G</sub> Rate-of- Change	M	BIT STRING (4)	meters/sec (DTFA01- 96-C-00025 [58]).	_	
>>>t <sub>0</sub>	M	BIT STRING (11)	seconds (DTFA01-96- C-00025 [58]).	_	
Complete Almanac Provided	0	BOOLEAN	This field indicates whether almanac is provided for the full GANSS constellation or not. TRUE means complete GANSS almanac is provided.	YES	ignore

Range Bound	Explanation
maxGANSSSatAlmanac	Maximum number of satellites for which data is included in the IE.

### 9.2.1.104 GANSS Clock Model

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Satellite Clock Model		1 to <maxgan SSClockM od&gt;</maxgan 		Model -1 There may be more than one clock model included if defined in SIS ICD (e.g. two for Galileo).
>t <sub>oc</sub>	М		BIT STRING(14)	defined in OS SIS ICD [53].
>a <sub>i2</sub>	М		BIT STRING(12)	defined in OS SIS ICD [53].
>a <sub>i1</sub>	М		BIT STRING(18)	defined in OS SIS ICD [53].
>a <sub>i0</sub>	М		BIT STRING(28)	defined in OS SIS ICD [53].
>T <sub>GD</sub>	0		BIT STRING(10)	defined in OS SIS ICD [53].
>Model ID	0		INTEGER(01)	Coded as defined in TS 25.331 [16].

Range bound	Explanation
maxGANSSClockMod	Maximum number of satellite clock models for which data is included
	in the IE.

### 9.2.1.104a GANSS Additional Clock Models

The IE contains fields needed to model the GANSS clock parameters.

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Clock Models				
>NAV-Clock Model				Model-2.
>>t <sub>oc</sub>	М		BIT STRING(16)	Time of clock (seconds) (IS-QZSS [59]).
>>af <sub>2</sub>	М		BIT STRING (8)	Clock correction polynomial coefficient (sec/sec <sup>2</sup> ) (IS-QZSS [59]).
>>af <sub>1</sub>	М		BIT STRING (16)	Clock correction polynomial coefficient (sec/sec) (IS-QZSS [59]).
>>af <sub>0</sub>	M		BIT STRING (22)	Clock correction polynomial coefficient (seconds) (IS-QZSS [59]).
>>T <sub>GD</sub>	M		BIT STRING (8)	Group delay (seconds) (IS-QZSS [59]).
>CNAV/CNAV-2 Clock Model			, ,	Model-3.
>>t <sub>oc</sub>	M		BIT STRING (11)	Clock data reference time of week (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>t <sub>op</sub>	M		BIT STRING (11)	Clock data predict time of week (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oc</sub> Index	М		BIT STRING (5)	SV clock accuracy index (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oc1</sub> Index	M		BIT STRING (3)	SV clock accuracy change index (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oc2</sub> Index	M		BIT STRING (3)	SV clock accuracy change rate index (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>a <sub>f2-n</sub>	М		BIT STRING (10)	SV clock drift rate correction coefficient (sec/sec <sup>2</sup> ) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>a <sub>f1-n</sub>	M		BIT STRING (20)	SV clock drift correction coefficient (sec/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>a <sub>f0-n</sub>	М		BIT STRING (26)	SV clock bias correction coefficient (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>T <sub>GD</sub>	M		BIT STRING (13)	Group delay correction (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>ISC <sub>L1CP</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-800 [57], IS-QZSS [59]).
>>ISC <sub>L1CD</sub>	0		BIT STRING (13)	Inter signal group delay correction

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
				(seconds) (IS-GPS-800 [57], IS-QZSS [59]).
>>ISC <sub>L1C/A</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-QZSS [59]).
>>ISC <sub>L2C</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-QZSS [59]).
>>ISC <sub>L5I5</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-705 [56], IS-QZSS [59]).
>>ISC <sub>L5Q5</sub>	0		BIT STRING (13)	Inter signal group delay correction (seconds) (IS-GPS-705 [56], IS-QZSS [59]).
>GLONASS Satellite Clock Model				Model-4.
$>\tau_{n}(t_{b})$	М		BIT STRING (22)	Satellite clock offset (seconds) [60].
$>\gamma_{n}(t_{b})$	M		BIT STRING (11)	Relative frequency offset from nominal value (dimensionless) [60].
$> \Delta  au_n$	0		BIT STRING (5)	Time difference between transmission in G2 and G1 (seconds) [60].
>SBAS Satellite Clock Model				Model-5
>t <sub>0</sub>	М		BIT STRING (13)	(seconds) (DTFA01-96-C- 00025 [58]).
>a <sub>Gfo</sub>	М		BIT STRING (12)	(seconds) (DTFA01-96-C- 00025 [58]).
>a <sub>Gf1</sub>	М		BIT STRING (8)	(sec/sec) (DTFA01-96-C- 00025 [58]).

# 9.2.1.105 GANSS Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
a <sub>i0</sub>	М		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
a <sub>i1</sub>	М		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
a <sub>i2</sub>	M		BIT STRING(12)	This parameter is used as defined in OS SIS ICD [53].
GANSS Ionosphere Regional Storm Flags		01		
>Storm Flag 1	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 2	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 3	M		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 4	М		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].
>Storm Flag 5	M		BOOLEAN	This parameter is used as defined in OS SIS ICD [53].

# 9.2.1.105a GANSS Additional Ionospheric Model

The IE contains fields needed to model the propagation delays of the GANSS signals through the ionosphere.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Data ID	М		BIT STRING(2)	Coded as defined in TS 25.331 [16].
$\alpha_0$	М		BIT STRING (8)	seconds (IS-QZSS [59]).
$\alpha_1$	М		BIT STRING (8)	sec/semi-circle (IS-QZSS [59]).
$\alpha_2$	М		BIT STRING (8)	sec/(semi-circle) <sup>2</sup> (IS-QZSS [59]).
α <sub>3</sub>	М		BIT STRING (8)	sec/(semi-circle) <sup>3</sup> (IS-QZSS [59]).
$\beta_0$	М		BIT STRING (8)	seconds (IS-QZSS [59]).
β1	М		BIT STRING (8)	sec/semi-circle (IS-QZSS [59]).
$\beta_2$	M		BIT STRING (8)	sec/(semi-circle) <sup>2</sup> (IS-QZSS [59]).
β <sub>3</sub>	М		BIT STRING (8)	sec/(semi-circle) <sup>3</sup> (IS-QZSS [59]).

# 9.2.1.106 GANSS Navigation Model

Void.

### 9.2.1.107 GANSS Orbit Model

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Orbit Model	М			
>Keplerian Parameters				Model-1.
>>t <sub>oe</sub>	M		BIT STRING(14)	Time-of-Ephemeris in seconds, scale factor 60 (OS SIS ICD [53]).
>>ω	М		BIT STRING(32)	Argument of Perigee (semi-circles) (OS SIS ICD [53]).
>>∆n	M		BIT STRING(16)	Mean Motion Difference From Computed Value (semi- circles/sec) (OS SIS ICD [53]).
>>M <sub>0</sub>	M		BIT STRING(32)	Mean Anomaly at Reference Time (semi-circles) (OS SIS ICD [53]).
>>OMEGAdot	M		BIT STRING(24)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) (OS SIS ICD [53]).
>>e	М		BIT STRING(32)	Eccentricity, scale factor 2 <sup>-33</sup> (OS SIS ICD [53]).
>>ldot	M		BIT STRING(14)	Rate of Inclination Angle (semi-circles/sec) (OS SIS ICD [53]).
>>sqrtA	M		BIT STRING(32)	Least significant bits of Semi- Major Axis in (meters) <sup>1/2</sup> , scale factor 2 <sup>-19</sup> (OS SIS ICD [53]).
>>i <sub>0</sub>	М		BIT STRING (32)	Inclination Angle at Reference Time (semi-circles) (OS SIS ICD [53]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>OMEGA <sub>0</sub>	М		BIT STRING(32)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) (OS SIS ICD [53]).
>>C <sub>rs</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term to the Orbit Radius (meters) (OS SIS ICD [53]).
>>C <sub>is</sub>	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Angle Of Inclination (radians) (OS SIS ICD [53]).
>>C <sub>us</sub>	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Argument Of Latitude (radians) (OS SIS ICD [53]).
>>C <sub>rc</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term to the Orbit Radius (meters) (OS SIS ICD [53]).
>>C <sub>ic</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Angle Of Inclination (radians) (OS SIS ICD [53]).
>>C <sub>uc</sub>	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Argument Of Latitude (radians) (OS SIS ICD [53]).

# 9.2.1.107a GANSS Additional Orbit Models

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Orbit Models				
>NAV-Keplerian Parameters				Model-2.
>>URA Index	M		BIT STRING(4)	SV accuracy (dimensionless) (IS-QZSS [59]).
>>Fit Interval Flag	M		BIT STRING (1)	Fit interval indication (dimensionless) (IS-QZSS [59]).
>>t <sub>oe</sub>	М		BIT STRING(16)	Time of ephemeris (seconds) (IS-QZSS [59]).
>>ω	М		BIT STRING (32)	Argument of perigee (semi-circles) (IS-QZSS [59]).
>>∆n	M		BIT STRING (16)	Mean motion difference from computed value (semi-circles/sec) (IS-QZSS [59]).
>>M <sub>0</sub>	M		BIT STRING (32)	Mean anomaly at reference time (semi-circles) (IS-QZSS [59]).
>>OMEGAdot	M		BIT STRING (24)	Rate of right ascension (semi-circles/sec) (IS-QZSS [59]).
>>e	M		BIT STRING (32)	Eccentricity (dimensionless) (IS-QZSS [59]).
>>ldot	M		BIT STRING (14)	Rate of inclination angle (semi-circles/sec) (IS-QZSS [59]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>sqrtA	М		BIT STRING (32)	Square root of semi-major axis (meters <sup>1/2</sup> ) (IS-QZSS [59]).
>>i <sub>0</sub>	М		BIT STRING (32)	Inclination angle at reference time (semi-circles) (IS-QZSS [59]).
>>OMEGA <sub>0</sub>	М		BIT STRING (32)	Longitude of ascending node of orbit plane at weekly epoch (semi-circles) (IS-QZSS [59]).
>>Crs	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the orbit radius (meters) (IS-QZSS [59]).
>>C <sub>is</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) (IS-QZSS [59]).
>>C <sub>us</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the argument of latitude (radians) (IS-QZSS [59]).
>>C <sub>rc</sub>	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the orbit radius (meters) (IS-QZSS [59]).
>>C <sub>ic</sub>	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) (IS-QZSS [59]).
>>C <sub>uc</sub>	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) (IS-QZSS [59]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>CNAV/CNAV-2 Keplerian Parameters				Model-3.
>>t <sub>op</sub>	M		BIT STRING (11)	Data predict time of week (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>URA <sub>oe</sub> Index	M		BIT STRING (5)	SV accuracy (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆A	M		BIT STRING (26)	Semi-major axis difference at reference time (meters) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>A_dot	М		BIT STRING (25)	Chane rate in semi-major axis (meters/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆n <sub>0</sub>	M		BIT STRING (17)	Mean motion difference from computed value at reference time (semi-circles/sec) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>∆n <sub>0</sub> _dot	M		BIT STRING (23)	Rate of mean motion difference from computed value (semi-circles/sec <sup>2</sup> ) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>M <sub>0-n</sub>	M		Bit String(33)	Mean anomaly at reference time (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>e <sub>n</sub>	М		BIT STRING (33)	Eccentricity (dimensionless) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>\u03b6n	М		Bit String(33)	Argument of perigee (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>Ω <sub>0-n</sub>	М		BIT STRING (33)	Reference right ascension angle (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>ΔΩ_dot	М		BIT STRING (17)	Rate of right ascension difference (semi-circles/sec) (IS-GPS- 200 [55], IS-GPS-705 [56], IS- GPS-800 [57], IS-QZSS [59]).
>>i <sub>o-n</sub>	М		BIT STRING (33)	Inclination angle at reference time (semi-circles) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>l <sub>0-n</sub> _dot	M		BIT STRING (15)	Rate of inclination angle (semi-circles/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C <sub>is-n</sub>	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>ic-n</sub>	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>rs-n</sub>	M		BIT STRING (24)	Amplitude of sine harmonic correction term to the orbit radius (meters) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>rc-n</sub>	М		BIT STRING (24)	Amplitude of cosine harmonic correction term to the orbit radius (meters) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>us-n</sub>	M		BIT STRING (21)	Amplitude of sine harmonic correction term to the argument of latitude (radians) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>>C <sub>uc-n</sub>	М		BIT STRING (21)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).
>GLONASS Earth-Centered, Earth-fixed Parameters				Model-4.
>>E <sub>n</sub>	M		BIT STRING (5)	Age of data (days) [60].
>>P1	M		BIT STRING (2)	Time interval between two adjacent values of t <sub>b</sub> (minutes) [60].
>>P2	М		BIT STRING (1)	Change of t <sub>b</sub> flag (dimensionless) [60].
>>M	0		BIT STRING (2)	Type of satellite (dimensionless) [60].
$\Rightarrow x_n(t_b)$	М		BIT STRING (27)	x-coordinate of satellite at time t <sub>b</sub> (kilometers) [60]
$\Rightarrow \dot{x}_n(t_b)$	М		BIT STRING (24)	x-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [60].
$\Rightarrow \ddot{x}_n(t_b)$	М		BIT STRING (5)	x-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [60].
$\Rightarrow y_n(t_b)$	М		BIT STRING (27)	y-coordinate of satellite at time t <sub>b</sub> (kilometers) [60].
$\Rightarrow \dot{y}_n(t_b)$	М		BIT STRING (24)	y-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [60].
$\Rightarrow \ddot{y}_n(t_b)$	М		BIT STRING (5)	y-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [60].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
$\Rightarrow z_n(t_b)$	M		BIT STRING (27)	z-coordinate of satellite at time t <sub>b</sub> (kilometers) [60].
$\Rightarrow \dot{z}_n(t_b)$	М		BIT STRING (24)	z-coordinate of satellite velocity at time t <sub>b</sub> (kilometers/sec) [60].
$\Rightarrow \ddot{z}_n(t_b)$	M		BIT STRING (5)	z-coordinate of satellite acceleration at time t <sub>b</sub> (kilometers/sec <sup>2</sup> ) [60].
>SBAS Earth-Centered, Earth- fixed Parameters				Model-5.
>>t <sub>0</sub>	C-ClockMo del		BIT STRING (13)	Time of applicability (seconds) (DTFA01-96-C-00025 [58]).
>>Accuracy	М		BIT STRING (4)	(dimensionless) (DTFA01-96- C-00025 [58]).
>>X <sub>G</sub>	М		BIT STRING (30)	(meters) (DTFA01-96-C-00025 [58]).
>>Y <sub>G</sub>	М		BIT STRING (30)	(meters) (DTFA01-96-C-00025 [58]).
>>Z <sub>G</sub>	М		BIT STRING (25)	(meters) (DTFA01-96-C-00025 [58]).
>>X <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>Y <sub>G</sub> Rate-of-Change	М		BIT STRING (17)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>Z <sub>G</sub> Rate-of-Change	М		BIT STRING (18)	(meters/sec) (DTFA01-96-C- 00025 [58]).
>>X <sub>G</sub> Acceleration	М		BIT STRING (10)	(meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).
>>Y <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).
>>Z <sub>G</sub> Acceleration	М		BIT STRING (10)	meters/sec <sup>2</sup> ) (DTFA01-96-C- 00025 [58]).

Condition	Explanation
ClockModel	This IE shall be present if "SBAS Earth-Centered, Earth-fixed Parameters" (Model-5) in IE GANSS Additional Clock Models is not included in GANSS Additional Navigation Models IE.

# 9.2.1.108 GANSS Real Time Integrity

This IE contains parameters that describe the real-time status of the GANSS constellation.

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	
Satellite Information		1 to		
		<maxgan< td=""><td></td><td></td></maxgan<>		
		SSSat>		
>Bad GANSS Sat ID	M		INTEGER(0.	Defined in TS 25.331 [16].
			.63)	
>Bad GANSS Signal ID	0		BIT	Coded as defined in TS
-			STRING(8)	25.331 [16].

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE.

# 9.2.1.109 GANSS Receiver Geographical Position (GANSS RX Pos)

The GANSS Receiver Geographical Position IE is used to identify the geographical coordinates of a GANSS receiver relevant for a certain Information Exchange Object.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Latitude Sign	М		ENUMERATED ( North, South)	
Degrees of Latitude	M		INTEGER (02 <sup>31</sup> -1)	The IE value (N) is derived by this formula: $N \le 2^{31} X /90 < N+1 X$ being the latitude in degree $(0^{\circ}90^{\circ})$ .
Degrees of Longitude	M		INTEGER (-2 <sup>31</sup> 2 <sup>31</sup> -1)	The IE value (N) is derived by this formula: N≤2 <sup>32</sup> X /360 < N+1 X being the longitude in degree (-180°+180°).
Direction of Altitude	M		ENUMERATED ( Height, Depth)	
Altitude	M		INTEGER (02 <sup>15</sup> -1)	The relation between the value (N) and the altitude (a) in meters it describes is $N \le a < N+1$ , except for $N=2^{15}-1$ for which the range is extended to include all greater values of (a).

#### 9.2.1.110 GANSS Time Model

The  $GANSS\ Time\ Model\ IE$  contains a set of parameters needed to relate GANSS time to selected time reference indicated by GNSS\_TO\_ID.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	Criticality	Assigned Criticality
GANSS Time Model Reference Time	M		INTEGER(0377 99)	GANSS reference time (modulo 1 week) in seconds. The scale factor is 2 <sup>4</sup>	-	·
T <sub>A0</sub>	M		INTEGER(- 214748364821 47483647)	Seconds, scale factor 2 <sup>-</sup>	-	
T <sub>A1</sub>	0		INTEGER (- 838860883886 07)	sec/sec, scale factor 2 <sup>-51</sup>	-	
T <sub>A2</sub>	0		INTEGER (- 6463)	sec/sec <sup>2</sup> , scale factor 2 <sup>-</sup>	_	
GNSS_TO_ID	M		ENUMERATED( GPS,, Galileo, QZSS, GLONASS)		-	
Week Number	0		INTEGER(0819 1)	Reference week of GANSS Time Model.	-	
Delta_T	0		INTEGER (- 128127)	This field specifies the integer seconds of the GNSS-GNSS Time Offset. Scale factor 1 second.	YES	ignore

#### 9.2.1.110a GANSS Additional Time Models

The GANSS Additional Time Models IE contains a set of parameters needed to relate GANSS time to selected time references.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GNSS-GNSS Time Model		1 <maxga NSS-1&gt;</maxga 		
>GANSS Time Model			9.2.1.110	

Range Bound	Explanation
maxGANSS-1	Maximum number of GANSS systems for which data is included in this IE.

### 9.2.1.111 GANSS UTC Model

The *GANSS UTC Model* IE contains a set of parameters needed to relate GANSS time to Universal Time Coordinate (UTC).

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
A <sub>1</sub>	М		BIT STRING(24)	sec/sec (OS SIS ICD [53]).
A <sub>0</sub>	M	BIT STRING(32)		seconds (OS SIS ICD [53]).
tot	М		BIT STRING(8)	seconds (OS SIS ICD [53]).
WN <sub>t</sub>	M		BIT STRING(8)	weeks (OS SIS ICD [53]).
$\Delta t_{LS}$	М		BIT STRING(8)	seconds (OS SIS ICD [53]).
WN <sub>LSF</sub>	M		BIT STRING(8)	weeks (OS SIS ICD [53]).
DN	М		BIT STRING(8)	days (OS SIS ICD [53]).
$\Delta t_{LSF}$	М		BIT STRING(8)	seconds (OS SIS ICD [53]).

#### 9.2.1.111a GANSS Additional UTC Models

The *GANSS Additional UTC Models* IE contains several sets of parameters needed to relate GANSS time to Universal Time Coordinate (UTC), as defined in IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], DTFA01-96-C-00025 [58], IS-QZSS [59], [60].

IE/Group name	Presence	Range	IE Type and	Semantics description
iL/Oloup hame	i icaciice	Range	in Type and	ociliantios acsoription
			Reference	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description	
CHOICE Additional UTC Models					
>Model Set 1			DIT	D: ((: : : : ( ONOO ::	
>A <sub>0-n</sub>	M		BIT STRING(16)	Bias coefficient of GNSS time scale relative to UTC time scale (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>A <sub>1-n</sub>	М		BIT STRING (13)	Drift coefficient of GNSS time scale relative to UTC time scale (sec/sec) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>A <sub>2-n</sub>	М		BIT STRING (7)	Drift rate correction coefficient of GNSS time scale relative to UTC time scale (sec/sec <sup>2</sup> ) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
$> \Delta t_{LS}$	M		BIT STRING (8)	Current or past leap second count (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>t <sub>ot</sub>	M		BIT STRING (16)	Time data reference time of week (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>WN <sub>ot</sub>	M		BIT STRING (13)	Time data reference week number (weeks) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>WN <sub>LSF</sub>	M		BIT STRING (8)	Leap second reference week number (weeks) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>DN	M		BIT STRING (4)	Leap second reference day number (days) (IS-GPS-200 [55], IS- GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
$> \!\! \Delta t_{LSF}$	M		BIT STRING (8)	Current or future leap second count (seconds) (IS-GPS-200 [55], IS-GPS-705 [56], IS-GPS-800 [57], IS-QZSS [59]).	
>Model Set 2					
>N <sup>A</sup>	M		BIT STRING (11)	Callendar day number within four-year period beginning since the leap year (days) [60].	
>τ <sub>c</sub>	М		BIT STRING (32)	GLONASS time scale correction to UTC(SU) (seconds) [60].	
>Delta UT1	0		DIT CTT :::		
>>B1	М		BIT STRING (11)	Coefficient to determine ΔUT1 (seconds) [60].	
>>B2	М		BIT STRING (10)	Coefficient to determine ΔUT1 (seconds/msd) [60].	
>KP	0		BIT STRING (2)	Notification of expected leap second correction	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
				(dimensionless) [60].
>Model Set 3				
>A <sub>1WNT</sub>	M		BIT STRING (24)	sec/sec (DTFA01-96-C-00025 [58], Message Type 12).
>A <sub>0WNT</sub>	M	BIT STRING seconds (32) (DTFA01-96-C-00025		seconds (DTFA01-96-C-00025 [58], Message Type 12).
>t <sub>ot</sub>	М		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>WN <sub>t</sub>	М		BIT STRING (8)	weeks (DTFA01-96-C-00025 [58], Message Type 12).
$>\Delta t_{LS}$	M		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>WN <sub>LSF</sub>	M		BIT STRING (8)	Weeks (DTFA01-96-C-00025 [58], Message Type 12).
>DN	M		BIT STRING (8)	days (DTFA01-96-C-00025 [58], Message Type 12).
$> \Delta t_{LSF}$	M		BIT STRING (8)	seconds (DTFA01-96-C-00025 [58], Message Type 12).
>UTC Standard ID	M		BIT STRING (3)	dimensionless Coded as defined in TS 25.331 [16].

# 9.2.1.112 T<sub>UTRAN-GANSS</sub> Accuracy Class

The  $T_{UTRAN-GANSS}$  Accuracy Class IE indicates the accuracy class of the UTRAN GANSS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GANSS</sub> Accuracy Class			ENUMERAT ED (Accuracy Class A, Accuracy Class B, Accuracy Class C)	More information about Measurement Accuracy Class is included in TS 25.133 [23].

### 9.2.1.113 T<sub>UTRAN-GANSS</sub> Measurement Threshold Information

The  $T_{UTRAN-GANSS}$  Measurement Threshold Information IE defines the related thresholds for UTRAN GANSS Timing of Cell Frames for UE Positioning measurements shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T <sub>UTRAN-GANSS</sub> Change Limit	0		INTEGER(1256)	Change of T <sub>UTRAN-GANSS</sub> value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T <sub>UTRAN-GANSS</sub> Deviation Limit	0		INTEGER(1256)	Deviation of the Predicted  T <sub>UTRAN-GANSS</sub> from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

# 9.2.1.114 T<sub>UTRAN-GANSS</sub> Measurement Value Information

The  $T_{UTRAN-GANSS}$  Measurement Value Information IE indicates the measurement results related to the UTRAN GANSS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
T <sub>UTRAN-GANSS</sub>	M			Indicates the UTRAN GANSS Timing of Cell Frames for UE Positioning. According to mapping in TS 25.133 [23] and TS 25.123 [24]; significant values range from 0 to 371589119999 99.	-	
>MS	M		INTEGER(016383)	Most Significant Part.	_	
>LS	М		INTEGER(0 42949672 95)	Least Significant Part.	_	
Tutran-ganss Quality	0		INTEGER(0 255)	Indicates the standard deviation (std) of the $T_{UTRAN}$ - GANSS measurements in 1/16 chip. $T_{UTRAN}$ - GANSS Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN}$ - GANSS Value, where x is the reported $T_{UTRAN}$ - GANSS Value and $\mu = E[x]$ is the expectation value of x.	-	
Tutran-ganss Drift Rate	M		INTEGER(- 5050)	Indicates the Tutran-Ganss drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GANSS clock.	-	
Tutran-ganss Drift Rate Quality	0		INTEGER(050)	Indicates the standard deviation (std) of the Tutran-Ganss drift rate measurements in 1/256 chip per second.  Tutran-Ganss Drift Rate  Quality = √E[(x-µ)²] = std of reported Tutran-Ganss Drift Rate, where x is the	_	

			reported $T_{UTRAN-GANSS}$ Drift Rate and $\mu = E[x]$ is the expectation value of x.		
GANSS Time ID	0	9.2.1.119a	Absence of this IE means Galileo system time.	YES	ignore

# 9.2.1.115 GANSS Reference Time

Void.

# 9.2.1.116 HARQ Memory Partitioning

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE HARQ Memory		1			_	
Partitioning						
>Implicit >>Number of Processes	M		INTEGER (18,12,1 4,16)	For HARQ process IDs going from 0 to "Number of Processes" – 1 the Total number of soft channel bits (TS 25.306 [42]) is partitioned equally between all HARQ processes according to the	-	
>Explicit				rules in TS 25.331 [16].	_	
>>HARQ Memory Partitioning I		1 <maxnr OfHARQP roc&gt;</maxnr 		The first instance of the parameter corresponds to HARQ process with identifier 0, the second instance to HARQ process with identifier 1, and so on.	_	
>>>Process Memory Size	М		9.2.1.49D	See TS 25.331 [16].	_	
>>HARQ Memory Partitioning Information Extension For MIMO		0, 4, 6 or 8		FDD and 1.28Mcps TDD only The 1 <sup>st</sup> instance corresponds to HARQ process with identifier set to "maxnoofHARQp rocesses", the 2 <sup>nd</sup> instance to HARQ process with identifier set to "maxnoofHARQp rocess with identifier set to "maxnoofHARQp rocesses+1", and so on.	GLOBAL	ignore
>>>Process Memory Size	М		9.2.1.49D	See TS 25.331 [16].	-	

Range Bound	Explanation
MaxNrOfHARQProc	Maximum number of HARQ processes for one UE [FDD – per stream
	(the maximum number of HARQ processes per UE is 2 *
	MaxnoofHARQprocesses in dual stream transmission mode)].

# 9.2.1.117 Multiple PLMN List

This information element contains a list of PLMN identities, which identifies the broadcasted PLMN Identities in MOCN and GWCN shared network configurations. The mandatory PLMN Identity in the MIB (called common PLMN in TS 23.251 [54]) is the first PLMN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PLMN Identity	M		OCTET STRING (SIZE (3))	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2n.  -The PLMN identity consists of 3 digits from MCC followed by
				either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
List of PLMNs		0 <maxnrofbroadc astPLMNs&gt;</maxnrofbroadc 		
>PLMN Identity	M		OCTET STRING (SIZE (3))	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2n.
				-The PLMN identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).

Range bound	Explanation
maxNrOfBroadcastPLMNs	Maximum number of additional PLMN identitys that can be
	broadcasted in a cell involved in a MOCN or GWCN Shared
	Network configuration. The value for maxNrOfBroadcastPLMNs is 5.

#### 9.2.1.118 GANSS Data Bit Assistance

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS TOD	M		INTEGER(059,)	Refererence time (modulo 1 minute) of the first bit of the data in <i>Data Bits</i> IE, in seconds.
Data Bit Assistance		1 <maxgans< td=""><td></td><td></td></maxgans<>		
List		SSat>		
>Sat ID	M		INTEGER(063)	Defined in TS 25.331 [16].
>Data Bit Assistance		1 <maxsgnty< td=""><td></td><td></td></maxsgnty<>		
Sgn List		pe>		
>>GANSS Signal ID	M		9.2.1.121	
>>Data Bits	М		BIT STRING(11024)	Raw data bits as transmitted from a specific satellite at the time indicated by GANSS_TOD. See TS 25.331 [16].

Range Bound	Explanation			
maxGANSSSat	Maximum number of satellites for which data is included in the IE.			
maxSgnType	Maximum number of GANSS signals included in the IE.			

### 9.2.1.119 GANSS ID

This IE defines a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS ID	M		INTEGER(07	Defines the GANSS and is
			,)	coded as defined in TS
				25.331 [16].

# 9.2.1.119a GANSS Time ID

This IE defines a particular GANSS system time.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Time ID	М		INTEGER(07 ,)	Defines the GANSS system time for the UTRAN GANSS Timing of Cell Frames for UE Positioning. Coded as defined in TS 25.331 [16], subclause 10.3.7.93a.

# 9.2.1.120 GANSS Navigation Model And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Transmission Time	M		9.2.1.122	GANSS Time when the Navigation model has been retrieved.
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1.
Satellite Information		1 to <maxgan SSSat&gt;</maxgan 		
>Sat ID	M		INTEGER(063)	Defined in TS 25.331 [16].
>SV Health	M		BIT STRING(5)	Coded as defined in OS SIS ICD [53].
>IOD	M		BIT STRING(10)	
>GANSS Clock Model	М		9.2.1.104	
>GANSS Orbit Model	M		9.2.1.107	

NOTE 1: The Non-Broadcast Indication allows to inform that the navigation model is not bit-to-bit the one broadcast by the satellite. If it is set to 1, the UE is informed that techniques such as data wiping off applied to the navigation model may not work for instance.

Condition	Explanation		
Orbit model	The IE shall be present if the GANSS Orbit Model IE		
	indicates "Keplerian Parameters".		

Range bound	Explanation		
maxGANSSSat	Maximum number of satellites for which data is included in the IE.		

# 9.2.1.120a GANSS Additional Navigation Models And Time Recovery

This IE contain information required to manage the transfer of precise navigation data to the GANSS-capable UE.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Transmission Time	M		9.2.1.122	GANSS Time when the Navigation model has been retrieved.
Non-Broadcast Indication	0		ENUMERAT ED(true)	If this IE is present, GANSS navigation model is not derived from satellite broadcast. See NOTE 1 in 9.2.1.120.
Satellite Information		1 <maxga NSSSat&gt;</maxga 		
>Sat ID	M		INTEGER(063)	Defined in TS 25.331 [16].
>SV Health	M		BIT STRING(6)	Coded as defined in TS 25.331 [16].
>IOD	M		BIT STRING(11)	Coded as defined in TS 25.331 [16].
>GANSS Additional Clock Models	M		GANSS I Clock Models 9.2.1.104a	
>GANSS Additional Orbit Models	M		GANSS Additional Orbit Models 9.2.1.107a	

Range bound	Explanation		
maxGANSSSat	Maximum number of satellites for which data is included in this IE.		
	The value of maxGANSSSat is 64.		

## 9.2.1.121 GANSS Signal ID

This IE defines a specific signal within a particular GANSS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Signal ID	M		INTEGER(07,)	Coded as defined in TS 25.331 [16].

### 9.2.1.122 GANSS Transmission Time

This IE indicates the GANSS Transmission Time.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
GANSS Day	0		INTEGER(0 8191)	The sequential number of days from the origin of the GNSS system time (indicated by the GANSS_ID given in the Requested Data Value IE) modulo 8192 days (about 22 years).
GANSS TOD	М		INTEGER(0 86399)	GANSS Time of Day in seconds.

# 9.2.1.122a GANSS Earth Orientation Parameters

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
t <sub>EOP</sub>	M		BIT STRING(16)	EOP data reference time (seconds) (IS-GPS-200 [55]).
PM_X	M		BIT STRING (21)	X-axis polar motion value at reference time (arc-seconds) (IS-GPS-200 [55]).
PM_X_dot	M		BIT STRING (15)	X-axis polar motion drift at reference time (arc-seconds/day) (IS-GPS-200 [55]).
PM_Y	M		BIT STRING (21)	Y-axis polar motion value at reference time (arc-seconds) (IS-GPS-200 [55]).
PM_Y_dot	M		BIT STRING (15)	Y-axis polar motion drift at reference time (arc-seconds/day) (IS-GPS- 200 [55]).
ΔUT1	M		BIT STRING (31)	UT1-UTC difference at reference time (seconds) (IS-GPS-200 [55]).
ΔUT1_dot	M		BIT STRING (19)	Rate of UT1-UTC difference at reference time (seconds/day) (IS-GPS-200 [55]).

## 9.2.1.122b SBAS ID

This IE defines a specific SBAS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SBAS ID	M		ENUMERATED( WAAS, EGNOS, MSAS, GAGAN,)	

# 9.2.1.122c GANSS Auxiliary Information

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE GANSS-ID				
>GANSS-ID-1				This choice may only be present if GANSS ID indicated "Modernized GPS".
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	М		INTEGER(063)	Defined in TS 25.331 [16].
>>>Signals Available	M		BIT STRING(8)	Coded as defined in TS 25.331 [16].
>GANSS-ID-3				This choice may be present if GANSS ID indicated "GLONASS".
>>Aux Info List		1 <maxgan SSSat&gt;</maxgan 		
>>>Sat ID	М		INTEGER(063)	Defined in TS 25.331 [16].
>>>Signals Available	М		BIT STRING(8)	Coded as defined in TS 25.331 [16].
>>>Channel Number	M		INTEGER (-713)	This field indicates the GLONASS carrier frequency number of the satellite identified by <i>Sat ID</i> , as defined in [60].

Range Bound	Explanation
maxGANSSSat	Maximum number of GANSS satellites for which data is included in this IE.

# 9.2.1.122d Additional Ionospheric Model Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional Ionospheric Model Request	M		BIT STRING(2)	Data ID for GANSS Additional lonospheric Model as defined in TS 25.331 [16], subclause 10.3.7.92b.

## 9.2.1.122e Earth Orientation Parameters Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Earth Orientation	М		BOOLEAN	True means requested.
Parameters Request				

## 9.2.1.122f GANSS Additional Navigation Models And Time Recovery Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Additional	M		BOOLEAN	True means requested.
Navigation Models And Time				·
Recovery Request				

## 9.2.1.122g GANSS Additional UTC Models Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Additional UTC Models Request	M		BOOLEAN	True means requested.

### 9.2.1.122h GANSS Auxiliary Information Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Auxiliary Information	М		BOOLEAN	True means requested.
Request				

### 9.2.1.123 SixtyfourQAM DL Support Indicator

The SixtyfourQAM DL Support Indicator indicates whether the particular cell is capable to support Sixtyfour QAM in DL or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Support Indicator			ENUMERAT ED (SixtyfourQA M DL Supported, SixtyfourQA M DL Not Supported)	

## 9.2.1.124 RANAP Enhanced Relocation Information Request

This parameter is transparent to the RNSAP. The parameter contains information for the Enhanced Relocation procedure as defined in TS 25.413 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation			BIT STRING	The content is defined in TS
Information Request				25.413 [2].

## 9.2.1.125 RANAP Enhanced Relocation Information Response

This parameter is transparent to the RNSAP. The parameter contains information for the Enhanced Relocation procedure as defined in TS 25.413 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation Information Response			BIT STRING	The content is defined in TS 25.413 [2].

#### 9.2.1.126 Released CN Domain

The parameter indicates the CD Domain(s) which the RNC shall release the related resource for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Released CN Domain	M			
>PS Domain			NULL	
>CS Domain			NULL	
>PS and CS Domain			NULL	

### 9.2.1.127 Secondary CCPCH system information MBMS

The parameter contains information for the Secondary CCPCH system information MBMS as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH system information MBMS			BIT STRING	The content is defined in TS 25.331 [16].

### 9.2.1.128 MBSFN Cluster Identity

The parameter is the identifier of a MBSFN cluster in one PLMN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Cluster Identity			INTEGER	the identifier of a MBSFN
			(065535)	cluster in one PLMN.

#### 9.2.1.129 MBSFN Scheduling Transmission Time Interval

The parameter is the identifier of an MBSFN Scheduling Transmission Time Interval.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Scheduling			INTEGER	Number of TTIs.
Transmission Time Interval			(4,8,16,32,	
			64,128,256)	

#### 9.2.1.130 MAC-ehs Reset Timer

The MAC-ehs Reset Timer IE is used as Reset Timer(Treset) described in TS 25.321 [41] subclause 11.6.4.5.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
144 C   D   T				T
MAC-ehs Reset Timer			ENUMERAT	Timer in multiples of T1 values
			ED (1, 2, 3,	(milliseconds). Used when
			4,)	MAC-ehs reordering queue is
			·	reset in CELL_FACH and
				CELL_PCH.

## 9.2.1.131 Enhanced FACH Support Indicator

This IE indicates the Enhanced FACH Support. [1.28Mcps TDD – This IE indicates the Enhanced FACH Support in both downlink and uplink.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced FACH Support Indicator			NULL	

## 9.2.1.132 Enhanced PCH Capability

This IE indicates the UE is capable of Enhanced PCH or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced PCH Capability			ENUMERAT	
			ED	
			(Enhanced	
			PCH	
			Capable,	
			Enhanced	
			PCH Not	
			Capable)	

## 9.2.1.133 Priority Queue Information for Enhanced FACH/PCH

The *Priority Queue Information for Enhanced FACH/PCH* IE provides information associated to HSDPA Priority Queue used for Enhanced FACH and/or Enhanced PCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue Information		1 <maxnr0 fPrioQueue</maxnr0 		
		S>		
>Priority Queue ID	M		9.2.1.45A	
>Scheduling Priority Indicator	M		9.2.1.51A	
>T1	M		9.2.1.54A	
>MAC-ehs Reset Timer	M		9.2.1.130	
>Discard Timer	0		9.2.1.19C	
>MAC-hs Window Size	M		9.2.1.34C	
>Maximum MAC-d PDU Size	M		MAC PDU	
			Size	
			Extended	
			9.2.1.34D	

Range Bound	Explanation
maxNrOfPrioQueues	Maximum number of Priority Queues.

### 9.2.1.134 MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Activation Indicator	M		NULL	

#### 9.2.1.135 MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Mode Indicator			ENUMERATED	
			(Activate,	
			Deactivate)	

### 9.2.1.136 DL RLC PDU Size Format

The DL RLC PDU Size Format IE indicates the downlink RLC PDU size format used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL RLC PDU Size Format			ENUMERATED ( Fixed RLC PDU size, Flexible RLC PDU size ,)	

# 9.2.1.137 UE Aggregate Maximum Bit Rate

The *UE Aggregate Maximum Bitrate* IE is applicable for all Non-GBR bearers per UE which is defined for the Downlink and the Uplink direction and provided by the CN to the RNC. At least one of the *UE Aggregate Maximum Bit Rate Downlink* IE and *UE Aggregate Maximum Bit Rate Uplink* IE shall be included in the *UE Aggregate Maximum Bit Rate* IE.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UE Aggregate Maximum Bit Rate				Desc: Applicable for non-GBR bearers.
>UE Aggregate Maximum Bit Rate Downlink	0		INTEGER (11,000,00 0,000)	Desc.: This IE indicates the aggregated maximum number of bits delivered by UTRAN and to UTRAN in DL within a period of time, divided by the duration of the period for all non-GBR bearers in one UE. The MBR of non-GBR bearers shall be ignored if this IE present.
>UE Aggregate Maximum Bit Rate Uplink	0		INTEGER (11,000,00 0,000)	Desc.: This IE indicates the aggregated maximum number of bits delivered by UTRAN and to UTRAN in UL within a period of time, divided by the duration of the period for all non-GBR bearers in one UE. The MBR of non-GBR bearers shall be ignored if this IE present.

# 9.2.1.138 DGNSS Validity Period

This IE defines the validity period of the GNSS differential corrections provided in DGPS corrections and DGANSS corrections IEs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UDRE Growth Rate	M		Enumerated( UDRE growth 1.5, UDRE growth 2, UDRE growth 4, UDRE growth 6, UDRE growth 8, UDRE growth 10, UDRE growth 12, UDRE growth 16)	This field provides an estimate of the growth rate of uncertainty (1-σ) in the corrections. The UDRE at time value specified in the <i>Time</i> of <i>Validity</i> for <i>UDRE</i> Growth Rate field is the value of this field times the value of UDRE provided in <i>DGPS Corrections</i> or <i>DGANSS</i> corrections IE (TS 25.331 [16]).
Time of Validity for UDRE Growth Rate	М		Enumerated( val20sec, val40sec, val80sec, val160sec, val320sec, val640sec, val1280sec, val2560sec)	This field specifies the time when the UDRE Growth Rate field applies (TS 25.331 [16]).

# 9.2.1.139 MDT Configuration

The IE defines the MDT function parameters.

Month   Mont	IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE MDT Area Scope   Scall based   T to	MDT Activation	М		ENUMERATED(MDT Only, MDT and	
Seeling   List	CHOICE MDT Area Scope	М			
>>>Cell-ID M INTEGER (0.2684354   S5)					
Colored State   Colored Stat			<maxnrofce IIIds&gt;</maxnrofce 		
>>LABased >>LAI List  1 to	>>>Cell-ID	M	(02684354		identifies a cell uniquely within UTRAN and consists of RNC-ID and C-ID as
>>LAI List  1 to maxNrOfLA   s>  >>LAI  >>>PLMN Identity  M  OCTET STRING (3)  - digits 0 to 9, two digits per octet, oct	>LA Based				
>>>PLMN identity  M  OCTET STRING (3)  - digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octe			<maxnrofla< td=""><td></td><td></td></maxnrofla<>		
octeteach digit encoded 0000 to 1001, -1111 used as fillerbit 4 to 1 of octet n encoding digit 2n-1bit 8 to 5 of octet n encoding digit 2nThe PLMN Identity consists of 3 digits from MCC followed by either a filler plus 2 digits from MNC (in case of 2 digit MNC) or 3 digits from MNC (in case of 3 3 digit MNC) or 3 digits from MNC (in case of 3 3 digit MNC) or 3 digits from MNC (in case of 4 3 digit MNC) or 3 digits from MNC (in case of 4 3 digit MNC) or 3 digits from MNC (in case of 4 3 digit MNC) or 3 digits from MNC (in case of 4 dillowed.  >>RAI List  >>>PLMN Identity  M  OCTET STRING (3)  This element identifies an area in which the MDT Configuration applies digits 0 to 9, two digits per octet each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MC (in case of 2 digit MNC) or 3 digits from MNC (in case of 2 digit MNC) or 3 digits from MNC (in case of 2 digit MNC) or 3 digits from MNC (in case of 3 digits from MNC) on 3 digits from MNC (in case of 3 digits from MNC) on 3 digits from MNC (in case of 3 digits from MNC) on 3 digits from MNC (in case of 3 digits from MNC) on 3 digits from MNC (in case of 4 digits from MNC) on 3 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digits from MNC) on 4 digits from MNC (in case of 4 digi					
>>>>LAC M OCTET STRING (2) 0000 and FFFE not allowed.  >RA Based >>RAI List  0 to	>>>PLMN Identity	M		OCTET STRING (3)	octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2nThe PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case
>>RAI List    O to   ImaxNrOfR   Als>   This element identifies an area in which the MDT   Configuration applies.	>>>LAC	М		OCTET STRING (2)	0000 and FFFE not
>>>RAI  >>>PLMN Identity  M  OCTET STRING (3)  OCTET STRING (3)  - digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n - bit 8 to 5 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MCC followed by either - a filler plus 2 digits from MNC (in case of 2 digit MNC) or - 3 digits from MNC (in case of a 3 digit MNC).  >>>>LAC  M  OCTET STRING (2)  OCTET STRING (1)	>RA Based				
area in which the MDT Configuration applies.  >>>>PLMN Identity  M  OCTET STRING (3)  - digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MCC followed by either - a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).  >>>>LAC  M  OCTET STRING (2)  0000 and FFFE not allowed.  >>>>RAC  M  OCTET STRING (1)	>>RAI List		<maxnrofr< td=""><td></td><td></td></maxnrofr<>		
>>>>PLMN Identity  M  OCTET STRING (3)  - digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n - The PLMN Identity consists of 3 digits from MCC followed by either - a filler plus 2 digits from MNC (in case of 2 digit MNC) or - 3 digits from MNC (in case of a 3 digit MNC).  >>>>LAC  M  OCTET STRING (2)  OCTET STRING (1)	>>>RAI				area in which the MDT
>>>RAC M OCTET STRING (1)	, and the second				octet, - each digit encoded 0000 to 1001, - 1111 used as filler - bit 4 to 1 of octet n encoding digit 2n-1 - bit 8 to 5 of octet n encoding digit 2n -The PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
- DLAMLArea Deced	>>>RAC	M		OCTET STRING (1)	allowed.
	. DI MAI A D - 1			NII II I	

M1 Report	0	9.2.2.128	M1: FDD only CPICH RSCP and CPICH Ec/No measurement by UE. This information element shall not be sent, ignored if received.
M2 Report	0	9.2.3.83	M2: P-CCPCH RSCP and Timeslot ISCP for UTRA 1.28 TDD. This information element shall not be sent, ignored if received.
M3 Report	0	NULL	

Range bound	Explanation
maxNrOfCellIds	Maximum no. of Cell ID subject for MDT scope. Value is 32.
maxNrOfLAIs	Maximum no. of LAI subject for MDT scope. Value is 8.
maxNrOfRAIs	Maximum no of RAI subject for MDT scope. Value is 8.

## 9.2.1.140 MDT Report parameters

This IE defines the report parameters for MDT periodic reports. This IE is not used by the DRNS.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MDT Report Parameters				
>Report interval	M		ENUMERATED ( ms250, ms500, ms1000, ms2000, ms3000, ms4000, ms6000, ms12000, ms16000, ms20000, ms24000, ms32000, ms64000, )	This IE is defined in TS25.331[10].
>Report amount	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64, infinity,)	

## 9.2.1.141 Neighbouring UMTS Cell Information Extension

The Neighbouring UMTS Cell Information Extension IE is an extension IE to the Neighbouring UMTS Cell Information IE and indicates the UMTS neighbouring cells in the same way as in the Neighbouring UMTS Cell Information IE. The DRNC may use the Neighbouring UMTS Cell Information Extension IE to indicate remaining UMTS neighbouring cells if the number of neighbouring RNCs exceeds the predefined maximum number of neighbouring RNCs (maxNrOfNeighbouringRNCs).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Neighbouring UMTS Cell Information Extension		1 <maxnr OfExtende dNeighbou ringRNCs&gt;</maxnr 		
>RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the Neighbouring UMTS Cell Information IE, the RNC-ID IE shall be ignored.
>CN PS Domain Identifier	0		9.2.1.12	
>CN CS Domain Identifier	0		9.2.1.11	
>Neighbouring FDD Cell Information	0		9.2.1.41B	
>Neighbouring TDD Cell Information	0		9.2.1.41D	
>Neighbouring TDD Cell Information LCR	0		9.2.1.72	
>Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.

Range bound	Explanation
maxNrOfExtendedNeighbouringRNCs	Maximum number of extended neighbouring RNCs.

### 9.2.1.142 Source ID

The Source ID IE identifies the source for the relocation of SRNS. The Source ID shall be the SAI of the relocation source.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SAI	M		9.2.1.52	

## 9.2.1.143 Target ID

The *Target ID* IE identifies the target for the relocation of SRNS. The target ID shall be the Cell Global ID of the relocation target.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CGI	M		9.2.1.5D	

### 9.2.1.144 MS Classmark 2

The coding of this element is described in TS 24.008 [66].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 2	M		OCTET STRING	Coded same way as the Mobile Station Classmark 2
				IE defined in TS 24.008 [66].

### 9.2.1.145 MS Classmark 3

The coding of this element is described in TS 24.008 [66].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MS Classmark 3	M		OCTET STRING	Coded same way as the Mobile Station Classmark 3 IE defined in TS 24.008 [66].

### 9.2.1.146 Speech Version

The Speech Version IE identifies the speech version supported.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Speech Version	М		BIT STRING (4)	The coding of this IE is described in TS 24.008 [66].

# 9.2.1.147 Controlled Object Scope

Controlled Object Scope IE indicates the scope of objects which the control of information transfer shall be performed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is
				included, the RNC-ID IE shall be
				ignored.
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be
				used if the RNC identity has a
				value larger than 4095.
Multiple PLMN List	0		9.2.1.117	
UMTS Cell Information	0	0 <maxnrofc< td=""><td></td><td></td></maxnrofc<>		
		ells>		
>C-ID	M		9.2.1.6	

Range bound	Explanation			
maxNrOfCells	Maximum number of cells that can be indicated in the			
	corresponding IE.			

# 9.2.1.148 ANR Report Indication

ANR Report Indication IE contains information about neighbour cells detected by the ANR function in UE and sent to the initiating RNC (RNC<sub>1</sub>) over Uu.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	M		OCTET STRING (3)	The registed PLMN of UE when the ANR result was logged digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2nThe PLMN Identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).
L3 Information	М		9.2.1.32	The IE Contains UE INFORMATION RESPONSE defined in TS 25.331 [16].

### 9.2.1.149 ANR Cell Information

The ANR Cell Information IE provides information about an UTRAN Cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RNC-ID	M		9.2.1.50	If the Extended RNC-ID IE is included in the ANR Cell Information IE, the RNC-ID IE shall be ignored.
LAC	0		OCTET STRING (2)	0000 and FFFE not allowed.
RAC	0		OCTET STRING (1)	
ANR FDD Cell Information	0		9.2.1.150	
ANR TDD Cell Information	0		9.2.1.151	
ANR TDD Cell Information LCR	0		9.2.1.152	
Extended RNC-ID	0		9.2.1.50a	The Extended RNC-ID IE shall be used if the RNC identity has a value larger than 4095.

### 9.2.1.150 ANR FDD Cell Information

The ANR FDD Cell Information IE provides information for FDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Power	0		9.2.1.44	
Tx Diversity Indicator	M		9.2.2.50	
STTD Support Indicator	0		9.2.2.45	
Closed Loop Mode1 Support Indicator	0		9.2.2.2	
Restriction State Indicator	0		9.2.1.48C	
DPC Mode Change Support Indicator	0		9.2.2.56	
Cell Capability Container FDD	0		9.2.2.D	
SNA Information	0		9.2.1.52Ca	
Frequency Band Indicator	0		9.2.2.59	
Max UE DTX Cycle	0		9.2.2.87	
ANR Multiple PLMN List	0		9.2.1.153	
Secondary Serving Cell List	0		9.2.2.101	
Dual Band Secondary Serving Cell List	0		Secondary Serving Cell List 9.2.2.101	
Cell Capability Container Extension FDD	0		9.2.2.123	

## 9.2.1.151 ANR TDD Cell Information

The *ANR TDD Cell Information* IE provides information for 3.84Mcps TDD or 7.68Mcps TDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sync Case	M		9.2.1.54	
Time Slot For SCH	0		Time Slot	
			9.2.1.56	
SCH Time Slot	0		9.2.1.51	
SCTD Indicator	M		9.2.1.78	
DPCH Constant Value	0		9.2.1.23	
PCCPCH Power	0		9.2.1.43	
Restriction State Indicator	0		9.2.1.48C	
Cell Capability Container TDD	0		9.2.3.1a	
Cell Capability Container	0		9.2.3.31	
7.68Mcps TDD				
SNA Information	0		9.2.1.52Ca	
ANR Multiple PLMN List	0		9.2.1.153	

## 9.2.1.152 ANR TDD Cell Information LCR

The *ANR TDD Cell Information LCR* IE provides information for 1.28Mcps TDD cell that is neighbouring cell to the Base UTRAN cell in ANR neighbouring relation.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SCTD Indicator	M		9.2.1.78	
DPCH Constant Value	0		9.2.1.23	
PCCPCH Power	0		9.2.1.43	
Restriction State Indicator	0		9.2.1.48C	
Cell Capability Container TDD LCR	0		9.2.3.1b	
SNA Information	0		9.2.1.52Ca	
ANR Multiple PLMN List	0		9.2.1.153	
Cell Capability Container Extension TDD LCR	0		9.2.3.80	

## 9.2.1.153 ANR Multiple PLMN List

This information element contains a list of PLMN identities, which identifies the broadcasted PLMN Identities in MOCN and GWCN shared network configurations. The common PLMN Identify (mandatory PLMN Identity that is broascasted in the MIB) is not included in the list.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
List of PLMNs		1 <maxnrofbroadc astPLMNs&gt;</maxnrofbroadc 		
>PLMN Identity	M		OCTET STRING (SIZE (3))	- digits 0 to 9, two digits per octet, - each digit encoded 0000 to 1001, - 1111 used as filler bit 4 to 1 of octet n encoding digit 2n-1 bit 8 to 5 of octet n encoding digit 2n.  -The PLMN identity consists of 3 digits from MCC followed by either -a filler plus 2 digits from MNC (in case of 2 digit MNC) or -3 digits from MNC (in case of a 3 digit MNC).

Range bound	Explanation
maxNrOfBroadcastPLMNs	Maximum number of additional PLMN identitys that can be
	broadcasted in a cell involved in a MOCN or GWCN Shared
	Network configuration. The value for maxNrOfBroadcastPLMNs is 5.

#### 9.2.1.154 Extended RNTI

The Extended RNTI identifies the UE in the RNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended RNTI			INTEGER(1	
			048576419	
			4303,)	

## 9.2.1.155 Extended S-RNTI Group

The Extended S-RNTI Group identifies a group of UEs in the SRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended S-RNTI	М		Extended RNTI 9.2.1.154	
Extended S-RNTI bit mask index	М		Enumerated(b1, b2,b21,)	

The Extended S-RNTI group is identified by all Extended S-RNTI values whose bits starting from the most significant bit down to, and including, the bit indicated by Extended S-RNTI bit mask index, are equal to the corresponding bits of the Extended S-RNTI in this IE.

The bits of the Extended S-RNTI in this IE that are less significant than the bit position indicated by the Extended S-RNTI bit mask index shall be ignored.

#### 9.2.1.156 Common E-RGCH Cell Information

The Common E-RGCH Cell Information IE provides information about a Common E-RGCH capable cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common RG Activation State	M				_	
>De-Activation					-	
>>De-Activation	M		NULL		-	
>Activation					-	
>>E-RGCH Channelisation Code	M		FDD DL Channelisat ion Code Number 9.2.2.14	E-RGCH Channelisatio n Code	_	
>>E-RGCH Signature Sequence	M		INTEGER (0maxnoof SigSeqE- RGHICH - 1)	E-RGCH Signature Sequence	_	
>>Minimum Serving Grant	0	INTEGER (037,38)	(037) indicates E- DCH serving grant index as defined in TS 25.321 [41]; index 38 means zero grant	Minimum Serving Grant	-	

# 9.2.2 FDD Specific Parameters

This subclause contains parameters that are specific to FDD.

## 9.2.2.a ACK-NACK Repetition Factor

The ACK-NACK Repetition Factor IE indicates the consecutive repetition of the ACK and NACK.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
ACK-NACK Repetition			INTEGER	Step: 1.
Factor			(1,4,)	

### 9.2.2.b ACK Power Offset

The *ACK Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ ACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
ACK Power Offset			INTEGER	According to mapping in TS
			(08,,	25.213 [21] subclause 4.2.1.
			910)	

## 9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CM Configuration Change CFN	М		CFN 9.2.1.9		-	
Transmission Gap Pattern Sequence Status		0 <maxtgp S&gt;</maxtgp 		If the group is not present, none of the pattern sequences are activated.	-	
>TGPSI Identifier	M		INTEGER(1< MaxTGPS>)	Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be activated.</maxtgps>	-	
>TGPRC	M		INTEGER(05 11)	The number of transmission gap patterns within the Transmission Gap Pattern Sequence. 0=Infinity.	-	
>TGCFN	М		CFN 9.2.1.9	Connection Frame Number of the first frame of the first pattern 1 within the Transmission Gap Pattern Sequence.	-	
>Affected HS- DSCH serving cell List		0 <maxnr OfHSDSC H&gt;</maxnr 		The HS-DSCH serving cells affected by the TGPS when activating frequency specific compressed mode. Max 4 in this 3GPP release.	EACH	reject
>>C-ID	M		9.2.1.6		-	

Range bound	Explanation
maxTGPS	Maximum number of active pattern sequences. Value 6.
maxNrOfHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS-
	DSCH cells for one UE.

# 9.2.2.B Adjustment Period

Adjustment Period IE defines the period to be used for power balancing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1 256)	Unit: Frames.

## 9.2.2.C Adjustment Ratio

Adjustment Ratio IE (Radj) defines the convergence rate used for the associated Adjustment Period.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Ratio			INTEGER (0 100)	The Adjustment Ratio is given with a granularity of 0.01 0 -> 0.00 1 -> 0.01 100 -> 1.00

## 9.2.2.Ca Bundling Mode Indicator

The Bundling Mode Indicator indicates whether the bundling shall be done or shall not be done for Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Bundling Mode Indicator			ENUMERATED ( Bundling, No	The value "Bundling" is
			bundling)	applicable only when E-TTI indicates "2ms".

# 9.2.2.D Cell Capability Container FDD

The Cell Capability Container FDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container			BIT STRING	Each bit indicates whether a
FDD			(32)	cell supports a particular
				functionality or not. The
				value 1 of a bit indicates that
				the corresponding
				functionality is supported in a cell and value 0 indicates
				that the corresponding
				functionality is not supported
				in a cell. Each bit is defined
				as follows.
				The first bit:Reserved.
				The second bit: Delayed
				Activation Support Indicator.
				The third bit: HS-DSCH
				Support Indicator. The fourth bit:Reserved.
				The fourth bit: F-DPCH
				Support Indicator.
				The sixth bit: E-DCH Support
				Indicator.
				The seventh bit: E-DCH
				TTI2ms Support Indicator.
				The eighth bit: E-DCH
				2sf2and2sf4 and all inferior
				SFs Support Indicator.
				The ninth bit: E-DCH 2sf2
				and all inferior SFs Support Indicator.
				The tenth bit: E-DCH 2sf4
				and all inferior SFs Support
				Indicator.
				The eleventh bit: E-DCH sf4
				and all inferior SFs Support
				Indicator.
				The twelveth bit: E-DCH sf8
				and all inferior SFs Support Indicator.
				The thirteenth bit: E-DCH
				HARQ IR Combining
				Support Indicator.
				The fourteenth bit: E-DCH
				HARQ Chase Combining
				Support Indicator.
				The fifteenth bit: Continuous
				Packet Connectivity DTX-
				DRX Support Indicator. The sixteenth bit: Continuous
				Packet Connectivity HS-
				SCCH less Support
				Indicator.
				The seventeenth bit: MIMO
				Support Indicator.
				The eighteenth bit:
				SixteenQAM UL Support
				Indicator.
				The nineteenth bit: Flexible
				MAC-d PDU Size Support Indicator.
				The twentieth bit: F-DPCH
				Slot Format Support
				Indicator.
				The twentyfirst bit:
				SixtyfourQAM DL Support
				Indicator.
				The twentysecond bit:

	Flexible E-DCH MAC-d PDU Size Support Indicator. The twentythird bit: E- DPCCH Power Boosting Support Indicator. The twentytfourth bit: SixtyfourQAM DL and MIMO Combined Support Indicator. This bit shall not be set to 1 if SixtyfourQAM DL Support Indicator is set to 0 or MIMO Support Indicator is set to 0. The twentyfifth bit: Multi Cell Support Indicator The twentysixth bit: MBMS Support Indicator. The twentyseventh bit: TX Diversity on DL Control Channels by MIMO Capable UE when MIMO operation is Active Support Indicator. The twentyeighth bit: Dual Band Support Indicator The twentyninth bit: Single Stream MIMO Support Indicator. The thirtieth bit: Preferred Precoding Weight Set Restriction Support Indicator. (See TS 25.331 [16], the value 1 indicates preferred)
	Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver. Note that Reserved bits are not considered as a spare bit. They shall however be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.2.E Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See TS 25.215 [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER	
			(063,)	

## 9.2.2.1 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip Offset is used as offset for the DL DPCH relative to the Primary CPICH timing for the DL DPCH or for the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER	Unit: Chips.
			(038399)	

## 9.2.2.2 Closed Loop Mode1 Support Indicator

The Closed Loop Mode1 Support Indicator indicates whether the particular cell is capable to support Closed loop mode1 or not

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Mode1 Support Indicator			ENUMERAT ED(Closed	
			loop mode1	
			Supported, Closed loop	
			mode1 not supported).	

## 9.2.2.3 Closed Loop Mode2 Support Indicator

Void.

## 9.2.2.3A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Closed Loop Timing Adjustment			ENUMERAT	According to TS 25.214 [10]
Mode			ED(Offset1,	subclause 7.1:
			Offset2,)	Offset1 = slot(j+1)mod15
				Offset2 = $slot(j+2)mod15$

## 9.2.2.4 Compressed Mode Method

Void

#### 9.2.2.4A DCH FDD Information

The DCH FDD Information IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH FDD Information		1 <maxnr OfDCHs&gt;</maxnr 			_	
>Payload CRC Presence Indicator	M		9.2.1.42		_	
>UL FP Mode	M		9.2.1.67		_	
>ToAWS	M		9.2.1.58		_	
>ToAWE	М		9.2.1.57		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	М		9.2.1.16		_	
>>TrCH Source Statistics Descriptor	М		9.2.1.65		_	
>>Transport Format Set	М		9.2.1.64	For the UL.	_	
>>Transport Format Set	М		9.2.1.64	For the DL.	_	
>>BLER	M		9.2.1.4	For the UL.	_	
>>BLER	M		9.2.1.4	For the DL.	_	
>>Allocation/Retention Priority	М		9.2.1.1		_	
>>Frame Handling Priority	М		9.2.1.29		_	
>>QE-Selector	M		9.2.1.46A		_	
>>DRAC control	M		9.2.2.13		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	М		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

# 9.2.2.4B E-DCH FDD Information

The E-DCH FDD Information IE provides information for an E-DCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flows Information	М		9.2.2.4MC		-	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	If this IE is not included, scheduled transmission in all HARQ processes is allowed.	-	
E-DCH Maximum Bitrate	0		9.2.2.4MG		_	
E-DCH Processing Overload Level	0		9.2.1.95		-	
E-DCH Reference Power Offset	0		9.2.2.4MI		-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.90		YES	reject
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.61A	If the SixteenQAM UL operation is not configured for this UE, Table 16B for E- AGCH in TS 25.212 [9] shall be used.	YES	ignore
SixtyfourQAM UL Operation Indicator	0		9.2.2.90a		YES	reject
UL MIMO Information	0		9.2.2.159		YES	reject

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE is
	set to "Activate".

# 9.2.2.4C E-DCH FDD Information Response

The *E-DCH FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information Response		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			_	
>E-DCH MAC-d Flow ID	M		9.2.1.91	If only HARQ Process Allocation For 2ms Scheduled Transmissio n Grant IE and this IE (E-DCH MAC-d Flow ID) are present in the E-DCH FDD Information Response IE, the content of this IE shall be considered invalid.	_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HARQ Process Allocation For 2ms Non- Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
>Transport Bearer Not Setup Indicator	0		9.2.2.4T		YES	ignore
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.4D E-DCH FDD DL Control Channel Information

The E-DCH FDD DL Control Channel Information IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-AGCH And E-RGCH/E- HICH FDD Scrambling Code	O		DL Scrambling Code 9.2.2.11	Scrambling code on which E-AGCH, E-RGCH and E-HICH are transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code.	_	
E-AGCH Channelisation Code	0		FDD DL Channelisat ion Code Number 9.2.2.14		-	
Primary E-RNTI	0		E-RNTI 9.2.1.94		_	
Secondary E-RNTI	0		E-RNTI 9.2.1.94		_	
E-RGCH/E-HICH Channelisation Code	М		FDD DL Channelisat ion Code Number 9.2.2.14		-	
E-RGCH Signature Sequence	0		INTEGER (0maxnoof SigSeqERG HICH-1)		-	
E-HICH Signature Sequence	0		INTEGER (0maxnoof SigSeqERG HICH-1)		1	
Serving Grant Value	0		INTEGER (037,38)	(037) indicates E- DCH serving grant index as defined in TS 25.321 [41]; index 38 means zero grant.	ı	
Primary/Secondary Grant Selector	0		ENUMERA TED (Primary, Secondary)	Indicates whether the Serving Grant Value is granted with a primary E- RNTI or a secondary E- RNTI.	F	
E-RGCH Release Indicator	0		9.2.2.60		1	
E-RGCH and E-HICH Channelisation Code Validity Indicator  Default Serving Grant in	0		9.2.2.68 INTEGER	Indicates whether the value of E- RGCH and E- HICH Channelisatio n Code is invalid. Serving Grant	YES	ignore

DTX Cycle 2		(037,38)	value to be used in DTX- Cycle-2. (037) indicates E- DCH serving grant index as defined in TS 25.425 [32]; index 38 means zero grant.		
UL MIMO DL Control Channel information	0	9.2.2.162		YES	ignore

Range bound	Explanation
maxnoofSigSeqERGHICH	Maximum number Signature Sequences for E-RGCH
	/ E-HICH.

# 9.2.2.4E E-DCH RL Indication

Indicates whether a RL is an E-DCH RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH RL Indication			ENUMERAT	
			ED(E-DCH,	
			non E-DCH)	

# 9.2.2.4F E-DCH FDD Information To Modify

The E-DCH FDD Information IE provides information for an E-DCH to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		See Note1 below.	-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		-	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>TNL QoS	0		9.2.1.56A		_	
>Maximum Number of Retransmissions for E- DCH	0		9.2.1.100		-	
>Traffic Class	0		9.2.1.58A		_	
>E-DCH HARQ Power Offset FDD	0		9.2.2.4L		1	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		ı	
> CHOICE <i>E-DCH</i> grant type	0					
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	М		9.2.2.4N	If the Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored. When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the maximum number of bits per MAC-I PDU.	1	
>>>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		-	

>>>Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission	O	9.2.2.4R	When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the extended	YES	reject

>>E-DCH Scheduled			NULL			
Transmission Grant			INOLL			
>Bundling Mode Indicator	0		9.2.2.Ca		_	
>E-DCH Logical Channel	0		E-DCH		_	
To Add			Logical Channel Information 9.2.1.92			
>E-DCH Logical Channel To Modify			9.2.1.93		-	
>E-DCH Logical Channel To Delete		0< maxNoOfL ogicalCha nnels>			_	
>>Logical Channel ID	M		9.2.1.97		_	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
E-DCH Maximum Bitrate	0		9.2.2.4MG		_	
E-DCH Processing Overload Level	0		9.2.1.95		_	
E-DCH Reference Power Offset	0		9.2.2.4MI		_	
MAC-e Reset Indicator	0		9.2.1.99		_	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		YES	ignore
SixteenQAM UL Operation Indicator	0		9.2.2.90		YES	reject
E-DCH MAC-d PDU Size Format	0		9.2.1.91A		YES	reject
E-DCH DL Control Channel Grant Information		0 <maxnr OfEDCHR Ls&gt;</maxnr 			GLOBAL	ignore
>E-DCH RL ID	М		RL ID 9.2.1.49		_	
E-AGCH Table Choice	C- SixteenQA M UL Operation		9.2.2.61A	If sixteenQAM UL operation is not used in the new configuration for this UE, Table 16B for E-AGCH in TS 25.212 [9] shall be used in the new configuration.	YES	ignore
SixtyfourQAM UL Operation Indicator	0		9.2.2.90a	garanem	YES	reject
UL MIMO Reconfiguration	0		9.2.2.158		YES	reject

Note 1: Even if no E-DCH MAC-d Flow Specific Information needs to be modified, one E-DCH MAC-d Flow Information shall be included, which only contains the E-DCH MAC-d Flow ID IE and the Transport BearerRequest Indicator IE set to "Bearer not Requested".

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE
	is set to "Activate".

Range bound	Explanation		
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.		
MaxNoOfLogicalChannels	Maximum number of Logical Channels.		
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.		

# 9.2.2.4G E-DCH Transport Format Combination Set Information (E-TFCS Information)

Whereas the related Transport Block sizes are standardised in TS 25.321 [41] this IE gives details on the referenced Transport Block Size Table, the E-DCH Minimum Set E-TFCI, the Reference E-TFCIs and configuration parameters used for the calculation of the gain factors  $\beta_{ec}$  and  $\beta_{ed}$  defined in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-TFCI Table Index	М		INTEGER (01,, 27)	Indicates which standardised E-TFCS Transport Block Size Table shall be used. The related tables are specified in TS 25.321 [41].	-	
E-DCH Minimum Set E- TFCI	М		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see TS 25.321 [41] and TS 25.331 [16].	-	
Reference E-TFCI Information		1 <maxnr OfRefETF Cls&gt;</maxnr 			_	
>Reference E-TFCI	М		INTEGER (0127)		_	
>Reference E-TFCI Power Offset	М		9.2.2.4P	If the Extended Reference E- TFCI Power Offset IE is present, this IE shall be ignored.	-	
>Extended Reference E- TFCI Power Offset	0		9.2.2.4Q		YES	reject
E-DCH Minimum Set E- TFCI Validity Indicator	0		9.2.2.69	Indicates whether the value of E- DCH Minimum Set E-TFCI is invalid.	YES	reject
E-TFCI Boost Information	0		9.2.2.91		YES	reject
E-DPDCH Power Interpolation	O		BOOLEAN	True means that the E-DPDCH power interpolation formula shall be applied, False means that the E-DPDCH power extrapolation formula shall be applied for the computation of the gain factor $\beta_{ed}$ according to TS 25.214 [10].	YES	reject

Range Bound	Explanation
maxNrOfRefETFCIs	Maximum number of signalled reference E-TFCIs.

### 9.2.2.4J E-TTI

The E-TTI parameter indicates the Transmission Time Interval for E-DPCH operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TTI			ENUMERAT	
			ED (2ms,	
			10ms)	

### 9.2.2.4K E-DPCCH Power Offset

The E-DPCCH Power Offset is used to calculate the E-DPCCH gain factor  $\beta_{ec}$  as defined in TS 25.214 [10], whereas  $\beta_{ec}$  is related to the power difference between DPCCH and E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Offset			INTEGER (08)	According to mapping in TS 25.213 [21] subclause 4.2.1.3.

#### 9.2.2.4KA Void

### 9.2.2.4L E-DCH HARQ Power Offset FDD

The E-DCH HARQ Power Offset FDD is used to calculate the unquantised gain factor for an E-TFC ( $\beta_{ed,j,uq}$ ) as defined in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset FDD			INTEGER (06)	According to mapping in TS 25.213 [21] subclause 4.2.1.3.

9.2.2.4M Void

9.2.2.4MA Void

9.2.2.4MB Void

### 9.2.2.4MC E-DCH MAC-d Flows Information

The E-DCH MAC-d Flows Information IE is used for the establishment of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		-	
>TNL QoS	0		9.2.1.56A		_	
>Payload CRC Presence Indicator	М		9.2.1.42		_	
>Maximum Number of Retransmissions for E- DCH	М		9.2.1.100		_	
>Traffic Class	М		9.2.1.58A		-	
>E-DCH HARQ Power Offset FDD	М		9.2.2.4L		-	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		_	
>CHOICE E-DCH grant type	М				_	
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	М		9.2.2.4N	If the Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored. When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the maximum number of bits per MAC-I PDU.		
>>>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	If this IE is not included, transmission in all HARQ processes is allowed.	-	

>>>Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission	0	9.2.2.4R	When Maximum MAC-d PDU Size Extended IE is configured for an E-DCH Logical Channel this IE indicates the extended maximum number of bits per MAC-I PDU.	YES	reject
>>E-DCH Scheduled Transmission Grant		NULL			
>Bundling Mode Indicator	0	9.2.2.Ca		_	
>E-DCH Logical Channel Information	М	9.2.1.92		_	
>TrCH Source Statistics Descriptor	0	9.2.1.65		YES	ignore

Range bound	Explanation		
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.		

9.2.2.4MD Void

9.2.2.4ME Void

9.2.2.4MF Void

### 9.2.2.4MG E-DCH Maximum Bitrate

The E-DCH Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Maximum Bitrate			INTEGER (05742,, 574311498, 1149934507)	Bitrate on transport block level. Unit is kbits per second.

## 9.2.2.4MH Void

### 9.2.2.4MI E-DCH Reference Power Offset

The E-DCH Reference Power Offset is used to estimate the E-DPDCH power from E-TFCI without decoding MAC-e PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Reference Power			INTEGER (06)	According to mapping in TS
Offset				25.213 [21] subclause 4.2.1.3.

#### 9.2.2.4MJ Void

## 9.2.2.4N Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission indicates the maximum numbers of bits allowed to be included in a MAC-e (or MAC-i) PDU per E-DCH MAC-d flow configured for non-scheduled transmissions. If the range of the *Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE is insufficient to represent the value to be sent to the DRNS, the *Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission* IE shall be used to represent the value to be sent to the DRNS, see section 9.2.2.4R.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Bits per			INTEGER (119982)	
MAC-e PDU for Non-				
Scheduled Transmission				

#### 9.2.2.40 HARQ Process Allocation For 2ms TTI

The HARQ Process Allocation for 2ms TTI indicates those HARQ processes that are allowed. MAC-d PDU's for a MAC-d flow are only allowed to be transmitted in those processes for which the bit is set to "1".

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Process Allocation For 2ms TTI			BIT STRING (8)	The first Bit corresponds to HARQ process ID = 0, the second bit corresponds to HARQ process ID = 1, etc. The HARQ process ID for 2ms TTI is defined in TS 25.321 [41], chapter 11.8.1.3.

#### 9.2.2.4P Reference E-TFCI Power Offset

The Reference E-TFCI Power Offset is used to calculate the reference E-TFC gain factor  $\beta_{ed,ref}$  as defined in TS 25.214 [10]. If the range of the *Reference E-TFCI Power Offset* IE is insufficient to represent the value to be sent to the DRNS, the *Extended Reference E-TFCI Power Offset* IE shall be used to represent the value to be sent to the DRNS, see section 9.2.2.4Q.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference E-TFCI Power Offset			INTEGER (029)	According to mapping in TS 25.213 [21] subclause 4.2.1.3

#### 9.2.2.4Q Extended Reference E-TFCI Power Offset

The Extended Reference E-TFCI Power Offset IE shall be used if the range of the Reference E-TFCI Power Offset IE (see section 9.2.2.4P) is insufficient to represent the value of the Reference E-TFCI Power Offset to be sent to the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Reference E-TFCI Power Offset			INTEGER (3031,)	According to mapping in TS 25.213 [21] subclause 4.2.1.3.

# 9.2.2.4R Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission

The Extended Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE shall be used if the range of the Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission IE (see section 9.2.2.4N) is insufficient to represent the value of the Maximum Number of Bits per MAC-e (or MAC-i) PDU for Non-scheduled Transmission to be sent to the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Maximum Number of			INTEGER	
Bits per MAC-e PDU for Non-			(1998322978,,	
scheduled Transmission			2297934507)	

### 9.2.2.4S Transport Bearer Not Requested Indicator

The Transport Bearer Not Requested Indicator parameter indicates that a transport bearer shall not be established or may not to be established for DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not Requested Indicator			ENUMERATED (Transport Bearer shall not be Established, Transport Bearer may not be Established)	

### 9.2.2.4T Transport Bearer Not Setup Indicator

The Transport Bearer Not Setup Indicator parameter indicates that a transport bearer will not be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not Setup			ENUMERATED	
Indicator			(Transport Bearer	
			Not Setup)	

9.2.2.5 D-Field Length

Void

9.2.2.6 Diversity Control Field

Void.

9.2.2.7 Diversity Indication

Void.

9.2.2.8 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Diversity Mode			ENUMERAT	The Diversity Mode IE shall
			ED(None,	never be set to "Not Used". If
			STTD,	received it shall be rejected.
			Closed loop	·
			mode 1, Not	
			Used,)	

#### 9.2.2.9 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, according to TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Slot Format			INTEGER	
			(016,)	

### 9.2.2.9A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required or that an Initial DL DPCH Timing Adjustment has been performed by the DRNS. It also indicates whether the timing adjustment consists of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL DPCH Timing			ENUMERAT	The size of the timing
Adjustment			ED(timing	adjustment is 256 chips.
			advance,	
			timing delay)	

#### 9.2.2.10 DL Power

Void

### 9.2.2.10A DL Power Balancing Information

The *DL Power Balancing Information* IE provides information for power balancing to be activated in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Power Adjustment Type	M		9.2.2.28		_	
DL Reference Power	C-Common		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	
DL Reference Power Information	C-Individual	1 <maxnro fRLs&gt;</maxnro 			_	
>RL ID	M		9.2.1.49		_	
>DL Reference Power	M		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	
Max Adjustment Step	C- CommonOrIn dividual		9.2.2.23		_	
Adjustment Period	C- CommonOrIn dividual		9.2.2.B		_	
Adjustment Ratio	C- CommonOrIn dividual		9.2.2.C		_	

Condition	Explanation
Common	The IE shall be present if the Power Adjustment Type IE is set to
	"Common".
Individual	The IE shall be present if the Power Adjustment Type IE is set to
	"Individual".
CommonOrIndividual	The IE shall be present if the Power Adjustment Type IE is set to
	"Common" or "Individual".

Range Bound	Explanation
maxNrOfRLs	Maximum number of Radio Links for a UE.

### 9.2.2.10B DL Power Balancing Activation Indicator

The *DL Power Balancing Activation Indicator* IE indicates that the power balancing is activated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing			ENUMERATED(DL	
Activation Indicator			Power Balancing	
			Activated).	

### 9.2.2.10C DL Reference Power Information

The *DL Reference Power Information* IE provides reference power of the power balancing to be used in the relevant RL(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Common DL Reference Power	0		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	
Individual DL Reference Power Information		0 <maxnro fRLs&gt;</maxnro 			_	
>RL ID	M		9.2.1.49		_	
>DL Reference Power	М		DL power 9.2.1.21A	Power on DPCH or on F-DPCH.	_	

Range bound	Explanation
maxNrOfRLs	Maximum number of RLs for a UE.

### 9.2.2.10D DL Power Balancing Updated Indicator

The *DL Power Balancing Updated Indicator* IE indicates that the power balancing related parameters is updated in the RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing			ENUMERATED(DL	
Updated Indicator			Power Balancing	
			Updated).	

### 9.2.2.11 DL Scrambling Code

DL Scrambling code to be used by the RL. One cell may have multiple DL Scrambling codes available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code			INTEGER (015)	0= Primary scrambling code of the cell. 115= Secondary scrambling code.

# 9.2.2.12 Downlink Frame Type

Void

### 9.2.2.12A DPC Mode

The DPC Mode IE indicates the DPC mode to be applied TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode			ENUMERAT TED (Mode0, Mode1, )	Mode0: The DRNS shall estimate the UE transmitted TPC command and update the DL power in every slot. Mode1: The DRNS shall estimate the UE transmitted TPC command over three slots and shall update the DL power in every three slots.

#### 9.2.2.13 DRAC Control

The possibility to use DRAC control has been removed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DRAC Control			ENUMERAT ED (Not Used, Not- Requested)	The DRAC Control IE shall never be set to "Not Used".

9.2.2.13A DSCH FDD Information

Void.

9.2.2.13B DSCH FDD Information Response

Void.

9.2.2.13Bb DSCH-RNTI

Void.

# 9.2.2.13C FDD DCHs To Modify

The FDD DCHs To Modify IE provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
FDD DCHs To Modify		1 <maxnr OfDCHs&gt;</maxnr 			-	
>UL FP Mode	0		9.2.1.67		_	
>ToAWS	0		9.2.1.58		_	
>ToAWE	0		9.2.1.57		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	M		9.2.1.16		_	
>>Transport Format Set	0		9.2.1.64	For the UL.	_	
>>Transport Format Set	0		9.2.1.64	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1		_	
>>Frame Handling Priority	0		9.2.1.29		_	
>>Not Used	0		NULL		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	0		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

9.2.2.13D Enhanced DSCH PC

Void.

9.2.2.13E Enhanced DSCH PC Counter

Void.

9.2.2.13F Enhanced DSCH PC Indicator

Void.

9.2.2.13G Enhanced DSCH PC Wnd

Void.

#### 9.2.2.13H Enhanced DSCH Power Offset

Void.

### 9.2.2.13I Enhanced Primary CPICH Ec/No

Energy per PN chip divided by the total received power spectral density measured on the Primary CPICH by the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced Primary CPICH Ec/No			INTEGER(049)	According to the mapping of the Primary CPICH Ec/lo UE measurement defined in TS 25.133 [23] and TS 25.123 [24].

### 9.2.2.14 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD DL Channelisation Code Number			INTEGER(0. . 511)	According to the mapping in TS 25.213 [27].
				The maximum value is equal to the DL spreading factor –1.

#### 9.2.2.14A FDD DL Code Information

The *FDD DL Code Information* IE provides FDD DL Code information for all DPCHs or for the F-DPCH of one Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
FDD DL Code Information		1 <maxnrof DL-Codes</maxnrof 			_	
>DL Scrambling Code	M		9.2.2.11		_	
>FDD DL Channelisation Code Number	М		9.2.2.14		_	
>Transmission Gap Pattern Sequence Scrambling Code Information	0		9.2.2.47B		-	

Range bound	Explanation
maxNrOfDL-Codes	Maximum number of DL Channelisation Codes for
	one UE.

#### 9.2.2.15 FDD S-CCPCH Offset

Void.

### 9.2.2.16 FDD TPC Downlink Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FDD TPC Downlink Step			ENUMERAT	
Size			ED(0.5, 1,	
			1.5, 2,)	

### 9.2.2.16A First RLS Indicator

The First *RLS Indicator* IE indicates if a specific Radio Link and all Radio Links which are part of the same Radio Link Set, shall be considered as the first radio links established towards the UE or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
First RLS Indicator			ENUMERAT	
			ED(first RLS,	
			not first RLS)	

9.2.2.17 Gap Position Mode

Void.

9.2.2.18 Gap Period (TGP)

Void.

9.2.2.19 Gap Starting Slot Number (SN)

Void

### 9.2.2.19a HS-DSCH FDD Information

The HS-DSCH FDD Information IE is used for initial addition of HS-DSCH information to UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.30OA		_	
UE Capabilities		1			_	
Information						
>HS-DSCH Physical	М		9.2.1.30Oa		_	
Layer Category						
>1.28 Mcps TDD uplink	0		9.2.3.10D	Not to be	YES	ignore
physical channel capability				used.		
>Number of Supported Carriers	0		ENUMERATE D ( One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Tree-six carrier, Six-six carrier,, One-Two carrier Discontiguous, Two-Two carrier Discontiguous, One- Twocarrier Contiguous, Two-Two carrier	Not to be used.	YES	reject
			Contiguous)			
>MIMO SF Mode Supported For HS-PDSCH dual stream	0		ENUMERATE D (SF1, SF1/SF16)	Not to be used.	YES	ignore
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.30Oa	Not to be used.	YES	ignore
>UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0 Non-Capable)	Not to be used.	YES	ignore
>UE RF Band Capability	C-		9.2.3.84	Not to be	YES	ignore
LCR	NofSupport edCarriers			used.		.9
MAC-hs Reordering Buffer Size for RLC-UM	M		9.2.1.34Ab		_	
CQI Feedback Cycle k	М		9.2.2.24a		_	
CQI Repetition Factor	C-		9.2.2.24c		_	
ACK-NACK Repetition	CQICyclek M		9.2.2.a		_	
Factor						
CQI Power Offset	М		9.2.2.24b		-	
ACK Power Offset	M		9.2.2.b		-	
NACK Power Offset	М		9.2.2.26a		-	
HS-SCCH Power Offset	0		9.2.2.19d		_	
HARQ Preamble Mode	0		9.2.2.57		YES	ignore
MIMO Activation Indicator	0		9.2.1.134		YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		YES	ignore
UE with enhanced HS- SCCH support indicator	0		NULL	UE supports enhanced HS-	YES	ignore

			SCCH functionality: - UE supports different HS- SCCH in consecutive TTIs and, - in HS-SCCH- less operation mode the UE supports HS- SCCH orders.		
Enhanced HS Serving CC Abort	0	ENUMERATE D (Abort Enhanced HS Serving CC, )	Shall be ignored in Radio Link Setup and Radio Link Addition procedures.	YES	reject
UE Support Indicator Extension	0	9.2.2.103		YES	ignore
Power Offset For S-CPICH for MIMO Request Indicator	0	9.2.2.105		YES	ignore
Single Stream MIMO Activation Indicator	0	9.2.2.106		YES	reject
MIMO with four transmit antennas Activation Indicator	0	9.2.2.145		YES	reject
Dual Stream MIMO with four transmit antennas Activation Indicator	0	9.2.2.149		YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0	9.2.2.147		YES	ignore
Multiflow Information	0	9.2.2.152	For FDD only	YES	reject

Condition	Explanation
CQICyclek	The IE shall be present if the CQI Feedback Cycle k IE is set to
	a value greater than 0.

# 9.2.2.19aa HS-DSCH FDD Secondary Serving Information

The *HS-DSCH FDD Secondary Serving Information* IE is used for initial addition of Secondary Serving HS-DSCH information to UE Context and defines the cell specific parameters for the secondary serving HS-DSCH Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.19d		_	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		_	
MIMO Activation Indicator	0		9.2.1.134		YES	reject
Single Stream MIMO Activation Indicator	0		9.2.2.106		YES	reject
Diversity Mode	0		9.2.2.8	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected.	YES	reject
Transmit Diversity Indicator	0		9.2.2.48		YES	reject
Power Offset For S-CPICH for MIMO Request Indicator	0		9.2.2.105		YES	ignore
Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS- DSCH cell, Value = "2" indicates 2nd secondary serving HS- DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio link.	YES	reject
MIMO with four transmit antennas Activation Indicator	0		9.2.2.145		YES	reject
Dual Stream MIMO with four transmit antennas Activation Indicator	0		9.2.2.149		YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147		YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or assisting serving or assisting secondary serving HS- DSCH cell for the UL HS-DPCCH as specified in TS 25.212. In inter-Node B multiflow	YES	reject

		case, if	
		present, the	
		Value must	
		be "1".	

### 9.2.2.19b HS-DSCH FDD Information Response

The *HS-DSCH FDD Information Response* IE provides information for HS-DSCH MAC-d flows that have been established or modified. It also provides additional HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
HS-DSCH MAC-d		0 <max< td=""><td></td><td></td><td>_</td><td></td></max<>			_	
Flow Specific		NrOfMA				
Information		CdFlow				
Response		s>				
>HS-DSCH MAC-d	M		9.2.1.300		_	
Flow ID						
>Binding ID	0		9.2.1.3		_	
>Transport Layer	0		9.2.1.62		_	
Address						
>HS-DSCH Initial	0		9.2.1.30Na		_	
Capacity Allocation						
HS-SCCH Specific		0 <max< td=""><td></td><td></td><td>_</td><td></td></max<>			_	
Information		NrOfHS				
Response		SCCHC				
-		odes>				
>Code Number	M		INTEGER		_	
			(0127)			
HS-PDSCH And HS-	0		DL Scrambling		_	
SCCH Scrambling			Code			
Code			9.2.2.11			
Measurement Power	0		9.2.2.24d		_	
Offset			0.0.4.440			
HARQ Memory	0		9.2.1.116		_	
Partitioning	0		0.04.700		VEO	:
User Plane Congestion	0		9.2.1.70C		YES	ignore
Fields Inclusion HARQ Preamble Mode	0		9.2.2.58		YES	ignoro
Activation Indicator	0		9.2.2.56		150	ignore
MIMO Information	0		9.2.2.78		YES	Ignore
Response	0		9.2.2.70		163	ignore
SixtyfourQAM DL	0		9.2.2.79B		YES	Ignore
Usage Indicator	0		9.2.2.790		163	ignore
HS-DSCH TB Size	0		9.2.2.19G		YES	ignore
Table Indicator			3.2.2.130		1 120	ignore
Power Offset For S-	0		9.2.2.104		YES	ignore
CPICH for MIMO			J.Z.Z. 104		123	ignore
Support of dynamic	0		9.2.2.129		YES	ignore
DTXDRX related HS-	~		3.2.2.1.20			19010
SCCH order						
Power Offset For S-	0		9.2.2.148		YES	ignore
CPICH for MIMO with						.5
four transmit antennas						
Precoder weight set	0		9.2.2.167		YES	ignore
restriction						3 2.12

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

# 9.2.2.19ba HS-DSCH FDD Secondary Serving Information Response

The HS-DSCH FDD Secondary Serving Information Response IE provides Secondary Serving HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Specific Secondary Serving Information Response		0 <maxn rOfHSSC CHCodes</maxn 			-	,
>Code Number	М		INTEGER (0127)		_	
HS-PDSCH And HS- SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.11		-	
Measurement Power Offset	0		9.2.2.24d		_	
SixtyfourQAM DL Usage Indicator	0		9.2.2.79B		_	
HS-DSCH TB Size Table Indicator	0		9.2.2.19G		_	
MIMO Information Response	0		9.2.2.78		YES	ignore
Power Offset For S- CPICH for MIMO	0		9.2.2.104		YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas	0		9.2.2.148		YES	ignore
Precoder weight set restriction	0		9.2.2.167		YES	ignore

Range bound	Explanation
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

### 9.2.2.19bb HS-DSCH FDD Secondary Serving Information To Modify

The *HS-DSCH FDD Secondary Serving Information To Modify* IE is used for modification of cell specific Secondary Serving HS-DSCH information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.19d	•	_	-
HS-SCCH Code Change Grant	0		9.2.1.30\$		-	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		ı	
MIMO Mode Indicator	0		9.2.1.135		YES	reject
Single Stream MIMO Mode	0		9.2.2.107		YES	reject
Indicator						
Diversity Mode	0		9.2.2.8	If Diversity mode = "Closed loop mode 1" the procedure shall be rejected.	YES	reject
Transmit Diversity Indicator	C- DiversityM ode		9.2.2.48		YES	reject
Non Cell Specific Tx Diversity	0		ENUMERAT ED (Tx Diversity,)	Value = "Tx Diversity": Diversity Mode and Transmit Diversity Indicator shall be non cell specific.	YES	reject
Power Offset For S-CPICH	0		9.2.2.105		YES	ignore
for MIMO Request Indicator Ordinal Number Of			INTEGER	Value = "1"	\/=0	
Frequency	0		(132,)	indicates 1st secondary serving HS-DSCH cell, Value = "2" indicates 2nd secondary serving HS-DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio link.	YES	reject
MIMO with four transmit	0		9.2.2.146	For FDD only	YES	reject
antennas Mode Indicator  Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or	YES	reject

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
				assisting		
				serving or		
				assisting		
				secondary		
				serving HS-		
				DSCH cell		
				for the UL		
				HS-DPCCH		
				as specified		
				in TS 25.212.		
				In inter-Node		
				B multiflow		
				case, if		
				present, the		
				Value must		
				be "1".		

Condition	Explanation
DiversityMode	The IE shall be present if Diversity Mode IE is present and not
	set to "None".

# 9.2.2.19bc HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised

The *HS-DSCH FDD Secondary Serving Information To Modify Unsynchronised* IE is used for modification of Secondary Serving HS-DSCH information in a UE Context with the Unsynchronised Radio Link Reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	0		9.2.2.19d		_	•
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		_	
MIMO Mode Indicator	0		9.2.1.135		YES	reject
Single Stream MIMO	0		9.2.2.107		YES	reject
Mode Indicator						
Power Offset For S- CPICH for MIMO	0		9.2.2.105		YES	ignore
Request Indicator Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS- DSCH cell, Value = "2" indicates 2nd secondary serving HS- DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the DRNS if the new configuration contains one secondary serving radio	YES	reject
MIMO with four transmit	0		9.2.2.146	link. For FDD only	YES	reject
antennas Mode Indicator			0.00450		\/50	
Dual Stream MIMO with four transmit antennas Mode Indicator	0		9.2.2.150	For FDD only	YES	reject
Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For FDD only	YES	ignore
Multiflow Ordinal Number Of Frequency	0		INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or assisting serving or assisting secondary serving HS-DSCH cell for the UL HS-DPCCH as specified in TS 25.212. In inter-Node B multiflow case, if present, the Value must be "1".	YES	reject

### 9.2.2.19c HS-DSCH FDD Update Information

The *HS-DSCH FDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		1	
CQI Feedback Cycle k	0		9.2.2.24a		_	
CQI Repetition Factor	0		9.2.2.24c		_	
ACK-NACK Repetition Factor	0		9.2.2.a		-	
CQI Power Offset	0		9.2.2.24b		_	
ACK Power Offset	0		9.2.2.b		-	
NACK Power Offset	0		9.2.2.26a		_	
HS-PDSCH Code Change Indicator	0		9.2.1.30V		YES	ignore
Precoder weight set restriction	0		9.2.2.167		YES	ignore

### 9.2.2.19ca HS-DSCH FDD Secondary Serving Update Information

The *HS-DSCH FDD Secondary Serving Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		-	
HS-PDSCH Code Change Indicator	0		9.2.1.30V	This IE shall never be included. If received it shall be ignored.		
Precoder weight set restriction	0		9.2.2.167		YES	ignore

### 9.2.2.19C HS-DSCH configured indicator

The *HS-DSCH Configured Indicator* IE indicates the configuration of HS-DSCH for the UE. The *HS-DSCH Configured Indicator* IE shall be used for the configuration of the E-DPDCH IQ branch mapping (TS 25.213 [21]).

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
HS-DSCH Configured Indicator			ENUMERATED (HS- DSCH configured, HS-DSCH not configured)	Indicator of the HS-DSCH configuration for configuration of the E-DPDCHs IQ branch mapping (TS 25.213 [21]).

#### 9.2.2.19d HS-SCCH Power Offset

The *HS-SCCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when FDPCH is configured. When F-DPCH is configured, the *HS-SCCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-SCCH Power Offset			INTEGER (0255)	Step 0.25 dB, range -32- +31.75 dB.

### 9.2.2.19e E-DCH FDD Update Information

The *E-DCH FDD Update Information* IE provides information for E-DCH to be updated. At least one IE shall be present.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Update Information		0 <maxn rOfEDCH MACdFlo ws&gt;</maxn 			1	
>E-DCH MAC-d Flow ID	М		9.2.1.91		I	
>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.4O		ľ	
HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.4O		I	
E-DCH DL Control Channel Change Information		0 <maxn rOfEDCH RLs&gt;</maxn 			GLOBAL	ignore
>E-DCH RL ID	М		RL ID 9.2.1.49		-	

Range bound	Explanation		
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.		
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE		

# 9.2.2.19f HS-DSCH Serving Cell Change Information

The *HS-DSCH Serving Cell Change Information* IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		-	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		YES	reject
Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		YES	reject

### 9.2.2.19g HS-DSCH Serving Cell Change Information Response

The *HS-DSCH Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Serving Cell Change					_	
>Successful					_	
>>HS-DSCH FDD Information Response	М		9.2.2.19b		_	
>>HS-DSCH-RNTI	М		9.2.1.30P		_	
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	Ignore
>Unsuccessful					_	
>>Cause	М		9.2.1.5		_	

### 9.2.2.19ga HS-DSCH Secondary Serving Cell Change Information Response

The *HS-DSCH Secondary Serving Cell Change Information Response* IE contains information which is used in HS-DSCH Secondary Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary Serving Cell Change				
>Successful				
>>HS-DSCH FDD	M		9.2.2.19ba	
Secondary Serving				
Information Response				
>>HS-DSCH-RNTI	M		9.2.1.30P	
>Unsuccessful				
>>Cause	M		9.2.1.5	

#### 9.2.2.19G HS-DSCH TB Size Table Indicator

The HS-DSCH TB Size Table Indicator IE is used to indicate that octet aligned table (TS 25.321 [41]) shall be used.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH TB Size Table			ENUMERATED	
Indicator			(octet aligned)	

### 9.2.2.19h E-DCH Serving Cell Change Information Response

The *E-DCH Serving Cell Change Information Response* IE contains information which is used in E-DCH Serving Cell change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving Cell Change				
>Successful				
>>RL Information Response		0 <maxnr OfRLs&gt;</maxnr 		
>>>RL ID	M		9.2.1.49	
>>>E-DCH FDD DL	M		9.2.2.4D	
Control Channel				
Information				
>Unsuccessful				
>>Cause	M		9.2.1.5	

Range bound	Explanation	
maxNrOfRLs	Maximum number of RLs for one UE.	

9.2.2.20 IB\_SG\_POS

Void.

9.2.2.21 IB\_SG\_REP

Void.

### 9.2.2.21a Inner Loop DL PC Status

The *Inner Loop DL PC Status* IE indicates whether inner loop DL control shall be active or inactive for all radio links for the UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inner Loop DL PC Status			ENUMERAT	
			ED(Active,	
			Inactive)	

### 9.2.2.21b Initial DL DPCH Timing Adjustment Allowed

The *Initial DL DPCH Timing Adjustment Allowed* IE indicates that the DRNS is allowed to perform a timing adjustment (either a timing advance or a timing delay with respect to the SFN timing) when establishing a radio link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Initial DL DPCH Timing Adjustment Allowed			ENUMERATED ( initial DL DPCH Timing Adjustment Allowed)	

#### 9.2.2.21A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, DRNS shall use the limited power increase algorithm as specified in TS 25.214 [10], subclause 5.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Limited Power Increase			ENUMERAT	
			ED(Used,	
			Not used,)	

#### 9.2.2.21B IPDL FDD Parameters

The IPDL FDD Parameters IE provides the information for the IPDL Configuration applied in FDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP spacing FDD	M		ENUMERAT ED(5,7,10,1 5,20,30,40,5 0,)	See TS 25.214 [10].
IP length	М		ENUMERAT ED(5,10,)	See TS 25.214 [10].
IP offset	М		INTEGER(09)	See TS 25.214 [10].
Seed	М		INTEGER(063)	See TS 25.214 [10].
Burst mode parameters	0		9.2.1.4B	

9.2.2.21C Length of TFCI2

Void.

9.2.2.21D Void

9.2.2.21E Void

9.2.2.21F Void

9.2.2.22 Max Adjustment Period

Void.

### 9.2.2.23 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots that can be utilised by the downlink power balancing algorithm. *Max Adjustment Step* IE defines a time period, in terms of number of slots, in which the accumulated power adjustments shall be maximum 1 dB. This value does not include the DL inner loop PC adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Adjustment Step			INTEGER (110)	Slots.

### 9.2.2.24 Max Number of UL DPDCHs

Maximum number of uplink DPDCHs during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number of UL DPDCHs			INTEGER (16)	

### 9.2.2.24a CQI Feedback Cycle k

The CQI Feedback Cycle k IE provides the duration of the CQI feedback cycle.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CQI Feedback Cycle k			ENUMERAT ED (0, 2, 4, 8, 10, 20, 40, 80, 160,, 16, 32, 64)	Unit ms The allowed values for this IE depend on the configured CQI Repetition Factor and the HS-DSCH configuration as defined in TS 25.214 [10].

### 9.2.2.24b CQI Power Offset

The *CQI Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slots carrying CQI information and the associated DPCCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CQI Power Offset			INTEGER	According to mapping in TS
			(08,,	25.213 [21] subclause 4.2.1.
			910)	

### 9.2.2.24c CQI Repetition Factor

The CQI Repetition Factor IE indicates the consecutive repetition of the CQI.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CQI Repetition Factor			INTEGER (1,4,)	Step: 1.

#### 9.2.2.24d Measurement Power Offset

The Measurement Power Offset IE is used as defined in TS 25.214 [10] subclause 6A.2.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Power Offset			INTEGER (-1226)	Unit: dB. Range: -613dB. Step: 0.5dB.

#### 9.2.2.24e Maximum Set of E-DPDCHs

The Maximum Set of E-DPDCHs as defined in TS 25.212 [9]. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Set of E-DPDCHs			ENUMERATED	
			(vN256, vN128,	
			vN64, vN32, vN16,	
			vN8, vN4, v2xN4,	
			v2xN2,	
			v2xN2plus2xN4,,	
			v2xM2plus2xM4)	

9.2.2.24f Void

9.2.2.24A Min DL Channelisation Code Length

Void

### 9.2.2.25 Min UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code			ENUMERAT	
Length			ED(4,8,16,	
			32,64,128,	
			256)	

### 9.2.2.26 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Multiplexing Position			ENUMERAT	
			ED(Fixed,	
			Flexible)	

### 9.2.2.26a NACK Power Offset

The NACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ NACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
NACK Power Offset			INTEGER	According to mapping in TS
			(08,,	25.213 [21] subclause 4.2.1.
			910)	

#### 9.2.2.26A Number of DL Channelisation Codes

This parameter notifies DRNS of the number of DL channelisation codes required for the Radio Link(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number of DL			INTEGER	
Channelisation Codes			(18)	

### 9.2.2.27 Pattern Duration (PD)

Void

#### 9.2.2.27a PC Preamble

Indicates DPDCH power control preamble length see TS 25.105 [7].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PCP Preamble			INTEGER	In number of frames.
			(07,)	

### 9.2.2.27A PDSCH Code Mapping

Void.

#### 9.2.2.27B Phase Reference Update Indicator

The Phase Reference Update Indicator IE indicates that the phase reference for the radio link needs to be changed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Phase Reference Update indicator			ENUMERATED (Phase Reference needs to be changed)	

### 9.2.2.28 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERAT	
			ED(None,	
			Common,	
			Individual)	

### 9.2.2.29 Power Control Mode (PCM)

Void.

#### 9.2.2.30 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPCH in case the UE Context is configured to use DPCH in the downlink.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Power Offset			INTEGER	Unit dB,
			(024)	Step 0.25 dB,
				Range 06 dB.

### 9.2.2.31 Power Resume Mode (PRM)

Void.

### 9.2.2.31A Preamble Signatures

Void.

### 9.2.2.32 Primary CPICH Ec/No

Energy per chip divided by the power density per band measured on the Primary CPICH by the terminal.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Ec/No			INTEGER	Unit dB, step 1 dB.
			(-30+30)	The value range is typically
				within the range of -24 dB to 0
				dB according to the CPICH
				Ec/Io UE measurement
				defined in TS 25.133 [23].

### 9.2.2.32A Primary CPICH Usage For Channel Estimation

The *Primary CPICH Usage For Channel Estimation* IE indicates whether the Primary CPICH may be used for channel estimation or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Usage For Channel Estimation			ENUMERATED	
Charmer Estimation			(Primary CPICH may be used,	
			Primary CPICH shall not be	
			used)	

### 9.2.2.33 Propagation Delay (PD)

Propagation delay is the one-way propagation delay of the radio signal from the UE to the Node B. If the range of the *Propagation Delay* IE is insufficient to represent the measured value, it shall be set to its maximum value, and the *Extended Propagation Delay* IE (see 9.2.2.33a) shall be used to represent the propagation delay value.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Propagation Delay			INTEGER	Unit: Chips. Step: 3 chips.
			(0255)	0=0 chips, 1=3 chips

### 9.2.2.33a Extended Propagation Delay

The Extended Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B. It shall be used if the *Propagation Delay* IE (see 9.2.2.33) cannot represent the measured value, due to range limitation.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Extended Propagation Delay			INTEGER	Continuation of intervals as
			(2551023)	defined in TS 25.133 [23].
				Unit: chip.
				Range: 7653069 chips.
				Step: 3 chips.

### 9.2.2.33A PRACH Minimum Spreading Factor

Void.

9.2.2.34 QE-Selector

Void.

9.2.2.34a Qth Parameter

Void.

9.2.2.34A RACH Sub Channel Numbers

Void.

9.2.2.35 RL Set ID

The RL Set ID uniquely identifies one RL Set within a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RL Set ID			INTEGER	
			(031)	

# 9.2.2.35a RL Specific E-DCH Information

The RL Specific E-DCH Information IE provides RL specific E-DCH Information.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RL Specific E-DCH Information		1 <maxnrof EDCHMACd Flows&gt;</maxnrof 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Bearer Not Requested Indicator	0		9.2.2.4\$		YES	ignore
E-AGCH Power Offset	0		9.2.2.61		_	
E-RGCH Power Offset	0		9.2.2.62		_	
E-HICH Power Offset	0		9.2.2.63		_	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

### 9.2.2.35A Received Total Wide Band Power

The parameter indicates the Received total wide band power in a cell, see TS 25.215 [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received Total Wide			INTEGER(0.	According to mapping in TS
Band Power			.621)	25.133 [23].

9.2.2.36 S-Field Length

Void.

9.2.2.36A Void

9.2.2.37 Scrambling Code Change

Void.

9.2.2.37A Scrambling Code Number

Void.

9.2.2.37B Secondary CCPCH Info

Void.

9.2.2.38 Secondary CCPCH Slot Format

Void.

### 9.2.2.38A Secondary CPICH Information

The Secondary CPICH Information IE provides the information on the Secondary CPICH when it can be used for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Scrambling Code	M		9.2.2.11	
FDD DL Channelisation Code Number	М		9.2.2.14	

### 9.2.2.38B Secondary CPICH Information Change

The Secondary CPICH Information Change IE indicates modification of information of the Secondary CPICH for channel estimation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Secondary CPICH Information Change	М			
>New Secondary CPICH				
>>Secondary CPICH Information	М		9.2.2.38A	
>Secondary CPICH Shall Not Be Used			NULL	

### 9.2.2.38C Serving E-DCH RL

The Serving E-DCH RL IE indicates whether the Serving E-DCH RL is in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Serving E-DCH RL	M			
>Serving E-DCH RL in this DRNS				
>>Serving E-DCH RL ID	M		RL ID 9.2.1.49	
>Serving E-DCH RL not in this DRNS			NULL	

9.2.2.39 Slot Number (SN)

Void

9.2.2.39a Split Type

Void.

9.2.2.39A SRB Delay

Indicates the number of frames after the PC Preamble period during which transmission of data on some RRC Signalling Bearers shall be prohibited by UE in accordance with TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SRB Delay			INTEGER(0.	In number of frames.
			.7,)	

9.2.2.40 SSDT Cell Identity

Void.

9.2.2.40A SSDT Cell Identity for EDSCHPC

Void.

9.2.2.41 SSDT Cell Identity Length

Void.

9.2.2.42 SSDT Indication

Void.

9.2.2.43 SSDT Support Indicator

The possibility to use SSDT Support Indicator has been removed.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
SSDT Support Indicator			ENUMERAT	The SSDT Support Indicator
			ED(Not	IE shall never be set to "Not
			Used, SSDT	Used".
			not	
			supported).	

### 9.2.2.44 STTD Indicator

Void.

### 9.2.2.45 STTD Support Indicator

The STTD Support Indicator indicates whether the STTD can be applied to DL DPCH and F-DPCH in the cell or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Support Indicator			ENUMERAT	
CTTE Capport maicator			ED(STTD	
			Supported,	
			STTD not	
			Supported).	

### 9.2.2.45A Synchronisation Indicator

The *Synchronisation Indicator* IE indicates that Timing Maintained Synchronisation shall be used at start of Radio Link, see also [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Indicator			ENUMERATED	
			(Timing Maintained	
			Synchronisation,)	

### 9.2.2.46 TFCI Signalling Mode

This parameter indicates has only one value with any meaning.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Mode			ENUMERAT ED(Normal, Not Used)	The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.

### 9.2.2.46A TFCI PC Support Indicator

Void.

### 9.2.2.47 Transmission Gap Distance (TGD)

Void.

### 9.2.2.47A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxtgps></maxtgps>		
>TGPSI Identifier	M		INTEGER(1< MaxTGPS>)	Transmission Gap Pattern Sequence Identifier Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	М		INTEGER(01 4)	Transmission Gap Starting Slot Number The slot number of the first transmission gap slot within the TGCFN.
>TGL1	М		INTEGER(11 4)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER(11 4)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER (0, 15 269)	Transmission gap distance indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to 0 (0 = undefined).
>TGPL1	М		INTEGER(1 144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER(1 144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL mode	M		ENUMERATE D(UL only, DL only, UL/DL)	Defines whether only DL, only UL, or combined UL/DL compressed mode is used.
>Downlink Compressed Mode Method	C-DL		ENUMERATE D(not Used, SF/2, higher layer scheduling,)	Method for generating downlink compressed mode gap The Downlink Compressed Mode Method IE shall never be set to "not Used".
>Uplink Compressed Mode Method	C-UL		ENUMERATE D(SF/2, higher layer scheduling,)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	M		ENUMERATE D(A, B,)	Defines if frame type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER(03 0)	Delta in SIR target value to be set in the DRNS during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase) Step 0.1 dB, Range 0-3dB.
>DeltaSIRafter1	М		INTEGER (030)	Delta in SIR target value to be set in the DRNS one frame after the frame containing the start of the first transmission gap in the

			transmission gap pattern,. Step 0.1 dB, Range 0-3dB.
>DeltaSIR2	0	INTEGER (030)	Delta in SIR target value to be set in the DRNS during the frame containing the start of the second transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase) When omitted, DeltaSIR2 = DeltaSIR1. Step 0.1 dB, Range 0-3dB.
>DeltaSIRafter2	0	INTEGER (030)	Delta in SIR target value to be set in the DRNS one frame after the frame containing the start of the second transmission gap in the transmission gap pattern. 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.

### 9.2.2.47B Transmission Gap Pattern Sequence Scrambling Code Information

This IE indicates whether or not the alternative scrambling code will be used in the DRNS for the Downlink compressed mode method "SF/2" in the Transmission Gap Pattern Sequence. For details see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Scrambling Code Information			ENUMERAT ED(code change, no code change)	Code change = alternative scrambling code will be used.

### 9.2.2.48 Transmit Diversity Indicator

The Transmit Diversity Indicator indicates whether Transmit Diversity shall be active or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmit Diversity Indicator			ENUMERAT	
-			ED(active,	
			inactive)	

### 9.2.2.49 Transmit Gap Length (TGL)

Void

### 9.2.2.50 Tx Diversity Indicator

The Tx Diversity Indicator indicates if the following conditions are satisfied:

- Primary CPICH is broadcast from two antennas
- STTD is applied to Primary CCPCH
- TSTD is applied to Primary SCH and Secondary SCH

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tx Diversity Indicator			ENUMERAT	
-			ED(true,	
			false).	

9.2.2.50A UE Support Of Dedicated Pilots For Channel Estimation

Void.

9.2.2.50B UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH

Void.

9.2.2.51 UL/DL Compressed Mode Selection

Void

#### 9.2.2.52 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, according to TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL DPCCH Slot Format			INTEGER	Value 5 shall not be used.
			(05,)	If value 5 is received, the
				procedure shall be rejected.

### 9.2.2.52A UL DPDCH Indicator for E-DCH operation

This IE indicated whether the requested configuration actually contain an UL DPDCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL DPDCH Indicator for E-			ENUMERAT	
DCH operation			ED (UL-	
			DPDCH	
			present, UL-	
			DPDCH not	
			present)	

### 9.2.2.53 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL Scrambling Code	M		INTEGER	
Number			(0 2 <sup>24</sup> -1)	
UL Scrambling Code Length	M		ENUMERAT	
			ED(Short,	
			Long)	

9.2.2.54 Uplink Delta SIR

Void

9.2.2.55 Uplink Delta SIR After

Void

### 9.2.2.56 DPC Mode Change Support Indicator

The DPC Mode Change Support Indicator IE indicates that the particular cell is capable to support DPC mode change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPC Mode Change Support Indicator			ENUMERATTE D (DPC Mode Change Supported)	

#### 9.2.2.57 HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as described in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED(mod e0, mode1)	"mode0" means HARQ Preamble Mode =0. "mode1" means HARQ Preamble Mode =1.

#### 9.2.2.58 HARQ Preamble Mode Activation Indicator

The HARQ Preamble Activation Indicator indicates if the configured HARQ Preamble Mode has been activated in the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERAT	
Activation Indicator			ED(HARQ	
			Preamble	
			Mode	
			Activated).	

### 9.2.2.59 Frequency Band Indicator

The Frequency Band Indicator IE indicates frequency band as defined in TS 25.104 [6].

IE/Group Name	Presence	Range	IE type and	Semantics description
-		_	reference	•
Frequency Band Indicator			ENUMERAT	
			ED (Band I,	
			Band II,	
			Band III,	
			Band IV,	
			Band V,	
			Band VI,	
			Band VII,	
			Band VIII,	
			Band IX,	
			Band X,	
			Band XI,	
			Band XII,	
			Band XIII,	
			Band XIV,	
			Band XV,	
			Band XVI,	
			Band XVII,	
			Band XVIII,	
			Band XIX,	
			Band XX,	
			Band XXI,	
			Band XXII,	
			,	
			Reserved23,	
			Reserved24,	
			Band XXV,	
			Band XXVI)	

#### 9.2.2.60 E-RGCH Release Indicator

Indicates that the E-RGCH is released..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Release Indicator			ENUMERATED (E- RGCH released)	

### 9.2.2.61 E-AGCH Power Offset

The *E-AGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-AGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Power Offset			INTEGER (0255,)	Unit: dB. Range: -32 +31.75 dB. Step: 0.25 dB.

### 9.2.2.61A E-AGCH Table Choice

The E-AGCH Table Choice IE indicates the choice of the E-AGCH table in TS 25.212 [9].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-AGCH Table Choice	М		ENUMERATED (Table 16B, Table 16B-1,)	Table 16B indicates the Table 16B: Mapping of Absolute Grant Value in [9] and Table 16B-1 indicates the Table 16B.1: Alternative Mapping of Absolute Grant Value in TS 25.212 [9].

#### 9.2.2.62 E-RGCH Power Offset

The *E-RGCH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-RGCH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH Power Offset			INTEGER (0255,)	Unit: dB. Range: -32 +31.75 dB. Step: 0.25 dB.

#### 9.2.2.63 E-HICH Power Offset

The *E-HICH Power Offset* IE indicates the Power offset relative to the pilot bits on the DL DPCCH except when F-DPCH is configured. When F-DPCH is configured, the *E-HICH Power Offset* IE indicates the Power offset relative to the power of transmitted TPC bits on the F-DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Power Offset			INTEGER (0255,)	Unit: dB. Range: -32 +31.75 dB. Step: 0.25 dB.

#### 9.2.2.64 E-RGCH 2-Index-Step Threshold

The *E-RGCH 2-index-step-threshold* IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 2-Index-Step			INTEGER	Refers to an index in the "SG-
Threshold			(037)	Table" (see TS 25.321 [41]).

### 9.2.2.65 E-RGCH 3-Index-Step Threshold

The E-RGCH 3-index-step-threshold IE is used to determine the Serving Grant.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RGCH 3-Index-Step			INTEGER	Refers to an index in the "SG-
Threshold			(037)	Table" (see TS 25.321 [41]).

#### 9.2.2.66 HARQ Info for E-DCH

The HARQ Info for E-DCH is used to indicate the use of redundancy version (RV) for the EDCH HARQ transmissions.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
HARQ Info for E-DCH			ENUMERATED (rv0, rvtable)	"rv0" indicates that the UE will only use E_DCH RV index 0. "rvtable" indicates that the UE will use an RSN based RV index as specified in TS 25.212 [9].

### 9.2.2.67 DCH Indicator For E-DCH-HSDPA Operation

The DCH Indicator For E-DCH-HSDPA Operation parameter indicates whether *DCH Information* IE should be ignored in the message in which the *DCH Indicator For E-DCH-HSDPA Operation* IE is included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DCH Indicator For E-DCH-			ENUMERATED	
HSDPA Operation			(DCH not present)	

### 9.2.2.68 E-RGCH and E-HICH Channelisation Code Validity Indicator

The E-RGCH and E-HICH Channelisation Code Validity Indicator parameter indicates if the E-RGCH/E-HICH Channelisation Code IE shall be ignored in the E-DCH FDD DL Control Channel Information IE in which the E-RGCH and E-HICH Channelisation Code Validity Indicator IE was included.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-RGCH and E-HICH			ENUMERATED	
Channelisation Code Validity			(E-RGCH and E-	
Indicator			HICH Channelisation	
			Code not valid)	

#### 9.2.2.69 E-DCH Minimum Set E-TFCI Validity Indicator

The *E-DCH Minimum Set E-TFCI Validity Indicator* parameter indicates if the *E-DCH Minimum Set E-TFCI* IE shall be ignored in the *E-DCH Transport Format Combination Set Information* IE in which the *E-DCH Minimum Set E-TFCI Validity Indicator* IE was included.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Minimum Set E-TFCI			ENUMERATED	
Validity Indicator			(E-DCH Minimum	
-			Set E-TFCI not valid)	

### 9.2.2.70 Fast Reconfiguration Mode

The Fast Reconfiguration Mode IE is used to notify the DRNS that the SRNC would like to use the activation time "when the UE is detected on the new configuration" as the timing for the reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration Mode			ENUMERATED (	
			Fast)	

# 9.2.2.71 Fast Reconfiguration Permission

The Fast Reconfiguration Permission IE is used to indicate to the SRNC that the DRNS can apply the activation time "when the UE is detected on the new configuration" for this reconfiguration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Fast Reconfiguration			ENUMERATED (	
Permission			Allowed)	

### 9.2.2.72 Continuous Packet Connectivity DTX-DRX Information

The *Continuous Packet Connectivity DTX-DRX Information* IE defines the parameters used for Continuos Packet Connectivity DTX-DRX operation (see TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	М		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI.
Enabling Delay	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.
DTX Information		1		
>CHOICE E-DCH TTI Length	М			
>>2ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>UE DTX Cycle 2	M		ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes.
>>>MAC DTX Cycle	М		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>10ms				
>>>UE DTX Cycle 1	М		ENUMERATED (1, 5, 10, 20)	Units of subframes.
>>>UE DTX Cycle 2	M		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes.
>>>MAC DTX Cycle	М		ENUMERATED (5, 10, 20)	Units of subframes.
>Inactivity Threshold for UE DTX Cycle 2	М		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs.
>UE DTX Long Preamble	М		ENÚMERATED (2,4,15)	Units of slots.
>MAC Inactivity Threshold	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs.
>CQI DTX Timer	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes.
>UE DPCCH burst1	М		ENUMERATED (1, 2, 5)	Units of subframes.
>UE DPCCH burst2	М		ENÚMERATED (1, 2, 5)	Units of subframes.
DRX Information		01		
>UE DRX Cycle	М		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes.
>Inactivity Threshold for UE DRX Cycle	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes.
>Inactivity Threshold for UE	M		ENUMERATED (0,	Units of E-DCH TTIs.

Grant Monitoring		1, 2, 4, 8, 16, 32, 64, 128, 256)	
>UE DRX Grant Monitoring	М	BOOLEAN	True: DRX Grant Monitoring shall be applied. False: DRX Grant Monitoring shall not be applied.

# 9.2.2.73 Continuous Packet Connectivity DTX-DRX Information To Modify

The *Continuous Packet Connectivity DTX-DRX Information To Modify* IE is used for modification of Continuous Packet Connectivity DTX-DRX information in a UE Context. The *Continuous Packet Connectivity DTX-DRX Information To Modify* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	0		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI.
Enabling Delay	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.
CHOICE DTX Information To Modify	0			
>Modify >>CHOICE E-DCH TTI Length	0			
>>>2ms				
>>>UE DTX Cycle 1	0		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>>UE DTX Cycle 2	0		ENUMERATED (4, 5, 8, 10, 16, 20, 32, 40, 64, 80, 128, 160)	Units of subframes.
>>>MAC DTX Cycle	0		ENUMERATED (1, 4, 5, 8, 10, 16, 20)	Units of subframes.
>>>10ms				
>>>UE DTX Cycle 1	0		ENUMERATED (1, 5, 10, 20)	Units of subframes.
>>>UE DTX Cycle 2	0		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes.
>>>MAC DTX Cycle	0		ENUMERATED (5, 10, 20)	Units of subframes.
>>Inactivity Threshold for UE DTX Cycle 2	0		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs.
>>UE DTX Long Preamble	0		ENUMERATED (2,4,15)	Units of slots.
>>MAC Inactivity Threshold	0		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs
>>CQI DTX Timer	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes.
>>UE DPCCH burst1	0		ENUMERATED (1, 2, 5)	Units of subframes.
>>UE DPCCH burst2	0		ENÚMERATED (1, 2, 5)	Units of subframes.
>Deactivate				
CHOICE DRX Information To Modify	0			
>Modify				
>>UE DRX Cycle	0		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes.
>>Inactivity Threshold for	0		ENUMERATED (0,	Units of subframes.

UE DRX Cycle		1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	
>>Inactivity Threshold for UE Grant Monitoring	0	ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs.
>>UE DRX Grant Monitoring	0	BOOLEAN	True = DRX Grant Monitoring shall be applied. False = DRX Grant Monitoring shall not be applied.
>Deactivate		NULL	

# 9.2.2.74 Continuous Packet Connectivity HS-SCCH less Information

The *Continuous Packet Connectivity HS-SCCH less Information* IE defines the parameters used for Continuos Packet Connectivity HS-SCCH less operation (see TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1 <maxnr OfHS- DSCHTBS s-HS- SCCHless</maxnr 		
>Transport Block Size Index	М		INTEGER (1maxNrOfHS- DSCHTBSs)	
>HS-PDSCH Second Code Support	M		BOOLEAN	True = The second HS- PDSCH code shall also be used. False = The second HS- PDSCH code shall not be used.

Range Bound	Explanation
maxNrOfHS-DSCHTBSs-HS-SCCHless	Maximum number of HS-DSCH Transport Block Sizes used for HS-SCCH-less operation.
maxNrOfHS-DSCHTBSs	Maximum number of HS-DSCH Transport Block Sizes.

# 9.2.2.75 Continuous Packet Connectivity HS-SCCH less Information Response

The *Continuous Packet Connectivity HS-SCCH less Information Response* IE provides information for HS-SCCH less operation determined within the Node B (see TS 25.214 [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH First Code Index	М		INTEGER (1maxHS- PDSCHCodeNrCom p-1)	Index of first HS-PDSCH code.
HS-PDSCH Second Code Index	0		INTEGER (1maxHS- PDSCHCodeNrCom p-1)	Index of second HS-PDSCH code. See Note 1.

NOTE 1: The "HS-PDSCH second code index" value is the value of IE "HS-PDSCH First Code Index" incremented by 1.

Range Bound	Explanation
maxHS-PDSCHCodeNrComp	Maximum number of codes at the defined spreading factor, within the
	complete code tree.

# 9.2.2.75A Continuous Packet Connectivity HS-SCCH Less Deactivate Indicator

The Continuous Packet Connectivity HS-SCCH Less Deactivate Indicator IE is used to deactive HS-SCCH less operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Continuous Packet	M		NULL	
Connectivity HS-SCCH Less				
Deactivate Indicator				

9.2.2.76 MIMO Activation Indicator

Void

9.2.2.77 MIMO Mode Indicator

Void

### 9.2.2.78 MIMO Information Response

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Pilot Configuration	M			
>Primary and Secondary CPICH				
>>MIMO S-CPICH Channelisation Code	М		INTEGER (0255)	
>Normal and Diversity Primary CPICH			NULL	
MIMO N/M Ratio	M		ENUMERATED (1/2, 2/3, ¾, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10, 1/1,)	
Additional Associated Secondary CPICH		0 <maxs CPICHCell -1&gt;</maxs 		For the additional secondary CPICHs.
>Additional Associated S- CPICH Channelisation Code	М		INTEGER (0255)	
>Additional Associated D- CPICH Channelisation Code	0		INTEGER (0255)	

Range Bound	Explanation		
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.		

# 9.2.2.79 SixtyfourQAM DL Support Indicator

Void.

# 9.2.2.79A Sixtyfour QAM Usage Allowed Indicator

The *Sixtyfour QAM Usage Allowed Indicator* IE indicates whether the Node B is allowed to use 64 QAM modulation for HS-DSCH transmission or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sixtyfour QAM Usage Allowed	M		ENUMERATED	
Indicator			(Allowed, Not-	
			Allowed)	

# 9.2.2.79B SixtyfourQAM DL Usage Indicator

The SixtyfourQAM DL Usage Indicator IE indicates if the Node B is using 64 QAM modulation for the HS-DSCH transmission, or if the Node B is not using 64 QAM modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM DL Usage Indicator			ENUMERATED (SixtyfourQAM DL	
			Used, SixtyfourQAM DL Not Used)	

9.2.2.80 Enhanced FACH Support Indicator

Void.

9.2.2.81 Enhanced PCH Support Indicator

Void.

9.2.2.82 Priority Queue Information for Enhanced FACH/PCH

Void.

9.2.2.83 SixteenQAM UL Information

Void.

9.2.2.84 SixteenQAM UL Information To Modify

Void.

#### 9.2.2.85 F-DPCH Slot Format

The F-DPCH Slot Format IE defines the F-DPCH slot format for the TPC bits, as defined in TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format			INTEGER (09)	

### 9.2.2.86 F-DPCH Slot Format Support Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-DPCH Slot Format Support			NULL	
Request				

### 9.2.2.87 Max UE DTX Cycle

The *Max UE DTX Cycle* IE defines the maximum UE DTX cycle supported by the Node B for Continuous Packet Connectivity DTX-DRX operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max UE DTX Cycle	М		ENUMERATED (v5,	Units of subframes.
-			v10, v20, v40, v64,	
			v80, v128, v160,)	

9.2.2.88 Enhanced PCH Capability

Void.

9.2.2.89 MAC-ehs Reset Timer

Void.

# 9.2.2.90 SixteenQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixteenQAM UL Operation	0		ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

# 9.2.2.90a SixtyfourQAM UL Operation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SixtyfourQAM UL Operation	0		ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

### 9.2.2.91 E-TFCI Boost Information

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-TFCI BetaEC Boost	M		INTEGER	E-TFCI threshold beyond
			(0127,)	which boosting of E-DPCCH is
				enabled.
UL Delta T2TP	C-E-		INTEGER (06,)	Total E-DPDCH power
	TFClboost			across all codes to the
	127			combined power of DPCCH
				and E-DPCCH.

Condition	Explanation
E-TFClboost127	The IE shall be present if the E-TFCI BetaEC Boost
	IE value is not set o 127.

# 9.2.2.92 Common E-DCH Support Indicator

This IE indicates the Common E-DCH Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH Support Indicator			NULL	

# 9.2.2.93 Common E-DCH MAC-d Flow Specific Information

The *Common E-DCH MAC-d Flow Specific Information* IE provides information associated to Common E-DCH MAC-d Flow used for Common E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows</maxnr 		
>Common E-DCH MAC-d Flow ID	M	>	E-DCH MAC-d flow	
>Maximum Number Of Retransmissions For E-DCH	М		9.2.1.100	
>E-DCH HARQ Power Offset FDD	М		9.2.2.4L	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89	
>Common E-DCH Logical Channel information	M	1 <maxno OfLogical Channels&gt;</maxno 		
>>Logical Channel ID	M		9.2.1.97	
>>Maximum MAC-d PDU Size Extended	M		MAC PDU Size Extended 9.2.1.34D	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d Flows.
maxNoOfLogicalChannels	Maximum number of logical channels.

# 9.2.2.94 Counting Information

The Counting Information IE provides counting result for MBMS service for each cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Counting Information		1 <maxnr OfFDDNei ghboursPe rRNC&gt;</maxnr 		
>C-ID	M		9.2.1.6	
>Counting Result	M		INTEGER (063)	The number of Ues listen to the MBMS Service. If the number of the UE is more than 63, this IE set to 63.

Range bound	Explanation
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.

### 9.2.2.95 Transmission Mode Information

The Transmission Mode Information IE provides transmission mode for MBMS service for each cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Counting Information		1 <maxnr< td=""><td></td><td></td></maxnr<>		
-		OfFDDNei		
		ghboursPe		
		rRNC>		
>C-ID	М		9.2.1.6	
>Transmission Mode	M		9.2.1.81	

Range bound	Explanation
maxNrOfFDDNeighboursPerRNC	Maximum number of neighbouring FDD cell for one cell.

# 9.2.2.96 MBMS Neighbouring Cell Information

The parameter contains information for the MBMS p-t-m radio bearer configuration procedure as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBMS Neighbouring Cell Information				
>MBMS Concatenated Service List		1 <maxlen gthMBMSco ncatservlist s &gt;</maxlen 		TMGI shall be uniquely defined by a reference to this index from the <i>MBMS short transmission identity</i> IE (TS 25.331 [16]) in the <i>L3 Information</i> IE.
>>TMGI	М		9.2.1.80	
>L3 Information	0		9.2.1.32	The IE Contains MBMS COMMON P-T-M RB INFORMATION defined in TS 25.331 [16].
>L3 Information	0		9.2.1.32	The IE Contains MBMS CURRENT CELL P-T- M RB INFORMATION defined in TS 25.331 [16].

Range bound	Explanation
maxlengthMBMSconcatservlists	Maximum length of the concatenated service lists contained in MBMS
	MODIFIED SERVICES INFORMATION and the MBMS UNMODIFIED
	SERVICES INFORMATION messages defined in TS 25.331 [16].

# 9.2.2.97 RLC Sequence Number

This parameter indicates the RLC Sequence Number.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RLC Sequence Number			INTEGER (0127)	

# 9.2.2.98 Time Stamp

This parameter indicates the Time Stamp used for Inter-RNC MBMS synchronisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Stamp			INTEGER (09999)	Units: 10ms.

# 9.2.2.99 HS-DSCH Preconfiguration Info

The *HS-DSCH Preconfiguration Info* IE provides information of the target cell preconfiguration in the DRNS as defined in TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			Officiality
Sets of HS-SCCH Codes		1 <max NrOfHSD SCH&gt;</max 	Keierenee	Index 1 refers to the serving HS-DSCH cell Index 2 <maxnrofhsdsch> refer to secondary serving HS-DSCH cells in the order as listed in 9.2.2.100 HS-DSCH Preconfiguration Setup. Max index is 4 in this 3GPP release.</maxnrofhsdsch>	ı	
>HS-SCCH Preconfigured Codes		1 <maxn rOfHSSC CHCodes</maxn 			-	
>>Code Number	М		INTEGER (0127)		_	
>HS-DSCH- RNTI	М		9.2.1.31J		_	
>HS-PDSCH And HS-SCCH Scrambling Code	M		DL Scramblin g Code 9.2.2.11		-	
>SixtyfourQAM DL Support Indicator	0		9.2.1.123		_	
>SixtyfourQAM DL Usage Indicator	0		9.2.2.79B		-	
>HS-DSCH TB Size Table Indicator	0		9.2.2.19G		_	
>MIMO Information Response	0		9.2.2.78	Applicable for multicarrier mode of operation.	YES	ignore
>Power Offset For S-CPICH for MIMO	0		9.2.2.104	Applicable for multicarrier mode of operation. The "Power Offset For S-CPICH for MIMO" in the index 1 of "Sets of HS-SCCH Codes" shall be ignored.	YES	ignore
>Measurement Power Offset	0		9.2.2.24d		YES	ignore
>Power Offset For S-CPICH for MIMO with four transmit antennas	0		9.2.2.148	Applicable for multicarrier mode of operation. The "Power Offset For S-CPICH for MIMO" in the index 1 of "Sets of HS-SCCH Codes" shall be ignored.	YES	ignore
HARQ Memory Partitioning	M		9.2.1.116		_	
E-DCH FDD DL Control Channel Information	0		9.2.2.4D	For the primary UL frequency in Dual-cell E-DCH mode of operation.	-	
HARQ Preamble Mode Activation Indicator	0		9.2.2.58		-	
MIMO Information Response	0		9.2.2.78	Only applicable for MIMO in singe carrier mode of operation. Shall be ignored in multicarrier mode of operation.	-	
Continuous Packet	0		9.2.2.75			

	ı	1		T		1
Connectivity HS- SCCH less						
Information						
Response						
Power Offset For S- CPICH for MIMO	0		9.2.2.104	For the serving HS-DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
Additional E-DCH Preconfiguration Information		0 <maxn rOfEDCH -1&gt;</maxn 		For E-DCH on multiple frequencies in this DRNS. E-DCH on Secondary uplink frequency – max 1 in this 3GPP release. Index 1 correspond to the secondary serving HS-DSCH cells with index 2 in the IE Sets of HS-SCCH Codes. The list is in the order as listed in 9.2.2.100 HS-DSCH Preconfiguration Setup.	EACH	ignore
>E-DCH FDD DL Control Channel Information	М		9.2.2.4D	For the secondary UL frequency In Dual-cell E-DCH mode of operation.	-	
Support of dynamic DTXDRX related HS-SCCH order	0		9.2.2.129	DOTT THOUSE OF OPERATION.	YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas	0		9.2.2.148	For the serving HS-DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
F-TPICH Information Response	0		9.2.2.143		YES	ignore

Range bound	Explanation
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes
maxNrOfHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS- DSCH cells for one UE
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE

# 9.2.2.100 HS-DSCH Preconfiguration Setup

The *HS-DSCH Preconfiguration Setup* IE indicates that the DRNS shall preconfigure set(s) of HS-SCCH codes and may contain a list of secondary serving, assisting serving, and assisting secondary serving HS-DSCH cells to be preconfigured for Enhanced Service Cell Change. The Cell Change procedure for Dual Cell operation is described in TS 25.308 [63]

IE/Group Name	Prese nce	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
MAC-hs/ehs reset scheme	M		ENUMERAT ED (Always, Inter NodeB Change)	MAC-hs/ehs reset handling at enhanced HS serving cell change: "Always" means always reset "Inter NodeB Change" means Only reset at inter Node B cell change.	-	
HS-DSCH Physical Layer Category	M		9.2.1.30Oa		_	
MAC-hs Reordering Buffer Size for RLC-UM	M		9.2.1.34Ab		_	
Secondary Cells		0 <maxn rOfHSDS CH-1&gt;</maxn 		Preconfigured secondary serving HS-DSCH cell. maxNrOfHSDSCH-1 is max 3 in this 3GPP release.	_	
>Secondary C-ID	М		C-ID 9.2.1.6	C-ID of the preconfigured secondary serving HS-DSCH cell.	-	
>Num Secondary HS- SCCH Codes	0		INTEGER (1maxNrOf HSSCCHCo des)	For the secondary serving HS-DSCH cell.	-	
>Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For the secondary serving HS-DSCH cell.	_	
>MIMO Activation Indicator	0		9.2.1.134	For the secondary serving HS-DSCH cell.	YES	ignore
>E-DCH Indicator	0		NULL	The secondary serving HS-DSCH cell shall be preconfigured with E-DCH.	YES	ignore
>Power Offset For S- CPICH for MIMO Request Indicator	0		9.2.2.105	For the secondary serving HS-DSCH cell.	YES	ignore
>Ordinal Number Of Frequency	0		INTEGER (132,)	Value = "1" indicates 1st secondary serving HS-DSCH cell, Value = "2" indicates 2nd secondary serving HS-DSCH cell etc. TS 25.214 [10]. The IE shall be ignored by the Node B if the new configuration contains one secondary serving radio link.	YES	ignore
>MIMO with four transmit antennas Activation Indicator	0		9.2.2.145	For the secondary serving HS-DSCH cell	YES	ignore
>Dual Stream MIMO with four transmit antennas Activation Indicator	0		9.2.2.149	For the secondary serving HS-DSCH cell	YES	ignore
>Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0		9.2.2.147	For the secondary serving HS-DSCH cell	YES	ignore

>Multiflow Ordinal Number Of Frequency	0	INTEGER (132,)	In intra-Node B multiflow case, the Value specifies the index of the secondary serving or assisting serving or assisting secondary serving HS-DSCH cell for the UL HS- DPCCH as specified in TS 25.212. In inter-Node B multiflow case, if present, the Value	YES	ignore
Num Primary HS-SCCH Codes	0	INTEGER (1 maxNrOfHS SCCHCodes )	must be "1".  For the primary serving HS-DSCH cell.	-	
HARQ Preamble Mode	0	9.2.2.57		_	
MIMO Activation Indicator	0	9.2.1.134	In multicarrier mode of operation the IE is for the serving HS-DSCH cell.	-	
HS-DSCH MAC-d PDU Size Format	0	9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be assumed.	-	
Sixtyfour QAM Usage Allowed Indicator	0	9.2.2.79A	For the serving HS- DSCH cell.	-	
UE with enhanced HS- SCCH support indicator	0	NULL	UE supports enhanced HS-SCCH functionality: - UE supports different HS-SCCH in consecutive TTIs and, - in HS-SCCH-less operation mode the UE supports HS- SCCH orders.	-	
Continuous Packet Connectivity HS-SCCH less Information	0	9.2.2.74		_	
UE Support Indicator Extension	0	9.2.2.103		YES	ignore
Power Offset For S- CPICH for MIMO Request Indicator	0	9.2.2.105	For the serving HS- DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
MIMO with four transmit antennas Activation Indicator	0	9.2.2.145	In multicarrier mode of operation the IE is for the serving HS- DSCH cell	YES	ignore
Dual Stream MIMO with four transmit antennas Activation Indicator	0	9.2.2.149	In multicarrier mode of operation the IE is for the serving HS-DSCH cell	YES	ignore
Power Offset For S- CPICH for MIMO with four transmit antennas Request Indicator	0	9.2.2.147	For the serving HS- DSCH cell in both the single carrier mode and multicarrier mode of operation.	YES	ignore
Multiflow Information	0	9.2.2.152		YES	ignore
F-TPICH Information	0	9.2.2.139		YES	ignore
UL CLTD Information	0	9.2.2.131		YES	ignore
UL MIMO Information	0	9.2.2.159		YES	ignore

SixteenQAM UL	0	9.2.2.90	YES	ignore
Operation Indicator				
SixtyfourQAM UL	0	9.2.2.90a	YES	ignore
Operation Indicator				

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.

# 9.2.2.101 Secondary Serving Cell List

This *Secondary Serving Cell List* IE identifies the possible secondary serving HS-DSCH cells for a Multi Cell/Dual-Band capable cell that is able to serve as a serving HS-DSCH cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Possible Secondary Serving Cell List		1 <maxnrof HSDSCH-1&gt;</maxnrof 		For secondary serving HS-DSCH cell.	_	
>Possible Secondary Serving Cell	M		C-ID 9.2.1.6		_	
>Multicell E-DCH Restriction	0		BOOLEAN	TRUE means restricted FALSE or not included means no restrictions.	YES	ignore

Range bound	Explanation
maxNrOfHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.
	See NOTE below.
NOTE: In this case, "maxNrOfHSDSCH-1	" represents the maximum number of possible secondary serving cells
for a Multi Cell/Dual-Band capable cell.	

#### 9.2.2.102 Minimum Reduced E-DPDCH Gain Factor

The minimum gain factor ( $\beta_{ed,k,reduced,min}$ ) defined in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Reduced E-DPDCH			ENUMERATED	
Gain Factor			(8/15, 11/15, 15/15,	
			21/15, 30/15, 42/15,	
			60/15, 84/15,)	

# 9.2.2.103 UE Support Indicator Extension

The *UE Support Indicator Extension* IE is used to indicate the support level in the UE for optional HSDPA functions to the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE support indicator extension			BIT STRING (32)	Each bit indicates whether the UE supports a particular HSDPA function or not. The value 1 of a bit indicates that the corresponding functionality is supported in the UE and value 0 indicates that the corresponding functionality is not supported in the UE. Each bit is defined as follows: the first bit: Different HS-SCCH In Consecutive TTIs Support Indicator, the second bit: HS-SCCH orders in HS-SCCH-less Operation Support Indicator, the third bit: RRC Rel-9 (onwards) handling of DL secondary HS-DSCH (de)activation state Support Indicator, the fourth bit: UE DTXDRX related HS-SCCH orders uniform behavior indicator. the fifth bit: UE longer HARQ processing time for simultaneous Multiflow and MIMO operation  Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.2.104 Power Offset For S-CPICH for MIMO

The *Power Offset For S-CPICH for MIMO* IE indicates the the relative transmit power of the S-CPICH compared to the primary CPICH transmit power, when S-CPICH is used as a phase reference for a second transmit antenna in MIMO mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset For S-CPICH for MIMO			INTEGER(-6 0)	Offset in dB.

# 9.2.2.105 Power Offset For S-CPICH for MIMO Request Indicator

The *Power Offset For S-CPICH for MIMO Request Indicator* IE is present when the SRNC needs the DRNS to supply, if possible, the *Power Offset For S-CPICH for MIMO* IE when S-CPICH is used as a phase reference for a second transmit antenna in MIMO mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset For S-CPICH for MIMO Request Indicator			NULL	

# 9.2.2.106 Single Stream MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Single Stream MIMO	M		NULL	
Activation Indicator				

# 9.2.2.107 Single Stream MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Single Stream MIMO Mode			ENUMERATED	
Indicator			(Activate,	
			Deactivate)	

# 9.2.2.108 HS-DSCH MAC-ehs Format

Void.

### 9.2.2.109 Activation Information

The *Activation Information* IE defines the local activation state of the secondary uplink frequency of the UE in Dual Cell E-DCH operation.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Activation Information		1 <maxnro< th=""><th>For secondary E-</th><th></th></maxnro<>	For secondary E-	
		fEDCH-1>	DCH. Max 1 in this	
			3GPP release.	
>Uu Activation State	M		ENUMERATED	The activation state of the
			(Activated,	secondary UL frequency.
			De-activated,)	

Range Bound	Explanation
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

# 9.2.2.110 Additional E-DCH FDD Setup Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL DPCH Information		1			_	
>UL Scrambling Code	M		9.2.2.53		_	
>UL SIR Target	0		UL SIR 9.2.1.69		_	
Additional E-DCH RL Specific Information To Setup	М		9.2.2.115		_	
Additional E-DCH FDD Information	0		9.2.2.112		_	
F-DPCH Information		1			_	
>FDD TPC DL Step Size	M		9.2.2.16		_	
>Limited Power Increase	M		9.2.2.21A		_	
>Inner Loop DL PC Status	M		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		_	
Multicell E-DCH Information	0		9.2.2.114		YES	ignore

# 9.2.2.111 Additional E-DCH Configuration Change Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<b>UL DPCH Information</b>		01			_	
>UL Scrambling Code	0		9.2.2.53		_	
>UL SIR Target	0		UL SIR 9.2.1.69		_	
Additional E-DCH RL Specific Information To Add	0		9.2.2.116	Used when the E-DCH RL to add does not exist in the current UE context on the secondary UL frequency.	_	
Additional E-DCH RL Specific Information To Modify	0		9.2.2.117	Used when an existing E-DCH RL on the secondary UL frequency is modified.	_	
Additional E-DCH FDD Information To Modify	0		Additional E- DCH FDD Information 9.2.2.112	Used to modify the current additional E-DCH configuration with or without a new RL added in this procedure.	_	
F-DPCH Information		01			_	
>FDD TPC DL Step Size	М		9.2.2.16			
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	М		9.2.2.21a		_	
>F-DPCH Slot Format Support Request	0		9.2.2.86		-	
Multicell E-DCH Information	0	]	9.2.2.114		YES	ignore

# 9.2.2.112 Additional E-DCH FDD Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH FDD Information				
>HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	
>E-DCH Maximum Bitrate	0		9.2.2.4MG	
>E-DCH Processing Overload Level	0		9.2.1.95	
>E-DCH Minimum Set E- TFCI	0		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see TS 25.321 [41] and TS 25.331 [16].

# 9.2.2.113 Multicell E-DCH Transport Bearer Mode

This parameter indicates the Multicell E-DCH Transport Bearer Mode. For *Multicell E-DCH Transport Bearer Mode* = "Separate Iur Transport Bearer Mode" the Mac-d flows from each carrier uses different Iur transport bearers, for *Multicell E-DCH Transport Bearer Mode* = "UL Flow Multiplexing Mode" the Mac-d flows received on the different carriers in the DRNS is multiplexed on one Iur transport bearer (per Mac-d flow). The SRNC should apply the stored cell capabilities for the cell on primary UL frequency for the capabilities related to Multicell E-DCH Transport Bearer Mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multicell E-DCH Transport			ENUMERATED	
Bearer Mode			(Separate lur	
			Transport Bearer	
			Mode, UL Flow	
			Multiplexing Mode)	

### 9.2.2.114 Multicell E-DCH Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power Balancing Information	0		9.2.2.10A	
Minimum Reduced E-DPDCH Gain Factor	0		9.2.2.102	
Secondary UL Frequency Activation State	0		ENUMERATED (Activated, Deactivated,)	
F-DPCH Slot Format	0		9.2.2.85	
Common DL Reference Power	0		DL power 9.2.1.21A	Power on F-DPCH.

### 9.2.2.115 Additional E-DCH RL Specific Information To Setup

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information		1 <maxn rOfEDCH RLs&gt;</maxn 	1101010100		-	- Crimounty
>E-DCH Additional RL ID	М		RL ID 9.2.1.49		_	
>C-ID	0		9.2.1.6		_	
>First RLS Indicator	M		9.2.2.16A		_	
>Propagation Delay	0		9.2.2.33		_	
>Initial DL Tx Power	0		DL Power 9.2.1.21A			
>Primary CPICH Ec/No	0		9.2.2.32		_	
>E-AGCH Power Offset	0		9.2.2.61		_	
>E-RGCH Power Offset	0		9.2.2.62		_	
>E-HICH Power Offset	0		9.2.2.63		_	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		-	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE

# 9.2.2.116 Additional E-DCH RL Specific Information To Add

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information To Add		1 <maxn rOfEDCH RLs&gt;</maxn 			_	
>E-DCH Additional RL ID	M		RL ID 9.2.1.49		_	
>C-ID	М		9.2.1.6		_	
>Primary CPICH Ec/No	0		9.2.2.32		_	
>E-AGCH Power Offset	0		9.2.2.61		-	
>E-RGCH Power Offset	0		9.2.2.62		_	
>E-HICH Power Offset	0		9.2.2.63		ı	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		_	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

# 9.2.2.117 Additional E-DCH RL Specific Information To Modify

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Additional RL Specific Information to Modify		1 <maxnr OfEDCHR Ls&gt;</maxnr 			-	
>E-DCH Additional RL ID	M		RL ID 9.2.1.49		_	
>E-AGCH Power Offset	0		9.2.2.61		-	
>E-RGCH Power Offset	0		9.2.2.62		_	
>E-HICH Power Offset	0		9.2.2.63		_	
>Additional E-DCH MAC-d Flow Specific Information	0		9.2.2.118		-	
>Multicell E-DCH RL Specific Information	0		9.2.2.119		YES	ignore

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

# 9.2.2.118 Additional E-DCH MAC-d Flow Specific Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.119 Multicell E-DCH RL Specific Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended Propagation Delay	0		9.2.2.33a	
Enhanced Primary CPICH Ec/No	0		9.2.2.131	
DL Reference Power	0		DL power 9.2.1.21A	
Phase Reference Update Indicator	0		9.2.2.27B	
E-DCH DL Control Channel Grant	0		NULL	

# 9.2.2.120 Additional E-DCH FDD Information Response

The Additional E-DCH FDD Information Response IE provides information for new E-DCH radio links on the secondary UL frequency.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional E-DCH RL Information Response		1 <maxnr OfEDCHR Ls&gt;</maxnr 		
>E-DCH Additional RL ID	М		RL ID 9.2.1.49	
>Received Total Wide Band Power	М		9.2.2.35A	
>DL Power Balancing Activation Indicator	0		9.2.2.10B	
>RL Set ID	M		9.2.2.35	
>E-DCH RL Set ID	М		RL Set ID 9.2.2.35	
>E-DCH FDD DL Control Channel Information	М		9.2.2.4D	
>DL Code Information	М		FDD DL Code Information 9.2.2.14A	
>Additional E-DCH MAC-d Flow Specific Information Response		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>>E-DCH MAC-d Flow ID	M		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>HARQ Process Allocation For 2ms Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40	
>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69	
>Maximum Allowed UL Tx Power	M		9.2.1.35	
>Maximum DL TX Power	М		DL Power 9.2.1.21A	
>Minimum DL TX Power	М		DL Power 9.2.1.21A	
>Primary Scrambling Code	0		9.2.1.45	
>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in TS 25.104 [6].
>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in TS 25.104 [6].
>Primary CPICH Power	М		9.2.1.44	
>PC Preamble	М		9.2.2.27a	
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A	
>Secondary CPICH Information	0		9.2.2.38A	
>F-DPCH Slot Format	0		9.2.2.85	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.121 Additional Modified E-DCH FDD Information Response

The *Additional Modified E-DCH RL Information Response* IE provides information for RLs on the secondary UL frequency that has been modified and existied in the UE Context configuration before the reconfiguration procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Additional Modified E-DCH		1 <maxnr< td=""><td></td><td></td></maxnr<>		
RL Information Response		OfEDCHR		
		Ls>		
>E-DCH Additional RL ID	М		RL ID 9.2.1.49	
>DL Power Balancing Updated Indicator	0		9.2.2.10D	
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D	
>Additional E-DCH MAC-d Flow Specific Information Response		0 <maxnr OfEDCHM ACdFlows &gt;</maxnr 		
>>E-DCH MAC-d Flow ID	М		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>HARQ Process Allocation	0		HARQ Process	
For 2ms Scheduled			Allocation for 2ms	
Transmission Grant			TTI 9.2.2.4O	
>Maximum Uplink SIR	0		Uplink SIR 9.2.1.69	
>Minimum Uplink SIR	0		Uplink SIR 9.2.1.69	
>Maximum DL TX Power	0		DL Power 9.2.1.21A	
>Minimum DL TX Power	0		DL Power 9.2.1.21A	
>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A	
>Secondary CPICH Information Change	0		9.2.2.38B	
>F-DPCH Slot Format	0		9.2.2.85	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

# 9.2.2.122 Additional E-DCH FDD Update Information

IE/Group Name	Presenc	Range	IE Type and	Semantics Description
	е		Reference	
HARQ Process Allocation For	0		HARQ Process	
2ms Scheduled Transmission			Allocation for	
Grant			2ms TTI	
			9.2.2.40	
Additional E-DCH DL Control		0 <max< td=""><td></td><td></td></max<>		
Channel Change Information		NrOfED		
_		CHRLs		
		>		
> E-DCH Additional RL ID	M		RL ID	
			9.2.1.49	

Range bound	Explanation
maxNrOfEDCHRLs	Maximum number of E-DCH RLs for one UE.

### 9.2.2.123 Cell Capability Container Extension FDD

The Cell Capability Container Extension FDD IE is an extension to the Cell Capability Container FDD IE and indicates the cell capability in the same way as Cell Capability Container Extension FDD IE.

The cell capability of multi-cell related functions may depend on that the cell is multi-cell capable (adjacent and/or non-adjacent carrier) or Dual Band capable. Such support indicators in this *Cell Capability Container Extension FDD* IE shall be ignored by the SRNC if the cell does not have the required support indicated in the *Cell Capability Container FDD* IE: Multi Cell Support Indicator = "1" and/or Dual Band Support Indicator = "1". Support indicators that depend on multi-cell (adjacent and/or non-adjacent carrier) support are indicated in the table below with /Adjacent-carrier/. Support indicators that depend on Dual Band support are indicated in the table below with /Dual-band/. Support indicators that depend on that the cell supports one or both of multi-cell (adjacent and/or non-adjacent carrier) and Dual Band are indicated in the table below with /Multi-cell/. The marked support indicators indicate the support regardless of the supported multi-cell type in a multicell configuration: supported multi-cell type is - both serving HS-DSCH and secondary serving HS-DSCH, - secondary serving HS-DSCH or - serving HS-DSCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container			BIT STRING	Each bit indicates whether a
Extension FDD			(128)	cell supports a particular
			,	functionality or not. The
				value 1 of a bit indicates that
				the corresponding
				functionality is supported in a
				cell and value 0 indicates
				that the corresponding
				functionality is not supported
				in a cell. Each bit is defined
				as follows.
				The first bit: Cell Specific Tx
				Diversity Handling For Multi
				Cell Operation Support
				Indicator, /Multi-cell/.
				The second bit: Multi Cell
				and MIMO Support Indicator,
				/Adjacent-carrier/.
				The third bit: Multi Cell and
				Single Stream MIMO
				Support Indicator, /Adjacent-
				carrier/.
				The fourth bit: Multi Cell E-
				DCH Support Indicator,
				/Adjacent-carrier/.
				This bit shall be ignored by
				the SRNC if the fifth bit:
				Separate Iur Transport Bearer Support Indicator =
				"0" and the sixth bit: E-DCH
				UL Flow Multiplexing
				Support Indicator = "0"
				The fifth bit: Separate lur
				Transport Bearer Support
				Indicator, /Adjacent-carrier/.
				This bit shall be ignored by
				the SRNC if the fourth bit:
				Multi Cell E-DCH Support
				Indicator = "0"
				The sixth bit: E-DCH UL
				Flow Multiplexing Support
				Indicator, /Adjacent-carrier/.
				This bit shall be ignored by
				the SRNC if the fourth bit:
				Multi Cell E-DCH Support
				Indicator = "0"
				The seventh to eleventh bit:
				Maximum No of HSDPA
				Frequencies Support
				Indicator, /Multi-cell/.
				This support indicator is
				coded as the binary
				representation of the maximum number of HSDPA
				frequencies, with the seventh
				bit as the MSB and the
				eleventh bit as the LSB.
				Hexadecimal digit 0 means
				no support for 3 or more
				HSDPA carriers.
				Hexadecimal digits 1 and 2
				are reserved. The twelfth bit: Dual Band
				and MIMO Support Indicator,
				/Dual Band/.
				The thirteenth bit: HSDPA 3
	1	I .	1	1.10 timeonti bit. Hobi A 3

 		or more Carrier and MIMO Single Band Support
		Indicator, /Adjacent-carrier/
		The fourteenth bit: HSDPA 3
		or more Carrier and MIMO Dual Band Support Indicator,
		/Dual Band/.
		The fifteenth bit: Dual band
		and Single Stream MIMO
		Support Indicator,/Dual Band/.
		The sixteenth bit: HSDPA 3
		or more Carrier and Single
		Stream MIMO Single Band
		Support Indicator, /Adjacent-Carrier/.
		The seventeenth bit: HSDPA
		3 or more Carrier and Single
		Stream MIMO Dual Band
		Support Indicator,/Dual Band/.
		The eighteenth bit:
		Frequency Specific
		Compress Mode Capability/Multi-cell/.
		The nineteenth bit: UL CLTD
		capability.
		The twentieth to twenty-
		second bit: Supported MIMO transmit antennas (N). This
		capability is coded as the
		representation of the
		supported MIMO transmit
		antennas with the twentieth bit as the MSB and the
		twentys-econd bit as the
		LSB. Hexadecimal digit 0
		means no support for more
		than 2 MIMO transmit antennas. Hexadecimal digit
		2 means MIMO with four
		transmit antennas support.
		Hexadecimal digit 1 is
		reserved. Undefined values are considered as spare.
		The twenty-third bit: MIMO
		with N transmit antennas
		Capability Adjacent-carrier. The twenty-fourth bit: MIMO
		with N transmit antennas
		Capability Dual Band/Dual
		Band.
		The twenty-fifth bit: Multi Cell and MIMO with N transmit
		antennas Capability
		Adjacent-carrier.
		The twenty-sixth bit: Multi
		Cell and MIMO with N transmit antennas Capability
		Dual Band/Dual Band.
		The twenty-seventh bit:
		HSPA 3 or more Carrier and
		MIMO with N transmit antennas Capability
		Adjacent-carrier.
		The twenty-eighth bit: HSPA
		3 or more Carrier and MIMO
<u>l</u>		with N transmit antennas

		Capability Dual Band/Dual
		Band.
		This 3GPP release supports
		MIMO with four transmit
		antennas for up to 4 carriers.
		The twenty-ninth bit:
		Intra-Node B Multiflow.
		The thirtieth bit:
		Inter-Node B Multiflow.
		The thirty-first to thirty-third
		bits: Supported Multiflow
		configuration, where value 0 indicates support for one
		frequency two cells, value 1
		indicates support for two
		frequencies three cells, value
		2 indicates support for two
		frequencies four cells.
		Values 3-7 are reserved for
		future use.
		The thirty-fourth bit: Multiflow
		and MIMO.
		The thirty-fifth bit: Cell
		Specific Tx Diversity
		Handling For Multiflow Cell
		Operation.
		The thirty-sixth bit: Multiflow
		and single stream MIMO.
		The thirty-seventh bit: UL
		SixtyfourQAM capability.
		The thirty-eighth bit: UL
		MIMO capability.
		The thirty-ninth bit: UL MIMO
		and SixteenQAM capability.
		The fourtieth bit: UL MIMO
		and SixtyfourQAM capability.
		The fourty-first bit: Common
		E-RGCH capability.
		Note that undefined bits a
		Note that undefined bits are
		considered as a spare bit and spare bits shall be set to
		0 by the transmitter and shall
		be ignored by the receiver.
		Note that Reserved bits are
		not considered as a spare
		bit. They shall however be
		set to 0 by the transmitter
		and shall be ignored by the
		receiver.

# 9.2.2.124 Non-Serving RL Preconfiguration Setup

The *Non-Serving RL Preconfiguration Setup* IE indicates that the DRNS may preconfigure E-DCH DL Code Information configured for new non-serving RL for Enhanced Service Cell Change and contains the information for the location of new serving RL after the Enhanced Serving Cell Change.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE new Serving RL	M				ı	
>New Serving RL in the DRNS			NULL		I	
>New Serving RL Not in the DRNS			NULL		_	
>New Serving RL in the DRNS or New Serving RL Not in the DRNS			NULL		-	
Additional E-DCH Non- Serving RL Preconfiguration Setup	0		NULL		YES	ignore
F-TPICH Information	0		9.2.2.139		YES	ignore

# 9.2.2.125 Non-Serving RL Preconfiguration Info

The Non-Serving RL  $\,$  Preconfiguration Info IE provides information for the new non-serving RL after Enhanced Serving Cell Change.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description	,	Criticality
New non-serving RL E-DCH	0		Reference 9.2.2.4D	E-DCH FDD		
FDD DL Control Channel			9.2.2.4D E-DCH	DL Control	_	
Information A			FDD DL	Channel		
			Control	Information		
			Channel	for non-		
			Information	serving RL in		
				Serving E- DCH RLS.		
New non-serving RL E-DCH	0		9.2.2.4D	E-DCH FDD	_	
FDD DL Control Channel			E-DCH	DL Control		
Information B			FDD DL	Channel		
			Control Channel	Information for non-		
			Information	serving RL in		
				non serving		
				E-DCH RLS		
				in in case		
				serving RL is in the DRNS.		
New non-serving RL E-DCH	0		9.2.2.4D	E-DCH FDD	_	
FDD DL Control Channel			E-DCH	DL Control		
Information C			FDD DL	Channel		
			Control Channel	Information for non-		
			Information	serving RL in		
				case serving		
				RL is not in		
Additional E-DCH New		0 <maxnr< td=""><td></td><td>the DRNS. E-DCH on</td><td>EACH</td><td>ignoro</td></maxnr<>		the DRNS. E-DCH on	EACH	ignoro
non-serving RL E-DCH		OfEDCH-		Secondary	EACH	ignore
FDD DL Control Channel		1>		uplink		
Information				frequency -		
				max 1 in this 3GPP		
				release.		
>New non-serving RL E-	0		9.2.2.13Dc	E-DCH FDD	_	
DCH FDD DL Control			E-DCH	DL Control		
Channel Information A			FDD DL Control	Channel Information		
			Channel	for Additional		
			Information	non-serving		
				RL in		
				Serving E-		
>New non-serving RL E-	0		9.2.2.13Dc	DCH RLS. E-DCH FDD	_	
DCH FDD DL Control			E-DCH	DL Control		
Channel Information B			FDD DL	Channel		
			Control	Information		
			Channel Information	for Additional non-serving		
				RL in non		
				serving E-		
				DCH RLS in case		
				Additional		
				serving RL is		
			0.00.107	in the DRNS.		
>New non-serving RL E- DCH FDD DL Control	0		9.2.2.13Dc	E-DCH FDD	_	
Channel Information C			E-DCH FDD DL	DL Control Channel		
Silainisi misimation o			Control	Information		
			Channel	for Additional		
			Information	non-serving		
				RL in case Additional		
	<u> </u>	<u> </u>	<u> </u>	Auditional	<u> </u>	l

			serving RL is not in the DRNS.		
F-TPICH Information Response	0	9.2.2.143		YES	ignore

Range bound	Explanation
maxNrOfEDCH-1	Maximum number of uplink frequencies -1 for E-DCH for one UE.

#### 9.2.2.126 Void

# 9.2.2.127 Usefulness of Battery Optimization

This IE, when present, indicates whether the device can benefit from UTRAN-based battery consumption optimisation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Usefulness of Battery Optimization			Enumerated ( CanBenefit, CannotBenefit )	

# 9.2.2.128 M1 Report

This IE defines the parameters for M1 report, FDD report of UE radio measurements. This IE is not used by the DRNS.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
M1 Report				
>CHOICE Report trigger	M			
>>Periodic				
>>>MDT Report Parameters	М		9.2.1.140	
>>Event1F				
>>>Measurement quantity	M		ENUMERATED( CPICH Ec/N0, CPICH RSCP, Pathloss,)	
>>>threshold	M		INTEGER(-120165)	Range used depends on measurement quantity. CPICH RSCP -12025 dBm. CPICH Ec/No -240 dB Pathloss 30165dB.

# 9.2.2.129 Support of Dynamic DTXDRX Related HS-SCCH Order

The *Support of dynamic DTXDRX related HS-SCCH order* IE is to indicate if DRNS supports the DRX/DTX related HS-SCCH order for CPC non-uniform UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of dynamic DTXDRX			ENUMERATED	
related HS-SCCH order			(Supported, Not	
			Supported)	

### 9.2.2.130 UL CLTD Information Reconf

The *UL CLTD Information Reconf* IE is used for the reconfiguration of the UL CLTD operation in a UE context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of UL CLTD		1		
>Setup				Used when UL CLTD is not configured in the current UE Context.
>>UL CLTD Information	M		9.2.2.131	
>Configuration Change				Used when the existing UL CLTD configuration in the current UE context is modified.
>>UL CLTD information To Modify	М		9.2.2.132	
>Removal				Used when the existing UL CLTD configuration in the current UE context is removed.
>>UL CLTD information Removal	М		9.2.2.133	

#### 9.2.2.131 UL CLTD Information

The UL CLTD Information IE defines the parameters used for UL CLTD operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset Information	M		9.2.2.137	
C-ID	C- DCHonly		9.2.1.6	
UL CLTD Activation Information	0		9.2.2.138	

Condition	Explanation	
DCHonly	The IE shall be present only if there is no serving E- DCH RL or HS-DSCH RL configuration in the concerned UE context.	

# 9.2.2.132 UL CLTD Information To Modify

The  $UL\ CLTD$  information  $To\ Modify\ IE$  is used for modification of  $UL\ CLTD$  information in a  $UE\ Context$ .

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset Information	0		9.2.2.137	
C-ID	0		9.2.1.6	
UL CLTD Activation Information	0		9.2.2.138	

### 9.2.2.133 UL CLTD Information Removal

The UL CLTD Information Removal IE is used for removal of UL CLTD information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL CLTD Information Removal			ENUMERATED	
			(Remove,)	

# 9.2.2.134 UL CLTD State Update Information

The *UL CLTD Update Information* IE provides information for the activation state of UL CLTD of the UE to be updated.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description
UL CLTD State Update Information			ENUMERATED (Activate, De-activate,)	The suggested UL CLTD activation state.

#### 9.2.2.135 F-TPICH Slot Format

Indicates the slot format used in F-TPICH in DL, accordingly to TS 25.211 [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format			INTEGER (09,)	

#### 9.2.2.136 F-TPICH Offset

The F-TPICH Offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Offset			INTEGER (0149)	Range: 038144 chips. Step: 256 chips.
				See TS 25.211 [8].

#### 9.2.2.137 S-DPCCH Power Offset Information

The S-DPCCH Power Offset is used to calculate the S-DPCCH gain factor,  $\beta_{sc}$ , as defined in TS 25.214 [10], whereas  $\beta_{sc}$  is related to the power difference between DPCCH and S-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-DPCCH Power Offset			INTEGER (06,)	According to mapping in TS
Information				25.213 [21] subclause 4.2.1.4.

#### 9.2.2.138 UL CLTD Activation Information

The UL CLTD Activation Information IE defines the activation state of the UE in UL CLTD operation.

IE/Group Name	Presenc	Range	IE Type and	Semantics Description
	е		Reference	
>UL CLTD Activation State	M		ENUMERATED	The activation state of the UL
			(Activated,	CLTD.
			De-activated,)	

### 9.2.2.139 F-TPICH Information

The F-TPICH Information IE defines the parameters used for F-TPICH configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Offset	M		9.2.2.136	

### 9.2.2.140 F-TPICH Information To Modify

The F-TPICH Information To Modify IE is used for modification of F-TPICH configuration.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Offset	0		9.2.2.136	

#### 9.2.2.141 F-TPICH Information Removal

The F-TPICH Information Removal IE is used for removal of F-TPICH information of a RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Information Removal			ENUMERATED (Remove,)	

#### 9.2.2.142 F-TPICH Information Reconf

The F-TPICH Information Reconf IE is used for the reconfiguration of the UL CLTD operation of a RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of F- TPICH Information		1		
>Setup				Used when F-TPICH is not configured in the current RL.
>>F-TPICH Information	M		9.2.2.139	
>Configuration Change				Used when the existing UL F- TPICH configuration in the current RL is modified.
>>F-TPICH Information To Modify	M		9.2.2.140	
>Removal				Used when the existing UL F- TPICH in the current RL is removed.
>>F-TPICH information Removal	M		9.2.2.141	

# 9.2.2.143 F-TPICH Information Response

The F-TPICH Information Response IE provides F-TPICH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format	M		9.2.2.135	
F-TPICH Channelisation Code	M		FDD DL	
Number			Channelisation Code	
			Number 9.2.2.14	

# 9.2.2.144 F-TPICH Reconfiguration Information

The *F-TPICH Reconfiguration Information Response* IE provides F-TPICH reconfiguration information triggered by the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
F-TPICH Slot Format	0		9.2.2.135	
F-TPICH Channelisation Code	0		FDD DL	
Number			Channelisation Code	
			Number 9.2.2.14	

#### 9.2.2.145 MIMO with four transmit antennas Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO with four transmit	M		NULL	
antennas Activation Indicator				

#### 9.2.2.146 MIMO with four transmit antennas Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO with four transmit	M		ENUMERATED	
antennas Mode Indicator			(Activate,	
			Deactivate)	

# 9.2.2.147 Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator

The *Power Offset For S-CPICH for MIMO with four transmit antennas Request Indicator* IE is present when the SRNC needs the DRNS to supply, if possible, the *Power Offset For S-CPICH for MIMO with four transmit antennas* IE when S-CPICH and additional S-CPICH is used as a phase reference for additional transmit antenna in MIMO with four transmit antennas mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Power Offset For S-CPICH for	M		NULL	
MIMO with four transmit				
antennas Request Indicator				

#### 9.2.2.148 Power Offset For S-CPICH for MIMO with four transmit antennas

The *Power Offset For S-CPICH for MIMO with four transmit antennas* IE indicates the relative transmit power of the Associated S-CPICH compared to the primary CPICH transmit power, when S-CPICH is used as a phase reference for additional transmit antenna in MIMO with four transmit antennas mode TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Associated Secondary CPICH		1 <maxscpichcell></maxscpichcell>		For MIMO with four transmit antennas. The 3 <sup>rd</sup> and the 4 <sup>th</sup> S-CICH should have the same power offset; The 3 <sup>rd</sup> and the 4 <sup>th</sup> D-CPICH should have the same power offset.
>Associated S-CPICH Channelisation Code	М		INTEGER (0255)	
>Power Offset for Associated S-CPICH	М		INTEGER (- 120)	Offset in dB
>Associated D-CPICH Channelisation Code	М		INTEGER (0255)	
>Power Offset for Associated D-CPICH	М		INTEGER (- 120)	Offset in dB

Range Bound	Explanation			
maxSCPICHCell	Maximum number of Secondary CPICHs that can be defined in a Cell.			

### 9.2.2.149 Dual Stream MIMO with four transmit antennas Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dual Stream MIMO with four transmit antennas Activation	M		NULL	
Indicator				

# 9.2.2.150 Dual Stream MIMO with four transmit antennas Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dual Stream MIMO with four	M		ENUMERATED	
transmit antennas Mode			(Activate,	
Indicator			Deactivate)	

# 9.2.2.151 Multiflow Reconfiguration

The Multiflow Reconfiguration IE is used setup, reconfigure, and stop Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, or Change, or Stop		1		
>Setup				Used when Multiflow is not configured.
>>Multiflow Information	М		9.2.2.152	
>Change				Used when Multiflow configuration changes.
>>Multiflow Information To Modify	М		9.2.2.153	
>Stop				Used when the existing Multiflow configuration is removed.
>>Multiflow Stop	M		9.2.2.154	

### 9.2.2.152 Multiflow Information

The Multiflow Information IE defines parameters to setup Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Total number of HS-DSCH cells	М		INTEGER (232,)	Total number of HS-DSCH cells configured for Multiflow.	-	
Role	M		Multiflow Role 9.2.2.155		-	
MIMO	M		Multiflow MIMO 9.2.2.156			
Timing	0		Multiflow Timing 9.2.2.157	In the inter-Node B Multiflow case, if present, this IE provides the timing information.		
Max number of HS-SCCH sets per Node B	0		INTEGER (116,)	Maximum number of HS- SCCH that can be allocated per NodeB	-	

# 9.2.2.153 Multiflow Information To Modify

The Multiflow Information To Modify IE defines parameters to reconfigure Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Total number of HS-DSCH cells	0		INTEGER (232,)	Total number of HS-DSCH cells configured for Multiflow.	-	Onticulty
Role	0		Multiflow Role 9.2.2.155		-	
MIMO	0		Multiflow MIMO 9.2.2.156			
Timing	0		Multiflow Timing 9.2.2.157	In the inter-Node B Multiflow case, if present, this IE provides the timing information.		
Max number of HS-SCCH sets per Node B	0		INTEGER (116,)	Maximum number of HS- SCCH that can be allocated per NodeB	-	

# 9.2.2.154 Multiflow Stop

The Multiflow Stop IE is used when the Multiflow operation is terminated.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow Stop	M		ENUMERATED	
			(Stop,)	

### 9.2.2.155 Multiflow Role

The Multiflow Role IE is used to specify primary or assisting Multiflow operation mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow Role	М		ENUMERATED (Primary, Assisting,)	This IE indicates whether Node B is configured with the primary serving HS-DSCH cell or assisting serving HS-DSCH cell.

### 9.2.2.156 Multiflow MIMO

The Multiflow MIMO IE is used to specify whether MIMO is configured for at least one of the cells.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiflow MIMO	M		ENUMERATED	
			(ON, OFF,)	

# 9.2.2.157 Multiflow Timing

The *Multiflow Timing IE* is used to specify timing information for the Multiflow operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Time Reference, or Non-time Reference		1		
>Time Reference			NULL	This indicates that the cell in the Multiflow time-reference cell (refer to TS 25.211, subclause 7.7.1).
>Non-time Reference			INTEGER (030,)	Unit: chip Range: 07680 chips Step: 256 chips  This IE indicates that the cell is a non-time reference cell. The value corresponds to the smallest TTX_diff value of the time reference cell (refer to TS25.211, sub-clause 7.7.1) and is used to calculate the HS-DPCCH to UL DPCCH timing difference in the non-time reference cell (refer to TS 25.211, sub-caluse 7.7.2).

# 9.2.2.158 UL MIMO Reconfiguration

The UL MIMO Reconfiguration IE is used for the reconfiguration of the UL MIMO operation in a UE context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Setup, Configuration Change or Removal of UL MIMO		1		
>Setup				Used when UL MIMO is not configured in the current UE Context.
>>UL MIMO Information	M		9.2.2.159	
>Configuration Change				Used when the existing UL MIMO configuration in the current UE context is modified.
>>UL MIMO information To Modify	M		9.2.2.160	
>Removal				Used when the existing UL MIMO configuration in the current UE context is removed.
>>UL MIMO information Removal	М		9.2.2.161	

# 9.2.2.159 UL MIMO Information

The *UL MIMO Information* IE defines the parameters used for UL MIMO operation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	0		9.2.2.163	
S-E-DPCCH Power Offset	M		9.2.2.164	
Inter-stream Interference Compensation Index	M		9.2.2.165	
Minimum E-TFCI for rank 2 transmissions	М		INTEGER (0127)	For the concept of "Minimum TB size for rank 2 transmissions" see TS 25.321 [32] and TS 25.331 [18].

# 9.2.2.160 UL MIMO Information To Modify

The UL MIMO information To Modify IE is used for modification of UL MIMO information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	0		9.2.2.163	
S-E-DPCCH Power Offset	0		9.2.2.164	According to $\Delta_{\text{S-E-DPCCH}}$ mapping in TS 25.213 [9] subclause 4.2.1.5.
Inter-stream Interference Compensation Index	0		9.2.2.165	
Minimum E-TFCI for rank 2 transmissions	0		INTEGER (0127)	For the concept of "Minimum TB size for rank 2 transmissions" see TS 25.321 [32] and TS 25.331 [18].

### 9.2.2.161 UL MIMO Information Removal

The UL MIMO Information Removal IE is used for removal of UL MIMO information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL MIMO Information Removal	М		ENUMERATED (Remove,)	

#### 9.2.2.162 UL MIMO DL Control Channel Information

UL MIMO DL Control Information contains the Node B allocation of the UL MIMO specific DL control channels. Secondary Transport Block E-HICH Signature Sequence is used to acknowledge the secondary transport block transmitted in the uplink, and it uses the same channelization code as the E-HICH used for non-MIMO and primary transport block acknowledgements. E-ROCH Channelization Code is selected from the pool allocated for E-AGCH codes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Channelization Code	0		FDD DL Channelisation Code Number 9.2.2.14	Should be present for the serving E-DCH cell only.
Secondary Transport Block E-RNTI	0		E-RNTI 9.2.1.75	E-ROCH S-E-RNTI as defined in TS 25.212 [8] subclause 4.10A.
Secondary Transport Block E- HICH Signature Sequence	0		INTEGER (0maxnoofSigSeqE -RGHICH - 1)	One Secondary TB E-HICH signature sequence should be present at least for the serving E-DCH cell.
Secondary Transport Block E- HICH Release Indicator	0		9.2.2.166	

Range Bound	Explanation	
maxnoofSigSeqE-RGHICH	Maximum number of Signature Sequences for E-RGCH/E-HICH.	

#### 9.2.2.163 E-ROCH Power Offset

The *E-ROCH Power Offset* IE indicates the power offset relative to the pilot bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-ROCH Power Offset	M		INTEGER (0255,)	Unit: dB Range: -32 +31.75 dB Step: 0.25 dB

#### 9.2.2.164 S-E-DPCCH Power Offset

The S-E-DPCCH Power Offset is used to calculate the S-E-DPCCH gain factor  $\beta_{sec}$  as defined in TS 25.214 [10], whereas  $\beta_{sec}$  is related to the power difference between DPCCH and S-E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
S-E-DPCCH Power Offset	М		INTEGER (017,)	According to $\Delta_{\text{S-E-DPCCH}}$ mapping in TS 25.213 [9] subclause 4.2.1.5.

### 9.2.2.165 Inter-stream Interference Compensation Index

The *Inter-stream Interference Compensation Index* IE indicates an offset that a UE applies while performing the E-TFC selection for the primary stream.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Inter-stream Interference Compensation Index	M		INTEGER (015,)	According to Δ <sub>ISI</sub> mapping in TS 25.213 [9] subclause 4.2.1.3.

### 9.2.2.166 Secondary Transport Block E-HICH Release Indicator

Indicates the release of the Uplink MIMO transmission's Secondary Transport Block E-HICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary Transport Block E- HICH Release Indicator	M		ENUMERATED (Secondary Transport Block E- HICH released)	

## 9.2.2.167 Precoder weight set restriction

This parameter defines the preferred precoding weight set restriction configuration as defined in TS 25.214 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Precoder weight set restriction			BIT STRING (64)	Each bit indicates whether a code in the Codebook is supported or not. The value 1 of a bit indicates that the corresponding code in the codebook is supported and value 0 indicates that the corresponding code in the Codebook is not supported.
				Note:Bit mapping is as defined in TS 25.331 [16]. If the bit has no corresponding code in the Codebook, it is set to 0.

# 9.2.3 TDD Specific Parameters

This subclause contains parameters that are specific to TDD.

#### 9.2.3.a Alpha Value

Used to support signalling of cell specific Alpha Value to SRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alpha Value			ENUMERAT ED(0, 1/8, 2/8, 3/8, 4/8, 5/8, 6/8, 7/8, 1)	

#### 9.2.3.A Block STTD Indicator

Void.

### 9.2.3.1 Burst Type

Void.

### 9.2.3.1a Cell Capability Container TDD

The Cell Capability Container TDD indicates which functionalities a 3.84Mcps TDD cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows.  The first bit: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC-d PDU Size Support Indicator. The fifth: MBMS Support Indicator. Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

# 9.2.3.1b Cell Capability Container TDD LCR

The Cell Capability Container TDD LCR indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD LCR			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows.  The first bit: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC-d PDU Size Support Indicator. Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.3.2 CCTrCH ID

The CCTrCH ID identifies unambiguously a CCTrCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CCTrCH ID			INTEGER	
			(015)	

### 9.2.3.2A DCH TDD Information

The *DCH TDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DCH Information		1 <maxnr OfDCHs&gt;</maxnr 			_	
>Payload CRC Presence Indicator	М		9.2.1.42		_	
>UL FP Mode	M		9.2.1.67		_	
>ToAWS	M		9.2.1.58		_	
>ToAWE	M		9.2.1.57		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	M		9.2.1.16		-	
>>CCTrCH ID	М		9.2.3.2	UL CCTrCH in which the DCH is mapped.	-	
>>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DCH is mapped.	-	
>>TrCH Source Statistics Descriptor	М		9.2.1.65		_	
>>Transport Format Set	M		9.2.1.64	For the UL.	_	
>>Transport Format Set	M		9.2.1.64	For the DL.	-	
>>BLER	M		9.2.1.4	For the UL.	-	
>>BLER	M		9.2.1.4	For the DL.	-	
>>Allocation/Retention Priority	М		9.2.1.1		_	
>>Frame Handling Priority	M		9.2.1.29		_	
>>QE-Selector	C- CoorDCH		9.2.1.46A		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	M		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Condition	Explanation
CoorDCH	The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the DCH Specific Info IE is greater
	than 1).

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

## 9.2.3.2B DCH TDD Information Response

Void

#### 9.2.3.2C DL Timeslot Information

The *DL Timeslot Information* IE provides information on the time slot allocation for a DL DPCH at 3.84Mcps.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
>TFCI Presence	M		9.2.1.55		_	
>DL Code Information	М		TDD DL Code Information 9.2.3.8C		_	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE.

### 9.2.3.2D DL Time Slot ISCP Info

The DL Time Slot ISCP Info IE gives interference level for each DL time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			,
DL Time Slot ISCP Info		1 <maxnr< td=""><td></td><td></td><td>-</td><td></td></maxnr<>			-	
		OfDLTs>				
>Time Slot	М		9.2.1.56		-	
>DL Timeslot ISCP	М		9.2.3.12		1	

Range bound	Explanation
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for
	3.84Mcps TDD.

#### 9.2.3.2E DL Timeslot Information LCR

The DL Timeslot Information LCR IE provides information for DL Timeslot to be established for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information LCR		1 <maxnrof DLTsLCR &gt;</maxnrof 			_	
>Time Slot LCR	М		9.2.3.12a		_	
>Midamble Shift LCR	М		9.2.3.4C		_	
>TFCI Presence	М		9.2.1.55		_	
>DL Code Information LCR	М		TDD DL Code Information LCR 9.2.3.8D		-	
>Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on DPCH.	YES	ignore
>Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH.	YES	ignore

Range bound Explanation			
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for		
	1.28Mcps TDD.		

### 9.2.3.2F DL Time Slot ISCP Info LCR

The DL Time Slot ISCP Info LCR IE provides information for DL Interference level for each time slot within the Radio Link for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Time Slot ISCP Info LCR		1 <maxnrofu LTsLCR&gt;</maxnrofu 			1	
>Time Slot LCR	М		9.2.3.12a		_	
>DL Timeslot ISCP	М		9.2.3.12		_	

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

### 9.2.3.3 DPCH ID

The DPCH ID identifies unambiguously a DPCH inside a Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER	
			(0239)	

#### 9.2.3.3a DSCH TDD Information

The DSCH TDD Information IE provides information for DSCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH TDD Information		1 <maxno OfDSCHs&gt;</maxno 			_	
>DSCH ID	M		9.2.3.3ae		_	
>CCTrCH ID	M		9.2.3.2	DL CCTrCH in which the DSCH is mapped.	-	
>TrCH Source Statistics Descriptor	М		9.2.1.65		1	
>Transport Format Set	M		9.2.1.64		-	
>Allocation/Retention Priority	M		9.2.1.1		_	
>Scheduling Priority Indicator	M		9.2.1.51A		_	
>BLER	M		9.2.1.4		_	
>Traffic Class	M		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore

Range bound	Explanation			
maxNoOfDSCHs	Maximum number of DSCHs for one UE.			

## 9.2.3.3aa HS-DSCH TDD Information

The HS-DSCH TDD Information IE is used for initial addition of HS-DSCH information to a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flows Information	М		9.2.1.30OA		_	
UE Capabilities Information		1			_	
>HS-DSCH Physical Layer Category	М		9.2.1.30Oa		_	
>1.28 Mcps TDD uplink physical channel capability	0		9.2.3.10D	Applicable to 1.28Mcps TDD only.	YES	ignore
>Number of Supported Carriers  >MIMO SF Mode Supported	0		ENUMERATE D ( One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Tree-six carrier, Six-six carrier,, One-Two carrier Discontiguous, Two-Two carrier Contiguous, Two-Two carrier Contiguous, Two-Two carrier Contiguous)	Applicable to 1.28Mcps TDD only. This IE indicates the number of carrier that UE can support at the same time, where "One-three carrier" means the number of supported carrier is one for the uplink, and three for the downlink. One-Two carrier Discontiguou s and Two- Two carrier Discontiguou s mean that the UE is capable of supporting two non- adjacent carriers. One-Two carrier Contiguous and Two- Two carrier	YES	ignore
For HS-PDSCH dual stream			(SF1, SF1/SF16)	1.28Mcps TDD only.		
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.30Oa	Applicable to 1.28Mcps TDD only.	YES	ignore
>UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0 Non-Capable)	Applicable to 1.28Mcps TDD only	YES	ignore
>UE RF Band Capability LCR	C- NofSupport edCarriers		9.2.3.84	Applicable to 1.28Mcps TDD only.	YES	ignore

MAC-hs Reordering Buffer Size for RLC-UM	М	9.2.1.34Ab		_	
TDD ACK NACK Power Offset	М	9.2.3.71		_	
HS-DSCH MAC-d PDU Size Format	0	9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
HS-SICH SIR Target	0	UL SIR 9.2.1.69	Applicable to 1.28Mcps TDD only.	YES	ignore
HS-SICH TPC step size	0	TDD TPC Uplink Step Size 9.2.3.10a	Applicable to 1.28Mcps TDD only.	YES	ignore
TSN-Length	0	9.2.3.3ai	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	reject
MIMO Activation Indicator	0	9.2.1.134		YES	reject

Condition	Explanation
NofSupportedCarriers	This IE shall be present if the Number of Supported Carriers IE is equal
	to "One-Two carrier Discontiguous" or "Two-Two carrier Discontiguous"
	and the concerned cell and the UE support more than one RF band.

# 9.2.3.3ab HS-DSCH TDD Information Response

The *HS-DSCH TDD Information Response* IE provides information for HS-DSCH that have been established or modified. It also provides additional HS-DSCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		0 <maxnr OfMACdFI ows&gt;</maxnr 			_	
>HS-DSCH MAC-d Flow ID	М	01102	9.2.1.300		_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.30Na		_	
HS-SCCH Specific Information Response		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Not applicable to 1.28 Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
>TDD Channelisation Code	М		9.2.3.8		_	
>HS-SICH Information	141	1	5.2.5.0		_	
>>HS SICH ID	М	•	9.2.3.3ad		_	
>>Time Slot	M		9.2.1.56		_	
>>Midamble Shift And Burst Type	M		9.2.3.4		_	
>>TDD Channelisation Code	М		9.2.3.8		_	
HS-SCCH Specific Information Response LCR		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Not applicable to 3.84 Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.12a		_	
>Midamble shift LCR	M		9.2.3.4C		_	
>First TDD Channelisation Code	M		TDD Channelisa tion Code 9.2.3.8		-	
>Second TDD Channelisation Code	M		TDD Channelisa tion Code 9.2.3.8		_	
>HS-SICH Information LCR		1			_	
>>HS SICH ID	M		9.2.3.3ad		_	
>>Time Slot LCR	M		9.2.3.12a		_	
>>Midamble shift LCR	M		9.2.3.4C		_	
>>TDD Channelisation Code	M		9.2.3.8		_	
>Used Frequency	O		UARFCN 9.2.1.66	Applicable for 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	0		9.2.1.66	Corresponds to Nt (3GPP TS 25.105). Applicable	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				for 1.28Mcps TDD when using multiple frequencies. See note1 below.		
HS-SCCH Specific Information Response 7.68 Mcps		0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Applicable to 7.68 Mcps TDD only.	YES	ignore
>Time Slot	М	11000632	9.2.1.56	TDD only.	_	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	
>HS-SICH Information		1			_	
>>HS SICH ID	M		9.2.3.3ad			
>>Time Slot	M		9.2.1.56		_	
>>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	
HS-PDSCH Timeslot Specific Information Response		0 <maxnr OfDLTs&gt;</maxnr 		Not Applicable to 1.28Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		_	
HS-PDSCH Timeslot Specific Information Response LCR		0 <maxnr OfDLTsLC R&gt;</maxnr 		Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.12a		_	
>Midamble Shift LCR	M		9.2.3.4C		_	
HS-PDSCH Timeslot Specific Information Response 7.68Mcps		0 <maxnr OfDLTs&gt;</maxnr 		Applicable to 7.68Mcps TDD only.	YES	Ignore
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		_	
HARQ Memory Partitioning	0		9.2.1.116		_	
User Plane Congestion Fields Inclusion	0		9.2.1.70C		YES	ignore
HS-SCCH Specific Information Response LCR per UARFCN		0 <maxh SDPAFreq uency-1&gt;</maxh 		Applicable for 1.28Mcps TDD.	GLOBAL	reject
>HS-SCCH Specific Information Response LCR		1 <maxnr OfHSSCC HCodes&gt;</maxnr 			_	
>>Time Slot LCR	М		9.2.3.12a		_	
>>Midamble Shift LCR	М		9.2.3.4C		_	
>>First TDD Channelisation Code	M		TDD Channelisa tion Code 9.2.3.8		-	
>>Second TDD Channelisation Code	М		TDD Channelisa tion Code 9.2.3.8		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>HS-SICH Information		1	Troioi on o		_	
LCR						
>>>HS SICH ID	M		9.2.3.3ad			
>>>Time Slot LCR	M		9.2.3.12a		_	
>>>Midamble Shift LCR	M		9.2.3.4C		_	
>>>TDD Channelisation Code	M		9.2.3.8		_	
>>Used Frequency	0		UARFCN 9.2.1.66	Applicable for 1.28Mcps TDD when using multiple frequencies. This IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	O		9.2.1.66	Corresponds to Nt □3GPP TS 25.105□. Applicable for 1.28Mcps TDD when using multiple frequencies. See note 1 below.	YES	ignore
>HARQ Memory Partitioning per UARFCN		0 <maxh SDPAFreq uency-1&gt;</maxh 				
>>HARQ Memory Partitioning	0		9.2.1.116		_	
>UARFCN	0		9.2.1.66	Corresponds to Nt □3GPP TS 25.105□. Applicable for 1.28Mcps TDD when using multiple frequencies. See note 1 below.	YES	ignore
>TS0 HS-PDSCH Indication LCR	0		9.2.3.74	1.28Mcps TDD only.	YES	ignore
Multi-Carrier number	0		Integer(1 maxHSDP AFrequenc y)	Applicable for 1.28Mcps TDD when using multiple frequencies.	YES	ignore
MIMO SF Mode for HS- PDSCH dual stream	0		Enumerate d (SF1, SF1/SF16)	Applicable for 1.28Mcps TDD when MIMO is configured.	YES	reject
MIMO Reference Signal Information	0	0 <maxnr OfHSSCC HCodes&gt;</maxnr 		Applicable for 1.28Mcps TDD when MIMO is configured.	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality	
>HS-SICH Reference Signal Information	М		9.2.3.72		YES		
Out-of-sync Detection Window	0		ENUMERA TED (40, 80, 160, 320, 640, )	Unit: ms Applicable to 1.28Mcps TDD.	YES	reject	
Note 1: This information element is a simplified representation of the ASN.1 description.							

Range bound	Explanation
maxNrOfMACdFlows	Maximum number of MAC-d flows.
maxNrOfHSSCCHCodes	Maximum number of HS-SCCH codes.
maxNrOfDLTs	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD.
maxNrOfDLTsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
maxHSDPAFrequency	Maximum number of Frequency that UE can support HSDPA.

## 9.2.3.3ac HS-DSCH TDD Update Information

The *HS-DSCH TDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		-	
TDD ACK NACK Power Offset	0		9.2.3.71		-	

#### 9.2.3.3ad HS-SICH ID

The HS-SICH ID identifies unambiguously a HS-SICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SICH ID			INTEGER (031)	For 1.28Mcps TDD, the IE is INTEGER (0255). In ASN.1, it is presented by another IE for the value beyond the 31.

#### 9.2.3.3ae DSCH ID

The DSCH ID is the identifier of an active downlink shared channel. It is unique for each active DSCH among the active DSCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER	
			(0255)	

#### 9.2.3.3af DSCH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before new credits are received from the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH Initial Window Size			INTEGER (1255)	Number of MAC-c/sh SDUs: 255 = Unlimited number of
			[ '	MAC-c/sh SDUs.

### 9.2.3.3ag DSCH Flow Control Information

The DSCH Flow Control Information IE provides flow control information for each scheduling priority class for the DSCH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH Flow Control Information		116			_	
>DSCH Scheduling Priority	М		Scheduling Priority Indicator 9.2.1.51A		-	
>MAC-c/sh SDU Length		1 <maxnr OfMACcsh SDU- Length&gt;</maxnr 			-	
>>MAC-c/sh SDU Length	M		9.2.1.34		_	
>DSCH Initial Window Size	0		9.2.3.3af		YES	ignore

Range bound	Explanation
maxNrOfMACcshSDU-Length	Maximum number of different MAC-c/sh SDU lengths.

### 9.2.3.3ah DSCH-RNTI

DSCH-RNTI is the UE identifier allocated by DRNS to be used over the radio interface by Ues having one or several DSCHs and/or USCHs. It is unique within a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH-RNTI			INTEGER(0.	
			.65535)	

### 9.2.3.3ai TSN-Length

The IE indicates the TSN length.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSN-Length			ENUMERATED	
			(tsn-6bits, tsn-9bits)	

#### 9.2.3.3A Maximum Number of Timeslots

Defines the maximum number of timeslots the UE has the capability of receiving or transmitting. [3.84Mcps TDD and 7.68Mcps TDD – in a frame] [1.28Mcps TDD – in a subframe]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of			INTEGER	For 1.28Mcps TDD the values 7
Timeslots			(114)	through 14 are not used.

### 9.2.3.3B Maximum Number of UL Physical Channels per Timeslot

Defines the maximum number of physical channels [3.84Mcps TDD and 7.68Mcps TDD – per frame] [1.28Mcps TDD – per subframe] that the UE is capable to transmit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of UL			INTEGER	
Physical Channels per			(12)	
Timeslot				

#### 9.2.3.3C Maximum Number of DL Physical Channels

Defines the maximum number of physical channels [3.84Mcps TDD – per frame] [1.28Mcps TDD – per subframe] that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	For 1.28Mcps TDD the values
Physical Channels			(1224)	97 through 224 are not used.

### 9.2.3.3D Maximum Number of DL Physical Channels per Timeslot

Defines the maximum number of physical channels per timeslot that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	
Physical Channels per			(116)	
Timeslot				

### 9.2.3.4 Midamble Shift And Burst Type

This information element indicates burst type and midamble allocation.

Three different midamble allocation schemes exist:

- Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL);
- Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only);
- UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type 1				
>> Midamble	M		ENUMERATED(4, 8,	As defined in TS
Configuration Burst			16)	25.221 [12].
Type 1 And 3				
>>Midamble	M		ENUMERATED(Defa	
Allocation Mode			ult midamble,	
			Common midamble,	
			UE specific	
			midamble)	
>>Midamble Shift	C-UE		INTEGER(015)	
Long				
>Type 2	1		ENUMERATED (S. S)	1 1 7 1 70
>> Midamble	M		ENUMERATED (3, 6)	As defined in TS
Configuration Burst				25.221 [12].
Type 2 >>Midamble	М		ENLINAEDA TED/D-4-	
>>iviidamble Allocation Mode	IVI		ENUMERATED(Defa ult midamble,	
Allocation Mode			Common midamble.	
			UE specific	
			midamble)	
>>Midamble Shift	C-UE		INTEGER	
Short	0-01		(015)	
>Type 3			(010)	UL only
>> Midamble	М		ENUMERATED (4, 8,	As defined in TS
Configuration Burst			16)	25.221 [12].
Type 1 And 3			, ,	
>>Midamble	M		ENUMERATED(Defa	
Allocation Mode			ult midamble, UÈ	
			specific midamble)	
>>Midamble Shift	C-UE		INTEGER(015)	
Long				

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

## 9.2.3.4A Minimum Spreading Factor

Defines the minimum spreading factor the UE has the capability of receiving or transmitting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading			INTEGER	
Factor			(116)	

## 9.2.3.4B IPDL TDD parameters

The IPDL TDD Parameters IE provides the information for the IPDL Configuration applied in 3.84Mcps TDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP Spacing TDD	М		ENUMERAT ED(30,40,50 , 70, 100,)	See TS 25.224 [22].
IP Start	М		INTEGER(0. .4095)	See TS 25.224 [22].
IP Slot	M		INTEGER(014)	See TS 25.224 [22].
IP P-CCPCH	M		ENUMERAT ED(Switch off 1 frame, Switch off 2 frames)	See TS 25.224 [22].
Burst mode parameters	0		9.2.1.4B	

### 9.2.3.4Bb IPDL TDD parameters LCR

The *IPDL TDD Parameters LCR* IE provides the information for the IPDL Configuration applied in 1.28Mcps TDD mode.

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
IP Spacing TDD	M		ENUMERAT ED(30,40,50 , 70, 100,)	See TS 25.224 [22].
IP Start	M		INTEGER(04095)	See TS 25.224 [22].
IP_Sub	М		ENUMERAT ED(First,Sec ond,Both)	See TS 25.224 [22].
Burst mode parameters	0		9.2.1.4B	

#### 9.2.3.4C Midamble shift LCR

This information element indicates midamble allocation in 1.28Mcps TDD.

Three different midamble allocation schemes exist:

- Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL);
- Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only);
  - UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL).

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
Midamble Allocation Mode	M		ENUMERAT ED(Default midamble,	
			Common midamble, UE specific midamble,)	
Midamble Shift Long	C-UE		INTEGER(015)	
Midamble Configuration LCR	M		ENUMERAT ED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in TS 25.221 [12].

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

#### 9.2.3.4D Neighbouring TDD Cell Information LCR

Void

### 9.2.3.5 Primary CCPCH RSCP

Received Signal Code Power is the received power on PCCPCH of the target cell after despreading. The reference point for the RSCP is the antenna connector at the UE, see TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP			INTEGER(	According to mapping of the
			091)	non-negative values in TS
				25.123 [24].

#### 9.2.3.5a Primary CCPCH RSCP Delta

Primary CCPCH RSCP Delta is the offset used to report the negative reporting range of P-CCPCH RSCP as per TS 25.123 [24].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP Delta			INTEGER( -51,)	If present, the actual value of Primary CCPCH RSCP = Primary CCPCH RSCP Delta.

#### 9.2.3.5A PRACH Midamble

Void.

### 9.2.3.5B RB Identity

The RB Identity is the identifier of a radio bearer. It is unique for each active Radio bearer among the active radio bearers simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RB Identity			INTEGER	In line with TS 25.331 [16],
			(031)	ch. 10.3.4.11.

### 9.2.3.6 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see TS 25.331 [16].

[1.28Mcps TDD- When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Length represents the number of consecutive Subframes, i.e. 5ms inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see TS 25.331 [16].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Length			INTEGER(163	

### 9.2.3.7 Repetition Period

The Repetition Period represents the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated. This means that if the Time Slot K is assigned to a physical channel in the Radio Frame J, it is assigned to the same physical channel also in all the Radio Frames J+n\*Repetition Period (where n is an integer) see TS 25.331 [16].

[1.28Mcps TDD- When applied to configure the E-DCH Non-scheduled Grant Information, the Repetition Period represents the number of consecutiveSubframes, i.e. 5ms after which the same assignment scheme of Time Slots to a Physical Channel is repeated see TS 25.331 [16].]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period			ENUMERATED	
			(1,2,4,8,16,32,6	
			4)	

## 9.2.3.7A Rx Timing Deviation

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value. For 1.28Mcps TDD this IE must be set to 0.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER (0127)	As specified in TS 25.435 [5], ch. 6.2.7.6.

### 9.2.3.7B Secondary CCPCH Info TDD

The Secondary CCPCH Info TDD IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
TFCS	М		9.2.1.63	For the DL.	_	
TFCI Coding	М		9.2.3.11		_	
Secondary CCPCH		0 <maxnr OfSCCPC Hs&gt;</maxnr 			_	
>Time Slot	М	1.07	9.2.1.56		_	
>Midamble Shift And Burst Type	М		9.2.3.4		-	
>TFCI Presence	М		9.2.1.55		_	
>Secondary CCPCH TDD Code Information	М		9.2.3.7C		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	М		9.2.3.7		_	
FACH		0maxNrO fFACHs			_	
>TFS	M		9.2.1.64	For the DL.	_	
PCH		01			_	
>TFS	M		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

## 9.2.3.7C Secondary CCPCH TDD Code Information

The Secondary CCPCH TDD Code Information IE provides TDD Channelisation Code information for all SCCPCHs of one Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information		1 <maxnr OfSCCPC Hs&gt;</maxnr 			-	
>TDD Channelisation Code	М		9.2.3.8		_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of SCCPCHs for one CCTrCH.

### 9.2.3.7D Special Burst Scheduling

The number of frames between special burst transmissions during DTX.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Special Burst Scheduling			INTEGER(1,	Number of frames between
			2,, 256)	special burst transmissions
				during DTX.

### 9.2.3.7E Synchronisation Configuration

The Synchronisation Configuration parameters that are used by the DRNS in the Radio Link Failure/Restore procedure.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
N_INSYNC_IND	M		INTEGER(1,	
			2,, 256)	
N_OUTSYNC_IND	M		INTEGER(1,	
			2,, 256)	
T_RLFAILURE	M		ENUMERAT	Unit: seconds.
			ED(0, 0.1,	
			0.2,, 25.5)	

### 9.2.3.7F Secondary CCPCH Info TDD LCR

The Secondary CCPCH Info TDD LCR IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE.

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
TFCS	M		9.2.1.63	For the DL.	_	
TFCI Coding	M		9.2.3.11		_	
Secondary CCPCH		0 <maxnr OfSCCPC Hs&gt;</maxnr 			_	
>Time Slot LCR	М		9.2.3.12a		_	
>Midamble Shift LCR	М		9.2.3.4C		_	
>TFCI Presence	М		9.2.1.55		_	
>Secondary CCPCH TDD Code Information LCR	М		9.2.3.7G		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	M		9.2.3.6		_	
>Repetition Period	M		9.2.3.7		_	
FACH		0 <maxnr OfFACHs&gt;</maxnr 			_	
>TFS	M		9.2.1.64	For the DL.	_	
PCH		01			_	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

# 9.2.3.7G Secondary CCPCH TDD Code Information LCR

The *Secondary CCPCH TDD Code Information LCR* IE provides LCR TDD Channelisation Code information for all SCCPCHs of one Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information		1 <maxnr OfSCCPC Hs&gt;</maxnr 			-	
>TDD Channelisation Code LCR	М		9.2.3.8a		_	
>SCCPCH Time Slot Format LCR	M		TDD DL DPCH Time Slot Format LCR 9.2.3.8E		-	

Range bound	Explanation
maxNrOfSCCPCHs	Maximum number of SCCPCHs for one CCTrCH.

# 9.2.3.7H Support of 8PSK

The Support of 8PSK IE indicates whether 8PSK is supported or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of 8PSK			ENUMERAT	
			ED(supported	
			)	

#### 9.2.3.7I TDD ACK NACK Power Offset

The *TDD ACK NACK Power Offset* IE indicates Power offset used in the UL in the HS-SICH between transmissions carrying positive and negative acknowledgements as per TS 25.331 [16].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TDD ACK NACK Power			INTEGER (-	Unit: dB.
Offset			78,)	Range: -7+8 dB.
				Step: 1 dB.

#### 9.2.3.8 TDD Channelisation Code

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code that can have a spreading factor of 1, 2, 4, 8 or 16.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code			ENUMERATED ((1/1), (2/1), (2/2), (4/1), (4/4), (8/1), (8/8), (16/1), (16/16),)	

#### 9.2.3.8a TDD Channelisation Code LCR

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 1.28Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code, that can have a spreading factor of 1, 2, 4, 8 or 16 and there is a choice between QPSK and 8PSK modulation.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code	M		ENUMERAT ED((1/1), (2/1), (2/2), (4/1),(4/4), (8/1), (8/8), (16/1) (16/16),)	
Modulation	М		ENUMERAT ED(QPSK, 8PSK,)	Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD.

#### 9.2.3.8A TDD DPCH Offset

The Offset represents the phase information for the allocation of a group of dedicated physical channels. The *Offset Type* IE = "No Initial Offset" is used when a starting offset is not required and the TDD Physical channel offset for each DPCH in the CCTrCH shall be directly determined from the TDD DPCH Offset. The *Offset Type* IE = "Initial Offset" is used when a starting offset is required. The TDD DPCH Offset shall map to the CFN and the TDD Physical Channel Offset for each DPCH in this CCTrCH shall calculated by TDD DPCH Offset *mod* Repetition period, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
			11010101100	
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER	
			(0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER	
			(063)	

## 9.2.3.8B TDD DCHs To Modify

The  $TDD\ DCHs\ To\ Modify\ IE$  provides information for DCHs to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DCHs To Modify		1 <maxnr OfDCHs&gt;</maxnr 			_	
>UL FP Mode	0		9.2.1.67		_	
>ToAWS	0		9.2.1.58		_	
>ToAWE	0		9.2.1.57		_	
>Transport Bearer Request Indicator	M		9.2.1.61		_	
>DCH Specific Info		1 <maxnr OfDCHs&gt;</maxnr 			_	
>>DCH ID	M		9.2.1.16		_	
>>CCTrCH ID	0		9.2.3.2	UL CCTrCH in which the DCH is mapped.	-	
>>CCTrCH ID	0		9.2.3.2	DL CCTrCH in which the DCH is mapped.	-	
>>Transport Format Set	0		9.2.1.64	For the UL.	_	
>>Transport Format Set	0		9.2.1.64	For the DL.	_	
>>Allocation/Retention Priority	0		9.2.1.1		_	
>>Frame Handling Priority	0		9.2.1.29		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	0		9.2.1.58A		YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNrOfDCHs	Maximum number of DCHs for one UE.

### 9.2.3.8C TDD DL Code Information

The TDD DL Code Information IE provides TDD DL Code information for all DPCHs of one DL Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information		1 <maxnr OfDPCHs &gt;</maxnr 			_	
>DPCH ID	М		9.2.3.3		_	
>TDD Channelisation Code	M		9.2.3.8		_	

Range bound	Explanation
maxNrOfDPCHs	Maximum number of DPCHs for one CCTrCH.

#### 9.2.3.8D TDD DL Code Information LCR

The TDD DL Code Information LCR IE provides DL Code information for the RL for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information LCR		1 <maxnrof DPCHsLC R&gt;</maxnrof 			-	
>DPCH ID	М		9.2.3.3		_	
>TDD Channelisation Code LCR	M		9.2.3.8a		-	
>TDD DL DPCH Time Slot Format LCR	М		9.2.3.8E		İ	

Range bound	Explanation
maxNrOfDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD.

#### 9.2.3.8E TDD DL DPCH Time Slot Format LCR

TDD DL DPCH Time Slot Format LCR indicates the time slot formats used in DL DPCH for 1.28Mcps TDD (see TS 25.221 [12]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Modulation				
> QPSK				
>>QPSK TDD DL DPCH	M		INTEGER	
TimeSlot Format LCR			(024,)	
> 8PSK				
>>8PSK TDD DL DPCH	M		INTEGER	
TimeSlot Format LCR			(024,)	

### 9.2.3.9 TDD Physical Channel Offset

The TDD Physical Channel Offset represents the phase information for the allocation of a non DPCH physical channel. (CFN mod Repetition Period = TDD Physical Channel Offset) see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Physical Channel			INTEGER	
Offset			(063)	

### 9.2.3.10 TDD TPC Downlink Step Size

This parameter indicates step size for the DL power adjustment (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step Size			ENUMERAT ED(1, 2, 3,)	Unit: dB.

## 9.2.3.10a TDD TPC Uplink Step Size

This parameter indicates step size for the UL power adjustment (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Uplink Step Size			ENUMERAT ED (1, 2, 3,)	Unit: dB.

#### 9.2.3.10A TDD UL Code Information

The TDD UL Code Information IE provides TDD UL Code information for all DPCHs of one UL Time Slot.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information		1 <maxnr OfDPCHs</maxnr 			_	
		>				
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code	M		9.2.3.8		_	

Range bound	Explanation
maxNrOfDPCHs	Maximum number of DPCHs for one CCTrCH.

#### 9.2.3.10B TDD UL Code Information LCR

The TDD UL Code Information LCR IE provides information for UL Code to be established for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
TDD UL Code Information LCR		1 <maxnro fDPCHsL CR&gt;</maxnro 			-	
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code LCR	М		9.2.3.8a		_	
>TDD UL DPCH Time Slot Format LCR	М		9.2.3.10C		1	

Range bound	Explanation			
maxNrOfDPCHsLCR	Maximum number of DPCH in one CCTrCH for 1.28Mcps TDD.			

#### 9.2.3.10C TDD UL DPCH Time Slot Format LCR

TDD UL DPCH Time Slot Format LCR indicates the time slot formats used in UL DPCH for 1.28Mcps TDD (see TS 25.221 [12]).

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
CHOICE Modulation				
> QPSK				
>>QPSK TDD UL DPCH	M		INTEGER	
Time Slot Format LCR			(069,)	
> 8PSK				
>>8PSK TDD UL DPCH	M		INTEGER	
Time Slot Format LCR			(024,)	

#### 9.2.3.10D 1.28 Mcps TDD uplink physical channel capability

1.28 Mcps TDD uplink physical channel capability IE defines the UE uplink physical channel capability for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of	М		INTEGER	
timeslots per subframe			(16)	
Maximum number of physical	M		ENUMERATED	
channels per timeslot			(1,2,3,4)	ļ

### 9.2.3.11 TFCI Coding

The TFCI Coding describes how the TFCI bits are coded. By default 1 TFCI bit is coded with 4 bits, 2 TFCI bits are coded with 8 bits, 3-5 TFCI bits are coded with 16 bits and 6-10 TFCI bits are coded with 32 bits.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Coding			ENUMERATE	
			D(4, 8, 16,	
			32,)	

#### 9.2.3.12 DL Timeslot ISCP

DL Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER( 091)	According to mapping in TS 25.123 [24].

#### 9.2.3.12a Time Slot LCR

The Time Slot LCR is the number of the traffic time slot within a 5 ms subframe of LCR TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Time Slot LCR			INTEGER	
			(06)	

### 9.2.3.12A Timing Advance Applied

Defines the need for Timing Advance functions such as Rx Timing Deviation measurement in a particular cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timing Advance Applied			ENUMERAT	
			ED(Yes, No)	

### 9.2.3.13 Transport Format Management

Defines whether the cell transmits the transport format information via broadcast or whether the transport format information is transmitted to the UE using dedicated RRC procedures

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Format			ENUMERAT	
Management			ED(Cell	
			Based, UE	
			Based,)	

#### 9.2.3.13A UL Timeslot ISCP

UL Timeslot ISCP is the measured interference in a uplink timeslot at the DRNS, see TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER( 0127)	According to mapping in TS 25.123 [24].

### 9.2.3.13B UL PhysCH SF Variation

Indicates whether variation of SF in UL is supported by Radio Link or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL PhysCH SF Variation			ENUMERAT	
-			ED(SF_Vari	
			ation_suppor	
			ted,	
			SF_Variation	
			_NOT_supp	
			orted)	

#### 9.2.3.13C UL Timeslot Information

The UL Timeslot Information IE provides information on the time slot allocation for a UL DPCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	2 cccpc		Cinicanty
UL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type	M		9.2.3.4		_	
>TFCI Presence	М		9.2.1.55		_	
>UL Code Information	M		TDD UL Code Information 9.2.3.10A		_	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE.

#### 9.2.3.13D UL Time Slot ISCP Info

The UL Time Slot ISCP Info IE gives interference level for each UL time slot within the Radio Link.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Time Slot ISCP Info		1 <maxnrof ULTs&gt;</maxnrof 			ı	
>Time Slot	M		9.2.1.56		_	
>UL Timeslot ISCP	M		9.2.3.13A		_	

Range bound	Explanation
maxNrOfULTs	Maximum number of uplink time slots per Radio Link.

#### 9.2.3.13E TSTD Indicator

Indicates if TSTD shall be active or not for the DL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Indicator			ENUMERAT	
			ED(active,	
			inactive)	

#### 9.2.3.13F TSTD Support Indicator

Indicates if UE support TSTD or not for DL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Support Indicator			ENUMERAT ED(TSTD supported, TSTD not supported)	

### 9.2.3.13Fa UE Measurement Hysteresis Time

The UE Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the UE Measurement Reporting procedure to be triggered, see TS 25.331 [16]..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement			INTEGER(0	Unit: dB.
Hysteresis Time			15)	Range: 07.5 dB.
-			·	Step: 0.5 dB.

#### 9.2.3.13Fb UE Measurement Parameter Modification Allowed

 $Indicates\ if\ the\ SRNC\ may\ modify\ the\ UE\ measurement\ parameters\ based\ on\ its\ existing\ measurement\ schedule.$ 

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UE Measurement			ENUMERAT	
Parameter Modification			ED	
Allowed			(Parameter	
			Modification	
			Allowed,)	

# 9.2.3.13Fc UE Measurement Report Characteristics

The UE Measurement Report Characteristics, defines how the reporting shall be performed. For definition of the event criteria see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Report				
Characteristics				
>Periodic				
>>Amount of Reporting	M		ENUMERAT	
			ED(1, 2, 4, 8,	
			16, 32, 64,	
			infinity)	
>>Reporting Interval	M		ENUMERAT	Indicates the interval of
			ED (250,	periodical report interval in
			500, 1000,	milliseconds.
			2000, 3000,	
			4000, 6000,	
			8000, 12000,	
			16000,	
			20000,	
			24000,	
			28000,	
			32000,	
			64000)	
>Event 1h	1		0.00.405.	T. d. 1.117
>>UE Measurement	M		9.2.3.13Fd	The threshold for which the
Threshold				DRNS shall trigger a
115.14	1.4		0.00.405	measurement report.
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger >>Hysteresis	M		9.2.3.13Fa	
>Event 1i	IVI		9.2.3.13Fa	
>>UE Measurement	M		9.2.3.13Fd	The threshold for which the
Threshold	IVI		9.2.3.13Fu	DRNS shall trigger a
Tillesiloid				measurement report.
>>UE Measurement	M		9.2.3.13Fg	measurement report.
Time to Trigger	141		5.2.5.161 g	
>>Hysteresis	М		9.2.3.13Fa	
>Event 6a	141		0.2.0.101 a	
>>UE Measurement	М		9.2.3.13Fd	
Threshold	141		0.2.0.101 d	
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger	'''		0.2.0.101 9	
>Event 6b	1			
>>UE Measurement	М		9.2.3.13Fd	
Threshold	'''		5.2.5.10. 4	
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger				
>Event 6c				
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger	'''		0.2.0.10.9	
>Event 6d				
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger	1		5.2.5.101 g	

#### 9.2.3.13Fd UE Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event 1h, 1i, 6a or 6b, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Measurement Threshold				
>Timeslot ISCP				
>>Timeslot ISCP	М		INTEGER (-11525)	In dBm.
>UE Tx Power				
>>UE Transmitted Power	M		INTEGER(- 5033)	In dBm.

## 9.2.3.13Fe UE Measurement Timeslot Information HCR

The *UE Measurement Time Slot Information* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Timeslot Information		1 <maxnrofts></maxnrofts>		
>Time Slot	M		9.2.1.56	
>Burst Type	М		ENUMERAT ED(Type1, Type 2, Type 3,)	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD.

#### 9.2.3.13Ff UE Measurement Timeslot Information LCR

The *UE Measurement Time Slot Information LCR* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Time Slot Information LCR		1 <maxnroftslcr &gt;</maxnroftslcr 		
>Time Slot LCR	M		9.2.3.12a	

Range bound	Explanation
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.

### 9.2.3.13Fg UE Measurement Time to Trigger

The UE time to trigger indicates the period of time between the timing of event detection and the timing of sending Measurement Report, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Time to trigger	М		ENUMERAT ED(0, 10, 20,	Time in ms.
			40, 60, 80, 100, 120,	

		160, 200,	
		240, 320,	
		640, 1280,	
		2560, 5000)	

## 9.2.3.13Fh UE Measurement Type

The UE Measurement Type identifies the type of measurement that shall be performed see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Type	М		ENUMERAT ED(Primary CCPCH RSCP, DL Timeslot ISCP, UE Transmitted Power,)	

#### 9.2.3.13Fi UE Measurement Value

The UE Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Measurement Value	М			
>UE Transmitted Power				
>>UE Transmitted Power list HCR		0 <maxnrofts></maxnrofts>		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.
>>>Time Slot	M		9.2.1.56	
>>>UE Transmitted Power	M		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>>UE Transmitted Power list LCR		0< maxNrOfTsLCR>		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.
>>>Time Slot LCR	M		9.2.3.12a	
>>>UE Transmitted Power	М		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>>UE Transmitted Power list 768		0 <maxnrofts></maxnrofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.
>>>Time Slot	M		9.2.1.56	
>>>UE Transmitted Power	M		INTEGER (0104)	According to mapping in TS 25.123 [24]. Values 020 are not used.
>P-CCPCH RSCP				
>>Primary CCPCH RSCP	0		9.2.3.5	According to mapping in TS 25.123 [24].
>>Primary CCPCH RSCP Delta	0		9.2.3.5a	According to mapping in TS 25.123 [24].
>DL Timeslot ISCP				
>>Timeslot list HCR		0 <maxnrofts></maxnrofts>		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD.
>>>Time Slot	M		9.2.1.56	
>>>Timeslot	M		9.2.3.12	

ISCP				
>>Timeslot list LCR		0 <maxnroftslc R&gt;</maxnroftslc 		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD.
>>>Time Slot LCR	М		9.2.3.12a	
>>>Timeslot ISCP	M		9.2.3.12	
>>Timeslot list 768		0 <maxnrofts></maxnrofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD.
>>>Time Slot	М		9.2.1.56	
>>>Timeslot ISCP	M		9.2.3.12	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or
	7.68Mcps TDD.
maxNrOfTsLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.

## 9.2.3.13Fj UE Measurement Value Information

The *UE Measurement Value Information* IE provides information both on whether or not the UE Measurement Value is provided in the message and if provided also the UE Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Measurement Availability Indicator	М			
>Measurement Available				
>>UE Measurement Value	М		9.2.3.13Fi	
>Measurement not Available			NULL	

### 9.2.3.13G UL Timeslot Information LCR

The UL Timeslot Information LCR IE provides information on the timeslot allocation for an UL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information LCR		1 <maxn rOfULT sLCR&gt;</maxn 			-	
>Time Slot LCR	M		9.2.3.12a		_	
>Midamble Shift LCR	M		9.2.3.4C		_	
>TFCI Presence	M		9.2.1.55		_	
>UL Code Information LCR	M		TDD UL Code Information LCR 9.2.3.10B			
>PLCCH Information	0		9.2.3.17		YES	ignore

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

#### 9.2.3.13H UL Time Slot ISCP Info LCR

The *UL Time Slot ISCP Info LCR* IE provides information for UL Interference level for each time slot within the Radio Link for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Time Slot ISCP Info		1 <maxnrofu LTsLCR&gt;</maxnrofu 			-	
>Time Slot LCR	M		9.2.3.12a		_	
>UL Timeslot ISCP	М		9.2.3.26A		_	

Range bound	Explanation
maxNrOfULTsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD.

### 9.2.3.13I Uplink Synchronisation Frequency

The UL Synchronisation Frequency IE specifies the frequency of the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink synchronisation			INTEGER (18)	Unit: subframe, step: 1.
frequency				

### 9.2.3.13J Uplink Synchronisation Step Size

The *UL Synchronisation Step Size* IE specifies the step size to be used for the adjustment of the uplink transmission timing.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink synchronisation step			INTEGER (18)	Unit: 1/8 chip, step: 1.
size				

## 9.2.3.13K Uplink Timing Advance Control LCR

The Uplink Timing Advance Control LCR indicates the parameters which are used to support Uplink Synchronisation for the UE in 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SYNC UL codes bitmap	М		BITSTRING (8)	Each bit indicates the availability of a SYNC_UL code.
FPACH info		1		
>Time Slot LCR	M		9.2.3.12a	
>TDD Channelisation Code LCR	М		9.2.3.8a	
>Midamble Shift LCR	M		9.2.3.4C	
>WT	M		INTEGER (14)	Maximum number of subframes to wait for transmission of FPACH.
PRXupPCHdes	M		INTEGER (-120 – 58,)	Desired UpPCH receive power. Unit: dBm. Step size: 1.
SYNC UL procedure		1		
parameters	M		ENLIMEDATED	
>Maximum Sync UL transmissions	IVI		ENUMERATED (1,2,4,8,)	
>Power Ramp Step	M		INTEGER (03,)	
Mmax	М		INTEGER (132)	Maximum number of synchronisation attempts.

### 9.2.3.13L USCH ID

The USCH ID is the identifier of an uplink shared channel. It is unique among the USCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
USCH ID			INTEGER (0255)	

## 9.2.3.14 USCH Information

The  $\mathit{USCH}$   $\mathit{Information}$  IE provides information for USCHs to be established.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
USCH Information		1 to <maxnoofu SCHs&gt;</maxnoofu 			_	
>USCH ID	M		9.2.3.14		_	
>CCTrCH ID	M		9.2.3.2	UL CCTrCH in which the USCH is mapped	_	
>TrCH Source Statistics Descriptor	М		9.2.1.65		_	
>Transport Format Set	М		9.2.1.64	For USCH.	_	
>Allocation/Retention Priority	M		9.2.1.1		_	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>RB Info		1 <maxno OfRB&gt;</maxno 		All Radio Bearers using this USCH.	_	
>>RB Identity	М		9.2.3.5B		_	
>Traffic class	М		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishme nt with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxNoOfUSCHs	Maximum number of USCHs for one UE.
maxNoOfRB	Maximum number of Radio Bearers for one UE.

# 9.2.3.16 Support of PLCCH

The Support of PLCCH IE indicates whether PLCCH is supported or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Support of PLCCH			ENUMERAT	
			ED(supported	
			)	

### 9.2.3.17 PLCCH Information

The *PLCCH Information* IE carres a PLCCH assignment for a timeslot of an UL DCH-type CCTrCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD Channelisation Code	M		9.2.3.8	Only QPSK modulation is used with PLCCH.
Time Slot LCR	M		9.2.3.12a	
Midamble Shift LCR	M		9.2.3.4C	
PLCCH Sequence Number	M		9.2.3.18	

### 9.2.3.18 PLCCH Sequence Number

This sequence number represents a portion of a PLCCH used to signal TPC / SS bits to a single UE. A value of zero indicates that the PLCCH assignment has been deleted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLCCH Sequence Number			INTEGER (014)	

### 9.2.3.19 Minimum Spreading Factor 7.68Mcps

Defines the minimum spreading factor the UE has the capability of receiving or transmitting for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Spreading Factor 768			INTEGER (132)	

#### 9.2.3.20 Maximum Number of DL Physical Channels 7.68Mcps

Defines the maximum number of physical channels for 7.68Mcps TDD – per frame that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL			INTEGER	
Physical Channels 768			(1448)	

#### 9.2.3.21 Maximum Number of DL Physical Channels per Timeslot 7.68Mcps

Defines the maximum number of physical channels per timeslot that the UE is capable to receive for 7.68 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL Physical Channels per Timeslot 768			INTEGER (132)	

### 9.2.3.22 Secondary CCPCH Info 7.68Mcps TDD

The *Secondary CCPCH Info 7.68Mcps TDD* IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
TEOO	1.4		Reference	Familia Di		
TFCS	M		9.2.1.63	For the DL.	_	
TFCI Coding	M		9.2.3.11		_	
Secondary CCPCH		0 <maxnr< td=""><td></td><td></td><td>_</td><td></td></maxnr<>			_	
		OfSCCPC				
		Hs768>				
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst	M		9.2.3.23		_	
Type 7.68Mcps						
>TFCI Presence	М		9.2.1.55		_	
>Secondary CCPCH TDD	M		9.2.3.24		_	
Code Information 7.68Mcps						
>TDD Physical Channel	M		9.2.3.9		_	
Offset						
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	M		9.2.3.7		_	
FACH		0maxNrO			_	
		fFACHs				
>TFS	М		9.2.1.64	For the DL.	_	
PCH		01			_	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxNrOfSCCPCHs768	Maximum number of Secondary CCPCHs per CCTrCH.
maxNrOfFACHs	Maximum number of FACHs mapped onto a Secondary CCPCH.

## 9.2.3.23 Midamble Shift And Burst Type 7.68Mcps

This information element indicates burst type and midamble allocation for 7.68Mcps TDD.

Three different midamble allocation schemes exist:

- Default midamble: the midamble is allocated by layer 1 depending on the associated channelisation code (DL and UL);
- Common midamble: the midamble is allocated by layer 1 depending on the number of channelisation codes (possible in DL only);
- UE specific midamble: a UE specific midamble is explicitly assigned (DL and UL).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Burst Type				
>Type 1				
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED(4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	
>Type 2				
>> Midamble Configuration Burst Type 2	M		ENUMERATED (4, 8)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Short	C-UE		INTEGER (07)	
>Type 3				UL only.
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED (4, 8, 16)	As defined in TS 25.221 [12].
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	

Condition	Explanation			
UE	The IE shall be present if the Midamble Allocation			
	Mode IE is set to "UE-specific midamble".			

### 9.2.3.24 Secondary CCPCH TDD Code Information 7.68Mcps

The Secondary CCPCH TDD Code Information 7.68Mcps IE provides TDD Channelisation Code information for all SCCPCHs of one Time Slot for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information 7.68Mcps		1 <maxnr OfSCCPC Hs768&gt;</maxnr 			_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation		
maxNrOfSCCPCHs768	Maximum number of SCCPCHs for one CCTrCH.		

### 9.2.3.25 TDD Channelisation Code 7.68Mcps

The Channelisation Code Number indicates which Channelisation Code is used for a given Physical Channel. In 7.68Mcps TDD the Channelisation Code is an Orthogonal Variable Spreading Factor code that can have a spreading factor of 1, 2, 4, 8, 16 or 32.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
TDD Channelisation			ENUMERATED((1/1)	
Code			, (2/1), (2/2), (4/1),	
			(4/4), (8/1), (8/8),	
			(16/1), (16/16),	
			(32/1), (32,32),)	

### 9.2.3.26 UL Timeslot Information 7.68Mcps

The *UL Timeslot Information* IE provides information on the time slot allocation for a UL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>TFCI Presence	M		9.2.1.55		_	
>UL Code Information 7.68Mcps	М		TDD UL Code Information 7.68Mcps 9.2.3.27		-	

Range bound	Explanation		
maxNrOfTS	Maximum number of Timeslots for a UE.		

### 9.2.3.27 TDD UL Code Information 7.68Mcps

The *TDD UL Code Information 7.68Mcps* IE provides TDD UL Code information for all DPCHs of one UL Time Slot for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information		1 <maxnr OfDPCHs 768&gt;</maxnr 			_	
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation		
maxNrOfDPCHs768	Maximum number of DPCHs for one CCTrCH.		

### 9.2.3.28 DL Timeslot Information 7.68Mcps

The *DL Timeslot Information 7.68Mcps* IE provides information on the time slot allocation for a DL DPCH for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DL Timeslot Information		1 <maxnr OfTS&gt;</maxnr 			_	
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		_	
>TFCI Presence	М		9.2.1.55		_	
>DL Code Information 7.68Mcps	М		TDD DL Code Information 7.68Mcps 9.2.3.29		_	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE.

### 9.2.3.29 TDD DL Code Information 7.68Mcps

The *TDD DL Code Information* IE provides TDD DL Code information for all DPCHs of one DL Time Slot for 7.68Mpcs TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD DL Code Information		1 <maxnr OfDPCHs 768&gt;</maxnr 			I	
>DPCH ID	M		9.2.3.3		ı	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		-	

Range bound	Explanation
maxNrOfDPCHs768	Maximum number of DPCHs for one CCTrCH.

### 9.2.3.30 Rx Timing Deviation 7.68Mcps

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value..

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER (01023)	As specified in TS 25.435 [5].

#### 9.2.3.31 Cell Capability Container 7.68 Mcps TDD

The Cell Capability Container 7.68 McpsTDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows.  The first bit: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC-d PDU Size Support Indicator. Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.3.32 Neighbouring TDD Cell Measurement Information 7.68Mcps

This IE provides information on the 7.68Mcps TDD neighbouring cells used for the purpose of Measurements. Since the measurement can be performed on every time slot and midamble shift, the *Time slot* IE and *Midamble shift and burst type* IE shall be included if available.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UTRAN Cell Identifier	M		9.2.1.71	
UARFCN	М		9.2.1.66	Corresponds to Nt TS 25.105 [7].
Cell Parameter ID	M		9.2.1.8	
Time slot	0		9.2.1.56	
Midamble Shift And Burst Type 7.68Mcps	0		9.2.3.23	

### 9.2.3.33 UE Measurement Timeslot Information 7.68Mcps

The *UE Measurement Time Slot Information* IE provides information for DL timeslots for the UE to measure, see TS 25.331 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement		1 <maxnrofts></maxnrofts>		
Timeslot Information				
>Time Slot	M		9.2.1.56	
>Burst Type	M		ENUMERATED	
·			(Type1, Type 2,	
			Type 3,)	

Range bound	Explanation
maxNrOfTS	Maximum number of Timeslots for a UE for 7.68Mcps TDD.

### 9.2.3.34 DPCH ID 7.68Mcps

The DPCH ID 7.68Mcps identifies unambiguously a DPCH inside a downlink Radio Link for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DPCH ID			INTEGER	
			(0479)	

### 9.2.3.35 Rx Timing Deviation 3.84Mcps Extended

Measured Rx Timing Deviation as a basis for timing advance, either measured directly from a RACH burst, or calculated from the Rx Timing Deviation measurement on the USCH by adding the current Timing Advance value. This is used when the extended timing advance is in use at 3.84 Mcps.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Rx Timing Deviation			INTEGER (0511)	As specified in TS 25.435 [5].

#### 9.2.3.36 E-PUCH Information

The *E-PUCH Information* IE provides parameters to configure the E-PUCH physical channel for 3.84Mcps TDD and 7.68 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum code rate	M		INTEGER (063)	Unit: - Range: 0.0551. Step: 0.015.
Maximum code rate	M		INTEGER (063)	Unit: - Range: 0.0551. Step: 0.015.
HARQ Info for E-DCH	M		ENUMERATED (rv0, rvtable)	"rv0" indicates that the UE will only use E_DCH RV index 0. "rvtable" indicates that the UE will use an RSN based RV index as specified in TS 25.211 [8].
N <sub>E-UCCH</sub>	M		INTEGER (112)	Number of slots that are required to carry TPC and TFCI (consecutively allocated slots beginning with the first).

#### 9.2.3.36a E-PUCH Information LCR

The *E-PUCH Information LCR* IE provides parameters to configure the E-PUCH physical channel for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Minimum code rate	М		INTEGER (063)	Unit: - Range: 0.055 1.	-	
Maximum code rate	M		INTEGER (063)	Step: 0.015. Unit: - Range: 0.0551. Step: 0.015.	-	
HARQ Info for E-DCH	M		ENUMERAT ED (rv0, rvtable)	"rv0" indicates that the UE will only use E_DCH RV index 0. "rvtable" indicates that the UE will use an RSN based RV index as specified in TS 25.211 [8].	_	
PRXdes_base	M		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH.	-	
E-PUCH TPC Step Size	М		TDD TPC Uplink Step Size 9.2.3.10a		-	
N <sub>E-UCCH</sub>	M		INTEGER (18)	Number of E- UCCH and TPC instances within an E- DCH TTI. Details are described in TS 25.221 [12].		
E-PUCH Power Control GAP	0		INTEGER (1255)	Unit: Number of subframes. Reference to E-PUCH Power Control for 1.28Mcps TDD in TS 25.224 [22]. If it is not present, UE shall deem it to be infinite in which case closed loop power control shall always be used.	YES	ignore

#### 9.2.3.37 E-TFCS Information TDD

Whereas the related E-DCH Transport Block sizes are standardised in TS 25.425 [32] this IE gives details on the Reference Betas.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
Reference Beta		1 <maxnrofrefb< th=""><th>Reference</th><th></th></maxnrofrefb<>	Reference	
Information QPSK		etas>		
>Reference Code Rate	M		INTEGER (010)	Unit: - Range: 01.
			(6.1.6)	Step: 0.1.
>Reference Beta	M		INTEGER(	Unit: -
			-1516)	Range: -15+16.
				Step: 1 dB.
Reference Beta		1 <maxnrofrefb< td=""><td></td><td></td></maxnrofrefb<>		
Information 16QAM		etas>		
>Reference Code Rate	M		INTEGER	Unit: -
			(010)	Range: 01.
				Step: 0.1.
>Reference Beta	M		INTEGER(	Unit: -
			-1516)	Range: -15+16.
				Step: 1 dB.

Range Bound	Explanation
maxNrOfRefBetas	Maximum number of signalled reference betas.

### 9.2.3.38 E-DCH MAC-d Flows Information TDD

The *E-DCH MAC-d Flows Information TDD* IE is used for the establishment of E-DCH MAC-d flows for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	М		9.2.1.1		-	
>TNL QoS	0		9.2.1.56A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishmen t with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishmen t with ALCAP.	-	
>Payload CRC Presence Indicator	M		9.2.1.42		_	
>Maximum Number Of Retransmissions For E-DCH	M		9.2.1.100		-	
>E-DCH HARQ Power Offset TDD	M		9.2.3.49		-	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		-	
>E-DCH Grant Type	M		9.2.3.43		_	
>E-DCH Logical Channel Information	М		9.2.1.92		-	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.49a	Mandatory for LCR TDD. Not applicable for 3.84Mcps TDD and 7.68Mcps TDD.	YES	YES
>Traffic Class	М		9.2.1.58A		YES	ignore

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.

### 9.2.3.39 E-DCH Non-scheduled Grant Information TDD

The *E-DCH Non-scheduled Grant Information TDD* IE is used to specify the details of an non-scheduled grant for 3.84Mcps and 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	M		9.2.3.44	
Power Resource Related Information	M		9.2.3.45	
Repetition Period	M		9.2.3.6	
Repetition Length	M		9.2.3.7	
TDD E-PUCH Offset	M		9.2.3.46	
TDD Channelisation Code	M		9.2.3.8	

#### 9.2.3.39a E-DCH Non-scheduled Grant Information LCR TDD

The *E-DCH Non-scheduled Grant Information LCR TDD* IE is used to specify the details of an non-scheduled grant for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR	М		9.2.3.44a	
Power Resource Related Information	М		9.2.3.45	
Repetition Period	M		9.2.3.6	
Repetition Length	M		9.2.3.7	
Subframe Number	М		ENUMERATED (0,1)	Used to indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Non-scheduled Grant.
TDD E-PUCH Offset	M	•	9.2.3.46	
TDD Channelisation Code	M		9.2.3.8	

#### 9.2.3.40 E-DCH TDD Information

The *E-DCH TDD Information* specifies the details of the maximum bit rate and processing overload level.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate	0		9.2.3.47	
E-DCH Processing Overload Level	0		9.2.1.95	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96	

#### 9.2.3.40a E-DCH TDD Information LCR

The *E-DCH TDD Information LCR* IE specifies the details of UE physical layer category, NodeB processing overload level and power offset, Maximum Number of Retransmission and E-DCH Retransmission timer for scheduling info. The *E-AGCH Inactivity Monitor Threshold* IE is used for E-AGCH channel monitoring control for scheduled transmission.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Physical Layer Category LCR	0		9.2.3.54	If the Extended E-DCH Physical Layer Category LCR IE is included in the E-DCH TDD Information LCR IE, the E-DCH Physical Layer Category LCR IE shall be ignored. In case of multicarrier E-DCH, this IE indicates the capability for each carrier.		
E-DCH Processing Overload Level	0		9.2.1.95		_	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		1	
Extended E-DCH Physical Layer Category LCR	0		9.2.3.54A	The Extended E-DCH Physical Layer Category LCR IE shall be used if the E-DCH Physical Layer Category has a value larger than 5. In case of multi- carrier E-DCH, this IE indicates the capability for each carrier.	YES	reject
Maximum Number of Retransmission for Scheduling Info LCR	0		Maximum Number of Retransmissi ons for E- DCH 9.2.1.100		YES	ignore
E-DCH Retransmission timer for Scheduling Info LCR	0		9.2.3.49a		YES	ignore
E-AGCH Inactivity Monitor Threshold	0		Enumerated (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, spare5,, infinity)	Units of subframes.	YES	ignore
SNPL Carrier Group Indicator	0		INTEGER (13)	Applicable to 1.28Mcps TDD in multi-carrier E- DCH operation only. The absence of this IE indicates the corresponding frequency belongs to a separate SNPL carrier group which only contains this carrier. The	YES	reject

			SNPL carrier group is defined in [16].		
Multi-Carrier E-DCH Physical Layer Category LCR	0	9.2.3.	54B Applicable to 1.28Mcps TDD in multi-carrier E- DCH operation only.	YES	reject
UE TS0 Capability LCR	0	ENUM ED (T Capa TS0 N Capa	ble, only.	YES	ignore

### 9.2.3.41 E-DCH TDD Information Response

The *E-DCH TDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow		0 <maxnrofedc< td=""><td></td><td></td></maxnrofedc<>		
Specific Information		HMACdFlows>		
Response				
>E-DCH MAC-d Flow ID	M		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer	0		9.2.1.62	
Address				
E-AGCH Specific		0 <maxnrofeag< td=""><td></td><td></td></maxnrofeag<>		
Information Response		CHCodes>		
>Time Slot	M		9.2.1.56	
>Midamble Shift And	M		9.2.3.4	
Burst Type				
>TDD Channelisation	M		9.2.3.8	
Code				
E-HICH Information		01		
Response				
>Time Slot	M		9.2.1.56	
>Midamble Shift And	M		9.2.3.4	
Burst Type				
>TDD Channelisation	M		9.2.3.8	
Code				
>E-HICH Time Offset	M		9.2.3.48	
E-DCH Non-scheduled	0		9.2.3.39	
Grant Information TDD				
E-RNTI	0		9.2.1.94	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.

### 9.2.3.41a E-DCH TDD Information Response 1.28Mcps

Only for 1.28Mcps TDD. The *E-DCH TDD Information Response 1.28Mcps* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information Response		0 <maxnrofedc HMACdFlows&gt;</maxnrofedc 		
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	
E-AGCH Specific		0 <maxnrofeag< td=""><td></td><td></td></maxnrofeag<>		
Information Response		CHCodes>		
>Time Slot LCR	M		9.2.3.12a	
>Midamble Shift LCR	M		9.2.3.4C	
>TDD Channelisation Code	М		9.2.3.8	
E-HICH Scheduled specific Information Response		01		
>Scheduled		0< maxNrOfEHICHC odes>		
>>EI	M		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift LCR	М		9.2.3.4C	
>>TDD Channelisation Code	М		9.2.3.8	
>Non-Scheduled		01		
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift LCR	M		9.2.3.4C	
>>TDD Channelisation Code	М		9.2.3.8	
>>Signature Sequence Group Index	М		INTEGER (019)	
>E-HICH time offset LCR	М		9.2.3.48a	
E-DCH Non-scheduled Grant Information LCR TDD	0		9.2.3.39a	
E-RNTI	0		9.2.1.94	

Range bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.
maxNrOfEHICHCodes	Maximum number of E-HICHs assigned to one UE.

### 9.2.3.42 E-DCH TDD Information to Modify

The *E-DCH MAC-d Flows Information TDD* IE is used for the establishment of E-DCH MAC-d flows for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxnr OfEDCHM ACdFlows &gt;</maxnr 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	М		9.2.1.61		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A		_	
>Maximum Number Of Retransmissions For E-DCH	0		9.2.1.100		_	
>E-DCH HARQ Power Offset TDD	0		9.2.3.49		_	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89		_	
>E-DCH Grant Type	0		9.2.3.43		_	
>E-DCH Logical Channel To Add	0		E-DCH Logical Channel Information 9.2.1.92		-	
>E-DCH Logical Channel To Modify	0		9.2.1.93		_	
>E-DCH Logical Channel To Delete		0< maxNoOfL ogicalCha nnels>			_	
>>Logical Channel ID	М		9.2.1.97		_	
>E-DCH MAC-d Flow Retransmission Timer	0		9.2.3.49a	Applicable for 1.28Mcps TDD only.	YES	ignore
>Traffic Class	0		9.2.1.58A		YES	ignore
MAC-e Reset Indicator	0		9.2.1.99		_	
E-DCH MAC-d PDU Size Format	0		9.2.1.91A		YES	reject
UE TS0 Capability LCR	0		ENUMERATE D (TS0 Capable, TS0 Non-Capable)	Applicable to 1.28Mcps TDD only.	YES	ignore

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxNoOfLogicalChannels	Maximum number of logical channels.

# 9.2.3.43 E-DCH Grant Type

The  $E ext{-}DCH$  Grant Type identifies whether a MAC-d flow is scheduled or non-scheduled.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Grant Type			ENUMERATED	
			(Scheduled,	
			Non-scheduled)	

#### 9.2.3.44 Timeslot Resource Related Information

The *Timeslot Resource Related Information* is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information			BIT STRING (13)	
IIIIOIIIIalioii			(13)	

#### 9.2.3.44a Timeslot Resource Related Information LCR

The *Timeslot Resource Related Information LCR* IE is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR			BIT STRING (5)	

#### 9.2.3.45 Power Resource Related Information

The *Power Resource Related Information* specifies the maximum allowed E-PUCH power resource (dB relative to  $P_{e-base}$ ) that the UE may use for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Resource Related			INTEGER	
Information			(132)	

#### 9.2.3.46 E-PUCH Offset

The E-PUCH Offset represents the CFN offset at which an non-scheduled E-DCH grant begins.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-PUCH Offset			INTEGER (0255)	
L	1		(0200)	

#### 9.2.3.47 E-DCH TDD Maximum Bitrate

The E-DCH TDD Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH in TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum			INTEGER	Bitrate on transport block
Bitrate			(09201,)	level. Unit is kbits per
				second.

#### 9.2.3.48 E-HICH Time Offset

The E-HICH Time Offset ( aka  $n_{\text{E-HICH}}$  (TS 25.221 [12])) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset			INTEGER (444)	

#### 9.2.3.48a E-HICH Time Offset LCR

The *E-HICH Time Offset LCR* IE(aka n<sub>E-HICH</sub> (TS 25.221 [12])) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset LCR			INTEGER (415)	

#### 9.2.3.49 E-DCH HARQ Power Offset TDD

The E-DCH HARQ Power Offset TDD is the power offset measured in dB.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset TDD			INTEGER (06)	

#### 9.2.3.49a E-DCH MAC-d Flow Retransmission Timer

The *E-DCH MAC-d Flow Retransmission Timer* IE is used in the E-DCH retransmission control as defined in TS 25.425 [32].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
E-DCH MAC-d Flow			ENUMERATED (10,	Unit: ms.
Retransmission Timer			15, 20, 25, 30, 35,	Node B may use this value to
			40, 45, 50, 55, 60,	stop the re-transmission of the
			65, 70, 75, 80, 85,	corresponding MAC-e PDU.
			90, 95, 100, 110,	
			120, 140, 160, 200,	
			240, 280, 320, 400,	
			480, 560,)	

#### 9.2.3.50 E-DCH Non-scheduled Grant Information 7.68Mcps TDD

The *E-DCH Non-scheduled Grant Information 7.68Mcps TDD* IE is used to specify the details of an non-scheduled grant for TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	М		9.2.3.44	
Power Resource Related Information	М		9.2.3.45	
Repetition Period	М		9.2.3.6	
Repetition Length	M		9.2.3.7	
TDD E-PUCH Offset	M		9.2.3.46	
TDD Channelisation Code 7.68Mcps	М		9.2.3.25	

### 9.2.3.51 E-DCH TDD Information 7.68Mcps

The *E-DCH TDD Information 7.68Mcps* specifies the details of the maximum bit rate and processing overload level for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum Bitrate 7.68Mcps	0		9.2.3.53	
E-DCH Processing Overload Level	0		9.2.1.95	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96	

### 9.2.3.52 E-DCH TDD Information Response 7.68Mcps

The *E-DCH TDD Information Response 7.68Mcps* IE provides information for E-DCH MAC-d flows that have been established or modified for 7.68Mcps TDD. It also provides additional E-DCH information determined within the Node B

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow Specific Information Response		0 <maxnrofedc HMACdFlows&gt;</maxnrofedc 		
>E-DCH MAC-d Flow ID	М		9.2.1.91	
>Binding ID	0		9.2.1.3	
>Transport Layer Address	0		9.2.1.62	
E-AGCH Specific Information Response 7.68Mcps		0 <maxnrofeag CHCodes&gt;</maxnrofeag 		
>Time Slot	M		9.2.1.56	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25	
E-HICH Information Response 7.68Mcps		01		
>Time Slot	M		9.2.1.56	
>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25	
>E-HICH Time Offset	М		9.2.3.48	
E-DCH Non-scheduled Grant Information 7.68Mcps TDD	0		9.2.3.50	
E-RNTI	0		9.2.1.94	

Range Bound	Explanation
maxNrOfEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.

### 9.2.3.53 E-DCH TDD Maximum Bitrate 7.68Mcps

The *E-DCH TDD Maximum Bitrate 7.68Mcps* parameter indicates the Maximum Bitrate for an E-DCH in 7.68Mcps TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum			INTEGER	Bitrate on transport block
Bitrate 7.68Mcps			(017713,)	level. Unit is kbits per
				second.

#### 9.2.3.54 E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Physical Layer			INTEGER (15)	As defined in TS 25.306 [42].
Category LCR				

#### 9.2.3.54A Extended E-DCH Physical layer Category LCR

Only for 1.28Mcps TDD. The *Extended E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-DCH Physical Layer Category LCR			INTEGER(6,)	As defined in TS 25.306 [42].

### 9.2.3.54B Multi-Carrier E-DCH Physical Layer Category LCR

Only for 1.28Mcps TDD. The *Multi-Carrier E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in multi-carrier E-DCH operation mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH Physical			INTEGER (18,)	As defined in [42].
Layer Category LCR				

#### 9.2.3.55 UpPCH Information LCR

Only for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UpPCH Information LCR		1 <maxfr equencyin Cell&gt;</maxfr 			EACH	ignore
>UARFCN	0		9.2.1.66		_	
>UpPCH Position LCR	0		9.2.3.56		_	

Range Bound	Explanation
maxFrequencyinCell	Maximum number of Frequency that can be defined in a Cell.

#### 9.2.3.56 UpPCH Position LCR

Only for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UpPCH Position LCR			INTEGER	
			(1127)	

#### 9.2.3.57 Common E-DCH MAC-d Flow ID

The Common E-DCH MAC-d Flow ID IE is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d			INTEGER	
Flow ID			(0255)	

### 9.2.3.58 Common E-DCH MAC-d Flow Specific Information LCR

The *Common E-DCH MAC-d Flow Specific Information LCR* IE provides information associated to Common E-DCH MAC-d Flow used for Common E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information LCR		1 <maxnrofedc HMACdFlowsLCR &gt;</maxnrofedc 		
>Common E-DCH MAC- d Flow ID	М		9.2.3.57	
>Maximum Number Of Retransmissions For E- DCH	М		9.2.1.100	
>E-DCH HARQ Power Offset TDD	М		9.2.3.49	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89	
>Common E-DCH Logical Channel information	М	1 <maxnooflogi calChannels&gt;</maxnooflogi 		
>>Logical Channel ID	M		9.2.1.97	
>>Maximum MAC-d PDU Size Extended	М		MAC PDU Size Extended 9.2.1.34D	

Range bound	Explanation
maxNrOfEDCHMACdFlowsLCR	Maximum number of E-DCH MAC-d Flows for 1.28Mcps TDD.
maxNoOfLogicalChannels	Maximum number of logical channels.

#### 9.2.3.59 MAC-es Maximum Bit Rate LCR

The MAC-es Maximum Bit Rate LCR IE indicates the maximum number of bits per second to be delivered over the air interface.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-es Maximum Bit Rate LCR			INTEGER (0 256,000,000,	Unit: bit/s.
			) , , , ,	

#### 9.2.3.60 Idle Interval Information

The *Idle Interval Information* IE indicates the idle interval used for E-UTRAN measurements by a multi-RAT UE in CELL\_DCH state. See TS 36.133 [64].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
K	М		INTEGER (23)	The actual idle interval period = 2 <sup>k</sup> .
Offset	М		INTEGER (07)	The idle interval position in the period.

### 9.2.3.61 Continuous Packet Connectivity DRX Information LCR

The *Continuous Packet Connectivity DRX Information LCR* IE defines the parameters used for Continuous Packet Connectivity DRX operation for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.	-	
HS-SCCH DRX Information		1				
>UE DRX Cycle	М		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>Inactivity Threshold for UE DRX Cycle	0		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>UE DRX Offset	М		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATED(128, 256,512,)	Units of subframes.	YES	ignore
E-AGCH DRX Information		01				
CHOICE E-AGCH DRX information type	М					
>Same as HS-SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E- AGCH Inactivity Monitor Threshold is absent.	-	
>E-AGCH DRX parameters						
>>E-AGCH DRX cycle	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes.	-	
>>E-AGCH Inactivity Monitor Threshold	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>E-AGCH DRX Offset	М		INTEGER (0 63)	Units of subframes. Offset of the E-AGCH DRX cycles.	-	

### 9.2.3.62 Continuous Packet Connectivity DRX Information To Modify LCR

The *Continuous Packet Connectivity DRX Information To Modify LCR* IE is used for modification of Continuous Packet Connectivity DRX information in a Node B Communication Context. The *Continuous Packet Connectivity DRX Information To Modify LCR* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.	-	•
CHOICE DRX Information To Modify	0					
>Modify						
>>HS-SCCH DRX Information		01				
>>>UE DRX Cycle	М		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>>>Inactivity Threshold for UE DRX Cycle	0		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>>>UE DRX Offset	М		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>>>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATED(128, 256,512,)	Units of subframes.	YES	ignore
>>E-AGCH DRX Information		01				
>>>CHOICE E-AGCH DRX information type	М				-	
>>>>Same as HS- SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E-AGCH Inactivity Monitor Threshold is absent.	-	
>>>E-AGCH DRX parameters						
>>>>E-AGCH DRX cycle	М		ENUMERATED (1,2,4,8,16,32,64,)	Units of subframes.	-	
>>>>E-AGCH Inactivity Monitor Threshold	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>>>E-AGCH DRX Offset	М		INTEGER (0 63)	Units of subframes. Offset of the E-AGCH DRX cycles.	-	
>Deactivate			NULL		-	

### 9.2.3.63 Continuous Packet Connectivity DRX Information Response LCR

DRNS uses the *Continuous Packet Connectivity DRX Information Response LCR* IE to inform the SRNS the parameters used for Continuous Packet Connectivity DRX operation for 1.28 Mcps TDD (see TS 25.224 [22]). Continuous Packet Connectivity DRX related parameters shall be configured by SRNS. For the parameters which can be accepted by DRNS, the DRNS shall not included the related IEs in the *Continuous Packet Connectivity DRX Information Response LCR* IE. For the parameters which can be not accepted by DRNS, the DRNS shall included the related IEs in the *Continuous Packet Connectivity DRX Information Response LCR* IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Enabling Delay	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames.	-	
HS-SCCH DRX Information		01				
>UE DRX Cycle	0		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>Inactivity Threshold for UE DRX Cycle	0		ENUMERATED(1,2,4 ,8,16,32,64,)	Units of subframes.	-	
>UE DRX Offset	0		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI.	-	
>Inactivity Threshold for UE DRX Cycle Ext	0		ENUMERATED(128, 256,512,)	Units of subframes. This IE can only be used when the Inactivity Threshold for UE DRX Cycle Ext is included in the request message, otherwise, the IE shall not be used.	YES	ignore
E-AGCH DRX Information		01				
CHOICE E-AGCH DRX information type	М					
>Same as HS-SCCH			NULL	Indicate the E-AGCH DRX Cycle and Offset are the same as the HS-SCCH DRX Cycle and Offset, and the E-AGCH Inactivity Monitor Threshold is absent.	-	
>E-AGCH DRX parameters						
>>E-AGCH DRX cycle	0		ENUMERATED (1,2,4,8,16,32,64,)	Units of subframes.	-	
>>E-AGCH Inactivity Monitor Threshold	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, infinity,)	Units of subframes.	-	
>>E-AGCH DRX Offset	0		INTEGER (0 63)	Units of subframes. Offset of the E-AGCH DRX cycles.	-	

# 9.2.3.64 HS-DSCH Semi-Persistent scheduling Information LCR

The *HS-DSCH Semi-Persistent scheduling Information LCR* IE defines the parameters used for HS-DSCH semi-Persistent scheduling for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1< maxNoOfT BSs- Mapping- HS-DSCH- SPS >		
>Transport Block Size maping Index	М		INTEGER (0 maxNoOfTBSs- Mapping-HS-DSCH- SPS-1)	Corresponds to the <i>Transport-block size information</i> field carried on HS-SCCH (see TS 25.222 [46]).
>Transport Block Size Index	М		INTEGER (1 maxNoOfHS-DSCH- TBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see TS 25.425 [32]).
Repetition Period list		1 <maxno< td=""><td></td><td></td></maxno<>		

	T	T	1	,
		OfRepetiti		
		on-Period-		
		LCR>		
>Repetition Period Index	М		INTEGER (0	Corresponds to the Resource
			maxNoOfRepetition- Period-LCR-1)	repetition period index field
			Pellou-LCR-1)	carried on HS-SCCH (see TS 25.222 [46]).
>Repetition Period	M		ENUMERATED	Units of subframes.
>Repetition Period	IVI		(1, 2, 4, 8, 16, 32,	Onits of Subframes.
			64,)	
>Repetition Length	0		INTEGER	Absence means Repetition
>Nepetition Length			(163))	Length equal to 1.
HS-DSCH Semi-Persistent	0		ENUMERATED(Res	Reserve means the HS-DSCH
Resource Reservation			erve)	Semi-Persistent Resource is
Indicator			0.70)	required to be reserved and be
				informed via response
				message.
HS-DSCH Semi-Persistent		1		
scheduling operation				
Indicator				
>CHOICE configuration				
>>Logical Channel level			BIT STRING (16)	Available when MAC-ehs is
				configured.
				Indicates the logical channels
				for which the HS-DSCH Semi-
				Persistent operation is
				intended to be used.
				Bit 0 is for logical channel 0, Bit 1 is for logical channel 1,
				Value '1' for a bit means that
				the HS-DSCH Semi-Persistent
				operation is allowed. Bit 0 is
				the first/leftmost bit of the bit
				string.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues
				for which the HS-DSCH Semi-
				Persistent operation is
				intended to be used.
				Bit 0 is for priority queue 0, Bit
				1 is for priority queue 1,
				Value '1' for a bit means that
				the HS-DSCH Semi-Persistent
				operation is allowed. Bit 0 is
				the first/leftmost bit of the bit
	1			string.

Range Bound	Explanation
maxNoOfHS-DSCH-TBSsLCR	Maximum number of HS-DSCH Transport Block Sizes.
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.

### 9.2.3.65 HS-DSCH Semi-Persistent scheduling Information to modify LCR

The *HS-PSCH Semi-Persistent scheduling Information to modify LCR* IE is used for the modification of HS-DSCH Semi-Persistent scheduling information for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		0< maxNoOfT BSs- Mapping- HS-DSCH- SPS >		

> Transport Block Size maping Index	М		INTEGER (0 maxNoOfTBSs- Mapping-HS-DSCH- SPS-1)	Corresponds to the <i>Transport-block size information</i> field carried on HS-SCCH (see TS 25.222 [46]).
>Transport Block Size Index	М		INTEGER (1 maxNoOfHS-DSCH- TBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see TS 25.425 [32]).
Repetition Period list		0 <maxno OfRepetiti on-Period- LCR&gt;</maxno 		
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition- Period-LCR)	Corresponds to the Resource repetition period index field carried on HS-SCCH (see TS 25.222 [46]).
>Repetition Period	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes.
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
HS-DSCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the Semi- Persistent HS-DSCH Resource is required to be reserved and be informed via response message.
HS-DSCH Semi-Persistent scheduling operation		01		
Indicator				
>CHOICE configuration				
>>Logical Channel level			BIT STRING (16)	Available when MAC-ehs is configured. Indicates the logical channels for which the HS-DSCH Semi-Persistent operation is intended to be used. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi-Persistent operation is intended to be used. Bit 0 is for prority queue 0, Bit1 is for priority queue 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.

Range Bound	Explanation		
maxNoOfHS-DSCH-TBSsLCR	Maximum number of HS-DSCH Transport Block Sizes.		
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.		
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.		

# 9.2.3.66 E-DCH Semi-Persistent scheduling Information LCR

The E-DCH Semi-Persistent scheduling Information LCR IE defines the parameters used for E-DCH semi-Persistent scheduling for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		1 <maxn ion-="" lcr="" oofrepetit="" period-=""></maxn>		
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>Repetition Period	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes.
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
E-DCH Semi-Persistent scheduling Indicator	М		BIT STRING (16)	Indicates the logical channels for which the E-DCH Semi-Persistent operation is intended to be used. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is the first/leftmost bit of the bit string.
E-DCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the E-DCH Semi-Persistent Resource is required to be reserved and be informed via response message.

Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

# 9.2.3.67 E-DCH Semi-Persistent scheduling Information to modify LCR

The *E-DCH Semi-Persistent scheduling Information to modify LCR* IE is used for the modification of E-DCH Semi-Persistent scheduling information for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		0 <maxn ion-="" lcr="" oofrepetit="" period-=""></maxn>		
>Repetition Period Index	М		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>Repetition Period	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes.
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
E-DCH Semi-Persistent scheduling Indicator	0		BIT STRING (16)	Indicates the logical channels for which the E-DCH Semi-Persistent operation is intended to be used. Bit 0 is for logical channel 0, Bit1 is for logical channel 1, Value '1' for a bit means that the HS-DSCH Semi-Persistent operation is allowed. Bit 0 is

			the first/leftmost bit of the bit string.
E-DCH Semi-Persistent Resource Reservation Indicator	0	ENUMERATED(Res erve)	Reserve means the E-DCH Semi-Persistent Resource is required to be reserved and be informed via response message.

Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

# 9.2.3.68 HS-DSCH Semi-Persistent scheduling Information Response LCR

The *HS-DSCH Semi-Persistent scheduling Information Response LCR* IE provides information for HS-DSCH Semi-Persistent scheduling determined within the Node B (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SICH information for HS- DSCH Semi-Persistent Scheduling operation		1< maxNoOf- HS-SICH- SPS>		
>HS-SICH mapping index	M		INTEGER (0 maxNoOf-HS-SICH- SPS-1)	
>CHIOCE HS-SICH type				
>>HS-SCCH associated HS- SICH				
>>>HS-SICH ID	М		HS SICH ID 9.2.3.3ad	
>>Non-HS-SCCH associated HS-SICH				
>>>Time Slot LCR	M		9.2.3.12a	
>>>Midamble shift LCR	M		9.2.3.4C	
>>>TDD Channelisation Code	М		9.2.3.8	
Allcoated HS-PDSCH Semi- persistent resource		01		
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition-Period-LCR-1)	
>Repetition Length for HS- PDSCH Semi-persistent Resouce	0		INTEGER (163))	Absence means Repetition Length equal to 1.
>HS-PDSCH offset	М		INTEGER (063))	Units of subframes.
>HS-PDSCH Midamble Configuation	М		Midamble Shift LCR 9.2.3.7A	
>Timeslot Resource Related Information	М		BIT STRING(5)	Each bit indicates availability of a timeslot, where the bit 0 corresponds to TS2, the bit 1 is TS3, the bit 3 is TS4 bit 5 corresponds to TS6. The value 1 of a bit indicates that the corresponding timeslot is available. Bit 0 is the first/leftmost bit of the bit string.
>Start Code	М		TDD Channelisation Code 9.2.3.19	
>End Code	М		TDD Channelisation Code 9.2.3.19	
>Transport Block Size Index	М		INTEGER (0 maxNoOfTBSs-	

		Mapping-HS-DS( SPS-1)	CH-
>Modulation type	М	ENUMERATED (QPSK, 16QAM)	
>HS-SICH mapping index	M	INTEGER (0 maxNoOf-HS-SI0 SPS-1)	CH-
Buffer Size for HS-DSCH Semi-Persistent scheduling	0	ENUMERATED (800304000,)	Indicats the buffer size that shall be reserved for HS-DSCH semi-persistent scheduling operation.  800 16000 by step of 800, 17600 32000 by step of 1600, 36000 80000 by step of 4000, 88000 160000 by step of 8000, 176000 304000 by step of 16000.
Number of Processes for HS- DSCH Semi-Persistent scheduling	0	INTEGER (116)	<u> </u>

Range Bound	Explanation				
maxNoOf-HS-SICH-SPS	Maximum number of HS-SICH for HS-DSCH Semi-Persistent				
	scheduling operation.				
maxNoOfTBSs-Mapping-HS-DSCH-SPS	Maximum number of Transport Block Size mapping index on HS-SCCH.				
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.				

### 9.2.3.69 E-DCH Semi-Persistent scheduling Information Response LCR

The *E-DCH Semi-Persistent scheduling Information Response LCR* IE provides information for E-DCH Semi-Persistent scheduling information determined within the Node B (see TS 25.2243 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allcoated E-DCH Semi-		01		
persistent resource				
>Timeslot Resource Related Information LCR	M		9.2.3.54a	
>Power Resource Related Information	М		9.2.3.45	
>Repetition Period Index	M		INTEGER (0 maxNoOfRepetition- Period-LCR-1)	
>Repetition Length	М		INTEGER (163))	Absence means Repetition Length equal to 1.
>Subframe Number	M		ENUMERATED ( 0,1)	Used to indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Non-scheduled Grant.
>TDD E-PUCH Offset	M		9.2.3.46	
>TDD Channelisation Code	M		9.2.3.19	
>NE-UCCH	M		INTEGER (18)	Number of E-UCCH and TPC instances within an E-DCH TTI. Details are described in TS 25.221 [12].
E-DCH SPS E-HICH information		01		

>CHOICE E-HICH configuration	М		
>>same as scheduled E- HICH			
>>> EI		INTEGER (03)	
>>explicit			
>>>Time Slot LCR	М	9.2.3.12a	
>>>Midamble Shift LCR	М	9.2.3.4C	
>>>TDD Channelisation Code	М	9.2.3.8	
>Signature Sequence Group Index	М	INTEGER (019)	

Range Bound	Explanation
maxNoOfRepetition-Period-LCR	Maximum number of Repetition Period for 1.28Mcps TDD.

### 9.2.3.70 HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR

The *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate HS-DSCH Semi-Persistent scheduling operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Semi-Persistent scheduling Deactivate	М		NULL	
Indicator				

### 9.2.3.71 E-DCH Semi-Persistent scheduling Deactivate Indicator LCR

The *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate E-DCH Semi-Persistent schedulung operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Semi-Persistent scheduling Deactivate Indicator	М		NULL	

#### 9.2.3.72 HS-SICH Reference Signal Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Midamble Configuration LCR	М		ENUMERATE D (2, 4, 6, 8,	As defined in TS 25.221 [12].		
			10, 12, 14, 16,)	10 20.221 [12].		
Midamble Shift	М		INTEGER (015)			
Time Slot LCR	M		9.2.3.12a			

#### 9.2.3.73 Cell Portion LCR ID

Cell Portion LCR ID is the unique identifier for a cell portion within a cell for 1.28 Mcps TDD. See TS 25.225 [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion LCR ID			INTEGER	
			(0255,)	

#### 9.2.3.74 TS0 HS-PDSCH Indication LCR

Only for 1.28Mcps TDD. The *TS0 HS-PDSCH Indication LCR* IE indicates the first bit of timeslot information included in the HS-SCCH can be used to allocate the HS-PDSCH resources on TS0.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TS0 HS-PDSCH Indication LCR			NULL	

#### 9.2.3.75 DCH Measurement Occasion Information

The *DCH Measurement Occasion Information* IE indicates Measurement Occasion Information used for interfrequency/ inter-RAT measurements in CELL\_DCH state for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CELL_DCH measurement occasion pattern sequence		1 to <maxnr OfDCHM easurem entOcca sionPatt ernSequ ence&gt;</maxnr 		
>Pattern sequence identifier	М		Integer(1 maxNrOfDCH Measurement OccasionPatte rnSequence)	
>Status Flag	M		Enumerated(a ctivate, deactivate)	This flag indicates whether the measurement occasion pattern sequence shall be activated or deactivated.
>Measurement purpose	O		BIT STRING (5)	Measurement Purpose. Bit 0 is for Inter- frequency measurement. Bit 1 is for GSM carrier RSSI measurement. Bit 2 is for Initial BSIC identification. Bit 3 is for BSIC re- confirmation. Bit 4 is for E-UTRA measurement.  The value 1 of a bit means that the measurement occasion pattern sequence is applicable for the corresponding type of measurement.  Bit 0 is the first/leftmost bit of the bit string.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
>Measurement occasion pattern sequence parameters	0			
>>k	M		Integer(19)	CELL_DCH measurement occasion cycle length coefficient. The actual measurement occasion period equal to 2k radio frames. Value 0 indicates continuous allocation.
>>Offset	M		Integer(0511)	In frames. The measurement occasion position in the measurement period.
>>M_Length	М		Integer(1512)	The measurement occasion length in frames starting from the Offset.
>>Timeslot Bitmap	M		Bit string (7)	Bitmap indicating which of the timeslot(s) is/are allocated for measurement. Bit 0 is for timeslot 0. Bit 1 is for timeslot 1. Bit 2 is for timeslot 2. Bit 3 is for timeslot 3. Bit 4 is for timeslot 4. Bit 5 is for timeslot 5. Bit 6 is for timeslot 6. The value 0 of a bit means the corresponding timeslot is not used for measurement. The value 1 of a bit means the corresponding timeslot is used for measurement. Bit 0 is the first/leftmost bit of the bit string.

Condition	Explanation
Measurementoccasionpatternsequence parameters	The IE shall be present if Measurement occasion pattern sequence parameters IE is present.

Range Bound	Explanation
maxNrOfDCHMeasurementOccasionPatternSequen ce	Maximum number of measurement occasion pattern sequence

### 9.2.3.76 DCH Measurement Type Indicator

The *DCH Measurement Type Indicator* IE indicates the measurement type(s) which the DRNS shall configured for the UE in CELL\_DCH state for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Measurement type	M	Kange		Measurement type. Bit 0 is for Inter-frequency measurement. Bit 1 is for GSM carrier RSSI measurement. Bit 2 is for Initial BSIC identification. Bit 3 is for BSIC reconfirmation. Bit 4 is for E-UTRA measurement.  The value 1 of a bit means that the measurement occasion pattern sequence should be configured for the corresponding type of measurement.
				Bit 0 is the first/leftmost bit of the bit string.

# 9.2.3.77 Multi-Carrier E-DCH Information LCR

The Multi-Carrier E-DCH  $Information\ LCR$  IE defines the parameters used for Multi-Carrier E-DCH operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH Information		1 <maxnrofu LCarriersLCR- 1&gt;</maxnrofu 		
>UARFCN	M		9.2.1.66	Corresponds to Nt (3GPP TS 25.105).
>SNPL Carrier Group Indicator	0		INTEGER (13)	Indicates to which SNPL carrier Group this frequency belongs. The absence of this IE indicates the corresponding frequency belongs to a separate SNPL carrier group which only contains this carrier. The SNPL carrier Group is defined in TS 25.331 [16].
>PRXdes_base	М		INTEGER (-11250)	dBm. Reference Desired RX power level for E-PUCH.
> Multi-Carrier E-DCH TDD MAC-d Flow Specific Information		0 <maxnrofe DCHMACdFlo ws&gt;</maxnrofe 		Shall be ignored if bearer establishment with ALCAP.  Shall be present only if the Separate lur transport bearer mode is used.
>>E-DCH MAC-d Flow ID	M		9.2.1.91	
>>Binding ID	M		9.2.1.3	
>>Transport Layer Address	М		9.2.1.62	

Range Bound	Explanation
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier E-DCH
	Operation.
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.

### 9.2.3.78 Multi-Carrier E-DCH Information Response LCR

The *Multi-Carrier E-DCH Information Response LCR* IE provides information for E-DCH MAC-d flows that determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multi-Carrier E-DCH		1 <maxnrofu< td=""><td></td><td></td></maxnrofu<>		
Information Response		LCarriersLCR- 1>		
>UARFCN	M		9.2.1.66	Corresponds to Nt (3GPP TS 25.105).
>E-DCH TDD MAC-d Flow		0 <maxnrofe< td=""><td></td><td>,</td></maxnrofe<>		,
Specific Information		DCHMACdFlo		
Response		WS>		
>>E-DCH MAC-d Flow ID	M		9.2.1.91	
>>Binding ID	0		9.2.1.3	
>>Transport Layer Address	0		9.2.1.62	
>E-AGCH Specific		0 <maxnrofe< td=""><td></td><td></td></maxnrofe<>		
Information Response		AGCHCodes>		
>>Time Slot LCR	M		9.2.3.12a	
>>Midamble Shift LCR	M		9.2.3.4C	
>>TDD Channelisation Code	M		9.2.3.8	
>E-HICH Scheduled specific		0<		
Information Response		maxNrOfEHIC		
		HCodes>		
>>EI	M		INTEGER (03)	E-HICH indication which is used to indicate UE on which E-HICH the feedback info is carried.
>>Time Slot LCR	M		9.2.3.12a	
>>Midamble Shift LCR	М		9.2.3.4C	
>>TDD Channelisation Code	М		9.2.3.8	

Range bound	Explanation
maxNrOfULCarriersLCR	Maximum number of uplink frequencis in Multi-Carrier E-DCH
	Operation.
maxNrOfEDCHMACdFlows	Maximum number of MAC-d flows.
maxNrOfEAGCHCodes	Maximum number of E-AGCHs assigned to one UE.
maxNrOfEHICHCodes	Maximum number of E-HICHs assigned to one UE.

#### 9.2.3.79 Multi-Carrier E-DCH Transport Bearer Mode LCR

This parameter indicates the Multicarrier E-DCH Transport Bearer Mode. For *Multi-Carrier E-DCH Transport Bearer Mode LCR* = " Separate Iur transport bearer mode" the Mac-d flows from each carrier uses different Iur transport bearers, for *Multi-Carrier E-DCH Transport Bearer Mode LCR* = " E-DCH UL flow multiplexing mode " the Mac-d flow received on the different carriers in the DRNS is multiplexed on one Iur transport bearer.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Multicarrier E-DCH Transport			ENUMERATED	
Bearer Mode			(Separate lur	
			transport bearer	
			mode,E-DCH UL	
			flow multiplexing	
			mode,)	

### 9.2.3.80 Cell Capability Container Extension TDD LCR

The *Cell Capability Container Extension TDD LCR* IE is an extension to the *Cell Capability Container TDD LCR* IE and indicates the cell capability in the same way as *Cell Capability Container TDD LCR* IE.

The Cell Capability Container Extension TDD LCR IE indicates the cell capability of Multi-Carrier related functions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container Extension TDD LCR			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows.  The first bit: Multi-Carrier E-DCH Operation Support Indicator. This bit shall be ignored by the SRNC if the second bit: Separate lur Transport Bearer Support Indicator = "0" and the third bit: E-DCH UL Flow Multiplexing Support Indicator = "0".  The second bit: Separate lur Transport Bearer Support Indicator, /Multi-carrier/.  This bit shall be ignored by the SRNC if the first bit: Multi-Carrier E-DCH Operation Support Indicator = "0".  The third bit: E-DCH UL flow multiplexing mode Indicator, /Multi-carrier/.  This bit shall be ignored by the SRNC if the first bit: Multi-Carrier E-DCH Operation Support Indicator = "0".  Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.  Note that Reserved bits are not considered as a spare bit. They shall however be set to 0 by the transmitter and shall be ignored by the receiver.

### 9.2.3.81 MU-MIMO Information

The MU-MIMO Information IE defines the parameters used for MU-MIMO operation for 1.28 Mcps TDD (see TS 25.224 [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MU-MIMO Operation	M		ENUMERATED (MU-MIMO Used, MU-MIMO Not Used)	
Standalone Midamble Channel Information		01		
>Standalone Midamble Configuration	M		ENUMERATED (2, 4, 6, 8, 10, 12, 14, 16,)	As defined in TS 25.221 [12].
>Standalone Midamble Shift	M		INTEGER (015)	
>Time Slot LCR	M		9.2.3.12a	
>Repetition Period	М		ENUMERATED (1, 2,4, 8, 16, 32, 64)	Units of subframes.
>Offset	M		INTEGER (063)	Units of subframes.
>Reference Beta	C-E-DCH		INTEGER (-1516)	Unit range -15db to +16db.

Condition	Explanation
E-DCH	This IE shall be present if IE "E-DCH Information 1.28Mcps" is present. Otherwise it is not needed.

#### 9.2.3.82 MU-MIMO Indicator

The *MU-MIMO Indicator* IE indicates the DRNC can use MU-MIMO on UL and/or DL. It also indicates that whether Standalone Midamble Channel should be used or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MU-MIMO Usage Indicator	M		ENUMERATED (UL Only, DL Only, UL and DL)	
Standalone Midamble Channel indicator	М		ENUMERATED (Used, Not Used)	

### 9.2.3.83 M2 Report

This IE defines the parameters for a M2 report, TDD report of UE radio measurements. This IE is not used by the DRNS.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
M2 Report				
>CHOICE Report trigger	M			
>>Periodic				
>>>MDT Report	М		9.2.1.140	
Parameters				
>>Event1I				
>>>threshold	M		INTEGER(-12025)	

# 9.2.3.84 UE RF Band Capability LCR

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE RF Band Capability Info		1<		
		maxFreqB		
		andsTDD>		
>UE RF Band Capability	М		ENUMERATED	Corresponds to the radio
			(a,b,c,d,e,f,g,h,i,j,k,l,	bands definition (TS 25.105
			m,n,o,p,)	[7]).

Range Bound	Explanation
maxFreqBandsTDD	Maximum number of Frequency bands for TDD.

# 9.3 Message and Information Element Abstract Syntax (with ASN.1)

#### 9.3.0 General

RNSAP ASN.1 definition conforms with ITU-T Rec. X.680 [18] and ITU-T Rec. X.681 [19].

Subclause 9.3 presents the Abstract Syntax of RNSAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclause 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, in which the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of RNSAP messages. RNSAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a RNSAP message according to the PDU definitions module and with the following additional rules:

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list in which the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

NOTE: In the above "IE" means an IE in the object set with an explicit ID. If one IE needs to appear more than once in one object set, then the different occurrences have different IE IDs.

If a RNSAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

### 9.3.1 Usage of Private Message Mechanism for Non-standard Use

The private message mechanism for non-standard use may be used:

- for special operator (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multivendor inter-operability.
- by vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation.

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

# 9.3.2 Elementary Procedure Definitions

```
-- Elementary Procedure definitions
__ *********************
RNSAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Descriptions (0)
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
  *****************
-- IE parameter types from other modules.
__ *******************
IMPORTS
   Criticality,
   ProcedureID,
   TransactionID
FROM RNSAP-CommonDataTypes
   CommonMeasurementFailureIndication,
   CommonMeasurementInitiationFailure,
   CommonMeasurementInitiationRequest,
   CommonMeasurementInitiationResponse,
   CommonMeasurementReport,
   CommonMeasurementTerminationRequest,
   CommonTransportChannelResourcesFailure,
   CommonTransportChannelResourcesRequest,
   CommonTransportChannelResourcesReleaseRequest,
   CommonTransportChannelResourcesResponseFDD,
   CommonTransportChannelResourcesResponseTDD,
   CompressedModeCommand,
   DedicatedMeasurementFailureIndication,
   DedicatedMeasurementInitiationFailure,
   DedicatedMeasurementInitiationRequest,
   DedicatedMeasurementInitiationResponse,
   DedicatedMeasurementReport,
   DedicatedMeasurementTerminationRequest,
   DirectInformationTransfer,
   DL-PowerControlRequest,
   DL-PowerTimeslotControlRequest,
   DownlinkSignallingTransferRequest,
   ErrorIndication,
   EnhancedRelocationCancel,
   EnhancedRelocationFailure,
   EnhancedRelocationRequest,
   EnhancedRelocationResponse,
   EnhancedRelocationSignallingTransfer,
   EnhancedRelocationRelease,
```

```
EnhancedRelocationResourceRequest,
EnhancedRelocationResourceResponse,
EnhancedRelocationResourceFailure.
EnhancedRelocationResourceReleaseCommand,
EnhancedRelocationResourceReleaseComplete,
InformationExchangeFailureIndication,
InformationExchangeInitiationFailure,
InformationExchangeInitiationReguest,
InformationExchangeInitiationResponse,
InformationExchangeTerminationRequest,
InformationReport,
InformationTransferControlRequest,
IurDeactivateTrace,
IurInvokeTrace,
MBMSAttachCommand,
MBMSDetachCommand,
MBSFNMCCHInformation,
PagingRequest,
PhysicalChannelReconfigurationCommand,
PhysicalChannelReconfigurationFailure,
PhysicalChannelReconfigurationRequestFDD,
PhysicalChannelReconfigurationRequestTDD,
PrivateMessage,
RadioLinkActivationCommandFDD,
RadioLinkActivationCommandTDD,
RadioLinkAdditionFailureFDD.
RadioLinkAdditionFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkCongestionIndication,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
RadioLinkFailureIndication,
RadioLinkParameterUpdateIndicationFDD,
RadioLinkParameterUpdateIndicationTDD,
RadioLinkPreemptionRequiredIndication,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReadyFDD,
RadioLinkReconfigurationReadyTDD,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponseFDD,
RadioLinkReconfigurationResponseTDD,
RadioLinkRestoreIndication,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
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RadioLinkSetupResponseFDD,
    RadioLinkSetupResponseTDD,
    RelocationCommit.
    ResetRequest,
    ResetResponse,
    UEMeasurementFailureIndication,
    UEMeasurementInitiationFailure.
    UEMeasurementInitiationRequest,
    UEMeasurementInitiationResponse,
    UEMeasurementReport,
    UEMeasurementTerminationRequest,
    SecondaryULFrequencyReport,
    SecondaryULFrequencyUpdateIndication,
    UplinkSignallingTransferIndicationFDD,
    UplinkSignallingTransferIndicationTDD,
    GERANUplinkSignallingTransferIndication
FROM RNSAP-PDU-Contents
    id-commonMeasurementFailure,
    id-commonMeasurementInitiation,
    id-commonMeasurementReporting,
    id-commonMeasurementTermination,
    id-commonTransportChannelResourcesInitialisation,
    id-commonTransportChannelResourcesRelease,
    id-compressedModeCommand,
    id-downlinkPowerControl,
    id-downlinkSignallingTransfer,
    id-downlinkPowerTimeslotControl,
    id-enhancedRelocation,
    id-enhancedRelocationCancel,
    id-enhancedRelocationSignallingTransfer,
    id-enhancedRelocationRelease,
    id-errorIndication,
    id-informationExchangeFailure,
    id-informationExchangeInitiation,
    id-informationReporting,
    id-informationExchangeTermination,
    id-informationTransferControl,
    id-iurDeactivateTrace,
    id-iurInvokeTrace,
    id-dedicatedMeasurementFailure,
    id-dedicatedMeasurementInitiation,
    id-dedicatedMeasurementReporting,
    id-dedicatedMeasurementTermination,
    id-directInformationTransfer,
    id-mBMSAttach,
    id-mBMSDetach,
    id-mBSFNMCCHInformation,
    id-paging,
    id-physicalChannelReconfiguration,
    id-privateMessage,
    id-radioLinkActivation,
    id-radioLinkAddition,
    id-radioLinkCongestion,
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id-radioLinkDeletion,
   id-radioLinkFailure.
   id-radioLinkParameterUpdate,
   id-radioLinkPreemption,
   id-radioLinkRestoration.
   id-radioLinkSetup,
   id-relocationCommit,
   id-reset,
   id-synchronisedRadioLinkReconfigurationCancellation,
   id-synchronisedRadioLinkReconfigurationCommit,
   id-synchronisedRadioLinkReconfigurationPreparation,
   id-uEMeasurementFailure,
   id-uEMeasurementInitiation,
   id-uEMeasurementReporting,
   id-uEMeasurementTermination,
   id-secondaryULFrequencyReporting,
   id-secondaryULFrequencyUpdate,
   id-unSynchronisedRadioLinkReconfiguration,
   id-uplinkSignallingTransfer,
   id-gERANuplinkSignallingTransfer,
   id-enhancedRelocationResourceAllocation,
   id-enhancedRelocationResourceRelease
FROM RNSAP-Constants;
     *****************
-- Interface Elementary Procedure Class
RNSAP-ELEMENTARY-PROCEDURE ::= CLASS {
   &InitiatingMessage
   &SuccessfulOutcome
                                  OPTIONAL,
   &UnsuccessfulOutcome
                                      OPTIONAL,
   &Outcome
                              OPTIONAL,
   &procedureID
                          ProcedureID
                                         UNIQUE,
   &criticality
                          Criticality
                                         DEFAULT ignore
WITH SYNTAX {
                          &InitiatingMessage
    INITIATING MESSAGE
                          &SuccessfulOutcome]
    [SUCCESSFUL OUTCOME
                              &UnsuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME
    [OUTCOME
                      &Outcome]
    PROCEDURE ID
                          &procedureID
                          &criticality]
    [CRITICALITY
-- Interface PDU Definition
  ********************
```

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RNSAP-PDU ::= CHOICE {
   initiatingMessage InitiatingMessage,
    successfulOutcome SuccessfulOutcome.
   unsuccessfulOutcome UnsuccessfulOutcome,
   out.come
                   Out.come.
    . . .
InitiatingMessage ::= SEQUENCE
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID TransactionID,
               RNSAP-ELEMENTARY-PROCEDURE.&InitiatingMessage
                                                            ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
SuccessfulOutcome ::= SEOUENCE
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}),
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
    transactionID TransactionID,
                                                              ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
               RNSAP-ELEMENTARY-PROCEDURE. & Successful Outcome
UnsuccessfulOutcome ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}),
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
    transactionID TransactionID,
    value
               RNSAP-ELEMENTARY-PROCEDURE. &UnsuccessfulOutcome ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
Outcome ::= SEOUENCE {
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}),
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID TransactionID,
               RNSAP-ELEMENTARY-PROCEDURE. & Outcome
                                                       ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
      -- Interface Elementary Procedure List
RNSAP-ELEMENTARY-PROCEDURES RNSAP-ELEMENTARY-PROCEDURE ::= {
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-1
   RNSAP-ELEMENTARY-PROCEDURES-CLASS-2
   RNSAP-ELEMENTARY-PROCEDURES-CLASS-3
    . . .
RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 RNSAP-ELEMENTARY-PROCEDURE ::= {
   radioLinkSetupFDD
   radioLinkSetupTDD
   radioLinkAdditionFDD
    radioLinkAdditionTDD
```

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radioLinkDeletion
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    physicalChannelReconfigurationFDD
    physicalChannelReconfigurationTDD
    dedicatedMeasurementInitiation
    commonTransportChannelResourcesInitialisationFDD
    commonTransportChannelResourcesInitialisationTDD
    commonMeasurementInitiation
    informationExchangeInitiation
    reset
    uEMeasurementInitiation
    enhancedRelocation
    enhancedRelocationResourceAllocation
    enhancedRelocationResourceRelease
RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 RNSAP-ELEMENTARY-PROCEDURE ::= {
    uplinkSignallingTransferFDD
    uplinkSignallingTransferTDD
    downlinkSignallingTransfer
    relocationCommit
    paging
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure
    radioLinkPreemption
    radioLinkRestoration
    dedicatedMeasurementReporting
    dedicatedMeasurementTermination
    dedicatedMeasurementFailure
    downlinkPowerControlFDD
    downlinkPowerTimeslotControl
    compressedModeCommandFDD
    commonTransportChannelResourcesRelease
    errorIndication
    privateMessage
    radioLinkCongestion
    commonMeasurementFailure
    commonMeasurementReporting
    commonMeasurementTermination
    informationExchangeFailure
    informationExchangeTermination
    informationReporting
    radioLinkActivationFDD
    radioLinkActivationTDD
    gERANuplinkSignallingTransfer
    radioLinkParameterUpdateFDD
    radioLinkParameterUpdateTDD
    uEMeasurementReporting
```

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uEMeasurementTermination
   uEMeasurementFailure
   iurInvokeTrace
   iurDeactivateTrace
   mBMSAttach
   mBMSDetach
   directInformationTransfer
   enhancedRelocationCancel
   enhancedRelocationSignallingTransfer
   enhancedRelocationRelease
   mBSFNMCCHInformation
   secondaryULFrequencyReportingFDD
   secondaryULFrequencyUpdateFDD
   informationTransferControl
RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 RNSAP-ELEMENTARY-PROCEDURE ::= {
       -- Interface Elementary Procedures
__ *********************
radioLinkSetupFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkSetupRequestFDD
   SUCCESSFUL OUTCOME RadioLinkSetupResponseFDD
   UNSUCCESSFUL OUTCOME
                         RadioLinkSetupFailureFDD
                      { procedureCode id-radioLinkSetup, ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                  reject
radioLinkSetupTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkSetupRequestTDD
   SUCCESSFUL OUTCOME RadioLinkSetupResponseTDD
   UNSUCCESSFUL OUTCOME
                         RadioLinkSetupFailureTDD
                      { procedureCode id-radioLinkSetup, ddMode tdd }
   PROCEDURE ID
   CRITICALITY
                  reject
radioLinkAdditionFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
   INITIATING MESSAGE RadioLinkAdditionRequestFDD
   SUCCESSFUL OUTCOME RadioLinkAdditionResponseFDD
   UNSUCCESSFUL OUTCOME
                         RadioLinkAdditionFailureFDD
                      { procedureCode id-radioLinkAddition , ddMode fdd }
   PROCEDURE ID
   CRITICALITY
                  reject
```

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radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkAdditionFailureTDD
    PROCEDURE ID
                        { procedureCode id-radioLinkAddition , ddMode tdd }
    CRITICALITY
                    reject
radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME RadioLinkDeletionResponse
    PROCEDURE ID
                        { procedureCode id-radioLinkDeletion, ddMode common }
    CRITICALITY
                    reject
synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyFDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareTDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyTDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseFDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkReconfigurationFailure
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PhysicalChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME PhysicalChannelReconfigurationCommand
                           PhysicalChannelReconfigurationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                        { procedureCode id-physicalChannelReconfiguration, ddMode fdd }
    CRITICALITY
                    reject
```

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physicalChannelReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE PhysicalChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME PhysicalChannelReconfigurationCommand
    UNSUCCESSFUL OUTCOME
                           PhysicalChannelReconfigurationFailure
                        { procedureCode id-physicalChannelReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
dedicatedMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME DedicatedMeasurementInitiationResponse
                           DedicatedMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY
                   reject
commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseFDD
    UNSUCCESSFUL OUTCOME
                           CommonTransportChannelResourcesFailure
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseTDD
                           CommonTransportChannelResourcesFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UplinkSignallingTransferIndicationFDD
    PROCEDURE ID
                        { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
    CRITICALITY
                    ignore
uplinkSignallingTransferTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UplinkSignallingTransferIndicationTDD
                        { procedureCode id-uplinkSignallingTransfer, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
downlinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE DownlinkSignallingTransferRequest
    PROCEDURE ID
                        { procedureCode id-downlinkSignallingTransfer, ddMode common }
    CRITICALITY
                    ignore
relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RelocationCommit
                        { procedureCode id-relocationCommit, ddMode common }
    PROCEDURE ID
```

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CRITICALITY
                    ignore
paging RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PagingRequest
                        { procedureCode id-paging, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCommit
    PROCEDURE ID
                        { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY
                    ignore
synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCancel
                        { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
radioLinkFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkFailureIndication
    PROCEDURE ID
                        { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY
                    ignore
radioLinkPreemption RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
                        { procedureCode id-radioLinkPreemption, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
radioLinkRestoration RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkRestoreIndication
    PROCEDURE ID
                        { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY
                    ignore
dedicatedMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementReport
                        { procedureCode id-dedicatedMeasurementReporting, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE DedicatedMeasurementTerminationRequest
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY
                    ignore
dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementFailureIndication
                        { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    PROCEDURE ID
```

```
CRITICALITY
                    ignore
radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkCongestionIndication
                        { procedureCode id-radioLinkCongestion, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerControlRequest
    PROCEDURE ID
                        { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY
                    ignore
downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerTimeslotControlRequest
                        { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CompressedModeCommand
    PROCEDURE ID
                        { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY
                    ignore
commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesReleaseRequest
                        { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
errorIndication RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE ErrorIndication
    PROCEDURE ID
                        { procedureCode id-errorIndication, ddMode common }
    CRITICALITY
                    ignore
commonMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            CommonMeasurementInitiationFailure
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            reject
commonMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonMeasurementReport
                        { procedureCode id-commonMeasurementReporting, ddMode common }
    PROCEDURE ID
    CRITICALITY
                        ignore
commonMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE CommonMeasurementTerminationRequest
    PROCEDURE ID
                        { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY
                    ignore
commonMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonMeasurementFailureIndication
                        { procedureCode id-commonMeasurementFailure, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationRequest
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationResponse
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                            { procedureCode id-informationExchangeInitiation, ddMode common }
    CRITICALITY
                            reject
informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationReport
    PROCEDURE ID
                            { procedureCode id-informationReporting, ddMode common }
    CRITICALITY
informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
                            InformationExchangeTerminationRequest
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-informationExchangeTermination, ddMode common }
    CRITICALITY
                            ignore
informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeFailureIndication
    PROCEDURE ID
                            { procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY
                            ignore
privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PrivateMessage
    PROCEDURE ID
                        { procedureCode id-privateMessage, ddMode common }
    CRITICALITY
                    ignore
reset RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            ResetRequest
    SUCCESSFUL OUTCOME
                            ResetResponse
    PROCEDURE ID
                            { procedureCode id-reset, ddMode common }
    CRITICALITY
                            reject
radioLinkActivationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkActivationCommandFDD
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode fdd }
```

```
CRITICALITY
                            ignore
radioLinkActivationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkActivationCommandTDD
                            { procedureCode id-radioLinkActivation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
gERANuplinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE GERANUplinkSignallingTransferIndication
                        { procedureCode id-qERANuplinkSignallingTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
radioLinkParameterUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkParameterUpdateIndicationFDD
    INITIATING MESSAGE
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                            ignore
radioLinkParameterUpdateTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
                            RadioLinkParameterUpdateIndicationTDD
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    CRITICALITY
uEMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementInitiationRequest
    SUCCESSFUL OUTCOME UEMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME
                            UEMeasurementInitiationFailure
    PROCEDURE ID
                        { procedureCode id-uEMeasurementInitiation, ddMode tdd }
    CRITICALITY
                    reject
uEMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementReport
                        { procedureCode id-uEMeasurementReporting, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
uEMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementTerminationRequest
    PROCEDURE ID
                        { procedureCode id-uEMeasurementTermination, ddMode tdd }
    CRITICALITY
                    ignore
uEMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementFailureIndication
    PROCEDURE ID
                        { procedureCode id-uEMeasurementFailure, ddMode tdd }
    CRITICALITY
                    ignore
iurInvokeTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
```

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INITIATING MESSAGE IurInvokeTrace
    PROCEDURE ID
                        { procedureCode id-iurInvokeTrace, ddMode common }
    CRITICALITY
iurDeactivateTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    { procedureCode id-iurDeactivateTrace, ddMode common }
    PROCEDURE ID
    CRITICALITY
mbmsAttach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBMSAttachCommand
    PROCEDURE ID
                            { procedureCode id-mBMSAttach, ddMode common }
    CRITICALITY
                           ignore
mBMSDetach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBMSDetachCommand
                            { procedureCode id-mBMSDetach, ddMode common }
    PROCEDURE ID
    CRITICALITY
                           ignore
directInformationTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           DirectInformationTransfer
    PROCEDURE ID
                           { procedureCode id-directInformationTransfer, ddMode common }
    CRITICALITY
                           ignore
enhancedRelocation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE EnhancedRelocationRequest
    SUCCESSFUL OUTCOME EnhancedRelocationResponse
    UNSUCCESSFUL OUTCOME
                           EnhancedRelocationFailure
                       { procedureCode id-enhancedRelocation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                   reject
enhancedRelocationCancel RNSAP-ELEMENTARY-PROCEDURE ::= {
                           EnhancedRelocationCancel
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationCancel, ddMode common }
    CRITICALITY
                           ignore
enhancedRelocationSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           EnhancedRelocationSignallingTransfer
                            { procedureCode id-enhancedRelocationSignallingTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                           ignore
enhancedRelocationRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           EnhancedRelocationRelease
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationRelease, ddMode common }
    CRITICALITY
                           ignore
```

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mbsfnmcchinformation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBSFNMCCHInformation
    PROCEDURE ID
                            { procedureCode id-mBSFNMCCHInformation, ddMode common }
    CRITICALITY
                            reject
secondaryULFrequencyReportingFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SecondaryULFrequencyReport
                            { procedureCode id-secondaryULFrequencyReporting, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
secondaryULFrequencyUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            SecondaryULFrequencyUpdateIndication
    PROCEDURE ID
                            { procedureCode id-secondaryULFrequencyUpdate, ddMode fdd }
    CRITICALITY
enhancedRelocationResourceAllocation RNSAP-ELEMENTARY-PROCEDURE ::= {
                            EnhancedRelocationResourceRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            EnhancedRelocationResourceResponse
                            EnhancedRelocationResourceFailure
   UNSUCCESSFUL OUTCOME
                            { procedureCode id-enhancedRelocationResourceAllocation, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                            reject
enhancedRelocationResourceRelease RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE
                            EnhancedRelocationResourceReleaseCommand
    SUCCESSFUL OUTCOME
                            EnhancedRelocationResourceReleaseComplete
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationResourceRelease, ddMode tdd }
    CRITICALITY
                            reject
informationTransferControl RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationTransferControlRequest
    PROCEDURE ID
                            { procedureCode id-informationTransferControl, ddMode common }
    CRITICALITY
                            ignore
END
```

## 9.3.3 PDU Definitions

```
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
__ **********************
-- IE parameter types from other modules.
IMPORTS
    Active-Pattern-Sequence-Information,
   Active-MBMS-Bearer-Service-ListFDD,
   Active-MBMS-Bearer-Service-ListFDD-PFL,
   Active-MBMS-Bearer-Service-ListTDD,
    Active-MBMS-Bearer-Service-ListTDD-PFL,
   AllocationRetentionPriority,
   AllowedOueuingTime,
   Allowed-Rate-Information,
   AlphaValue,
    AlternativeFormatReportingIndicator,
    AntennaColocationIndicator,
    BLER.
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    CGI,
    ClosedLoopModel-SupportIndicator,
    Closedlooptimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainerExtension-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellCapabilityContainer-TDD768,
    CellParameterID,
    CellPortionID,
    ChipOffset,
    CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
    CommonMeasurementValueInformation,
    CommonTransportChannelResourcesInitialisationNotRequired,
    Common-EDCH-MAC-d-Flow-Specific-InformationFDD,
    Common-EDCH-Support-Indicator,
    CongestionCause,
    Continuous-Packet-Connectivity-DTX-DRX-Information,
    Continuous-Packet-Connectivity-HS-SCCH-Less-Information,
```

EDCH-Serving-RL,

```
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response,
CPC-Information.
CoverageIndicator.
CriticalityDiagnostics,
CellPortionLCRID.
D-RNTI.
D-RNTI-ReleaseIndication.
DCH-FDD-Information,
DCH-ID,
DCH-Indicator-For-E-DCH-HSDPA-Operation,
DPCH-ID768,
DCH-InformationResponse,
DCH-TDD-Information,
DL-DPCH-SlotFormat,
DL-TimeslotISCP,
DL-Power.
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DL-PowerBalancing-UpdatedIndicator,
DL-ReferencePowerInformation,
DL-ScramblingCode,
DL-Timeslot-Information,
DL-Timeslot-Information768,
DL-TimeslotLCR-Information,
DL-TimeSlot-ISCP-Info,
DL-TimeSlot-ISCP-LCR-Information,
DPC-Mode,
DPC-Mode-Change-SupportIndicator,
DPCH-ID,
DL-DPCH-TimingAdjustment,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DSCH-FlowControlInformation,
DSCH-FlowControlItem,
DSCH-TDD-Information,
DSCH-ID,
DSCH-RNTI,
EDCH-FDD-Information,
EDCH-FDD-InformationResponse,
EDCH-FDD-Information-To-Modify,
EDCH-FDD-DL-ControlChannelInformation.
EDCH-DDI-Value,
EDCH-MACdFlow-ID,
EDCH-MACdFlow-Specific-InfoList,
EDCH-MACdFlows-To-Delete,
EDCH-MACdFlows-Information,
EDCH-RL-Indication,
```

```
E-DCH-Serving-cell-change-informationResponse,
EDPCH-Information-FDD.
EDPCH-Information-RLReconfPrepare-FDD,
EDPCH-Information-RLReconfRequest-FDD,
E-DCH-FDD-Update-Information,
E-DPCCH-PO,
E-RGCH-2-IndexStepThreshold,
E-RGCH-3-IndexStepThreshold,
E-RNTI,
E-TFCS-Information,
E-TTI,
Enhanced-FACH-Support-Indicator,
Enhanced-FACH-Information-ResponseFDD,
Enhanced-PCH-Capability,
ExtendedPropagationDelay,
Extended-RNC-ID,
Extended-RNTI,
Extended-S-RNTI-Group,
SchedulingPriorityIndicator,
Enhanced-PrimaryCPICH-EcNo,
F-DPCH-SlotFormat,
F-DPCH-SlotFormatSupportRequest,
FACH-FlowControlInformation,
Fast-Reconfiguration-Mode,
Fast-Reconfiguration-Permission,
FDD-DCHs-to-Modify,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
GA-AccessPointPosition,
GA-Cell,
GA-CellAdditionalShapes,
HARQ-Info-for-E-DCH,
HCS-Prio,
HSDSCH-Configured-Indicator,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-FDD-Update-Information,
HSDSCH-TDD-Update-Information,
HSDSCH-Information-to-Modify,
HSDSCH-Information-to-Modify-Unsynchronised,
HSDSCH-MACdFlow-ID,
HSDSCH-MACdFlows-Information,
HSDSCH-MACdFlows-to-Delete,
HSDSCH-Physical-Layer-Category,
HSDSCH-RNTI,
HS-DSCH-serving-cell-change-information,
HS-DSCH-serving-cell-change-informationResponse,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
```

```
HS-SICH-ID,
IMSI.
InformationExchangeID.
InformationReportCharacteristics,
InformationType,
Initial-DL-DPCH-TimingAdjustment-Allowed,
InnerLoopDLPCStatus,
Inter-Frequency-Cell-List,
L3-Information,
LimitedPowerIncrease,
MaximumAllowedULTxPower,
MaxNrDLPhysicalchannels,
MaxNrDLPhysicalchannelsTS,
MaxNrDLPhysicalchannels768,
MaxNrDLPhysicalchannelsTS768,
MaxNrOfUL-DPCHs,
MaxNrTimeslots,
MaxNrULPhysicalchannels,
MACes-Guaranteed-Bitrate,
MaxNr-Retransmissions-EDCH,
Max-Set-E-DPDCHs,
Max-UE-DTX-Cycle,
MeasurementFilterCoefficient,
MeasurementID,
MeasurementRecoveryBehavior,
MeasurementRecoveryReportingIndicator,
MeasurementRecoverySupportIndicator,
MBMS-Bearer-Service-List,
MBSFN-Cluster-Identity,
MCCH-Configuration-Info,
MCCH-Message-List,
MBSFN-Scheduling-Transmission-Time-Interval-Info-List,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftAndBurstType768,
MidambleShiftLCR,
MinimumSpreadingFactor,
MinimumSpreadingFactor768,
MinUL-ChannelisationCodeLength,
Multiple-PLMN-List,
MultiplexingPosition,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation768,
Neighbouring-GSM-CellInformation,
Neighbouring-UMTS-CellInformation,
NeighbouringTDDCellMeasurementInformationLCR,
Neighbouring-E-UTRA-CellInformation,
NrOfDLchannelisationcodes,
PagingCause,
PagingRecordType,
PartialReportingIndicator,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
```

```
PC-Preamble,
Permanent-NAS-UE-Identity,
Phase-Reference-Update-Indicator,
PowerAdjustmentType,
PowerOffset.
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
Primary-CPICH-Usage-For-Channel-Estimation,
PrimaryScramblingCode,
PropagationDelay,
ProvidedInformation,
PunctureLimit,
OE-Selector,
RANAP-EnhancedRelocationInformationRequest,
RANAP-EnhancedRelocationInformationResponse,
RANAP-RelocationInformation,
RB-Info,
Released-CN-Domain,
RL-ID,
RL-Set-ID,
RL-Specific-EDCH-Information,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
Received-total-wide-band-power,
RequestedDataValue,
RequestedDataValueInformation,
RL-Specific-DCH-Info,
RxTimingDeviationForTA,
RxTimingDeviationForTA768,
S-RNTI,
S-RNTI-Group,
SCH-TimeSlot,
SAI.
SFN,
Secondary-CCPCH-Info-TDD,
Secondary-CCPCH-Info-TDD768,
Secondary-CCPCH-System-Information-MBMS,
Secondary-CPICH-Information,
Secondary-CPICH-Information-Change,
Secondary-LCR-CCPCH-Info-TDD,
Secondary-Serving-Cell-List,
SNA-Information,
SpecialBurstScheduling,
SSDT-SupportIndicator,
STTD-SupportIndicator,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
SRB-Delay,
Support-8PSK,
SyncCase,
```

```
SynchronisationConfiguration,
SixtyfourOAM-DL-SupportIndicator,
TDD-ChannelisationCode.
TDD-ChannelisationCode768,
TDD-DCHs-to-Modify,
TDD-DL-Code-Information,
TDD-DPCHOffset.
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DL-Code-Information768,
TDD-UL-Code-Information,
TDD-UL-Code-LCR-Information,
TDD-UL-Code-Information768,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TimeSlot,
TimeSlotLCR,
TimingAdvanceApplied,
TMGI,
TnlQos,
TOAWE,
ToAWS,
TraceDepth,
TraceRecordingSessionReference,
TraceReference,
TrafficClass,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
Transmission-Gap-Pattern-Sequence-Information,
TransportFormatManagement,
TransportFormatSet,
TransportLayerAddress,
TrCH-SrcStatisticsDescr,
TSTD-Indicator,
TSTD-Support-Indicator,
UARFCN,
UC-ID,
UE-AggregateMaximumBitRate,
UEIdentity,
UEMeasurementType,
UEMeasurementTimeslotInfoHCR,
UEMeasurementTimeslotInfoLCR,
UEMeasurementTimeslotInfo768,
UEMeasurementReportCharacteristics,
UEMeasurementParameterModAllow,
UEMeasurementValueInformation,
UE-State,
UL-DPCCH-SlotFormat,
UL-DPDCHIndicatorEDCH,
```

```
UL-SIR,
UL-FP-Mode.
UL-PhysCH-SF-Variation,
UL-ScramblingCode,
UL-Timeslot-Information.
UL-Timeslot-Information768.
UL-TimeslotLCR-Information,
UL-TimeSlot-ISCP-Info,
UL-TimeSlot-ISCP-LCR-Info,
URA-ID,
URA-Information,
USCH-ID,
USCH-Information,
UL-Synchronisation-Parameters-LCR,
TDD-DL-DPCH-TimeSlotFormat-LCR,
TDD-UL-DPCH-TimeSlotFormat-LCR,
MAChs-ResetIndicator,
UL-TimingAdvanceCtrl-LCR,
TDD-TPC-UplinkStepSize-LCR,
PrimaryCCPCH-RSCP-Delta,
SynchronisationIndicator,
Support-PLCCH,
PLCCHinformation,
RxTimingDeviationForTAext,
E-DCH-Information,
E-DCH-Information-Reconfig,
E-DCH-Information-Response,
E-DCH-768-Information,
E-DCH-768-Information-Reconfig,
E-DCH-768-Information-Response,
E-DCH-LCR-Information,
E-DCH-LCR-Information-Reconfig,
E-DCH-LCR-Information-Response,
ControlGAP,
IdleIntervalInformation,
NeedforIdleInterval,
HS-SICH-ID-Extension,
TSN-Length,
UPPCHPositionLCR,
Common-EDCH-MAC-d-Flow-Specific-InformationLCR,
Enhanced-FACH-Information-ResponseLCR,
HSDSCH-PreconfigurationSetup,
HSDSCH-PreconfigurationInfo,
NoOfTargetCellHS-SCCH-Order,
EnhancedHSServingCC-Abort,
GANSS-Time-ID,
HS-DSCH-FDD-Secondary-Serving-Update-Information,
HS-DSCH-Secondary-Serving-Remove,
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised,
HS-DSCH-Secondary-Serving-Information-To-Modify,
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
HS-DSCH-FDD-Secondary-Serving-Information-Response,
HS-DSCH-FDD-Secondary-Serving-Information,
MinimumReducedE-DPDCH-GainFactor,
```

```
ContinuousPacketConnectivity-DRX-InformationLCR,
    ContinuousPacketConnectivity-DRX-Information-ResponseLCR,
    CPC-InformationLCR.
    E-DCH-Semi-PersistentScheduling-Information-LCR,
    HS-DSCH-Semi-PersistentScheduling-Information-LCR,
    HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR,
    E-DCH-Semi-PersistentScheduling-Information-ResponseLCR,
    RNTI-Allocation-Indicator,
    ActivationInformation,
    Additional-EDCH-Setup-Info,
    Additional-EDCH-Cell-Information-Response-List,
    Additional-EDCH-FDD-Update-Information,
    Additional-EDCH-Cell-Information-To-Add-List,
    Additional-EDCH-Cell-Information-Response-RLReconf-List,
    DCH-MeasurementOccasion-Information,
    DCH-MeasurementType-Indicator,
    Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency,
    Additional-EDCH-Cell-Information-Response-RLAddList,
    Non-Serving-RL-Preconfig-Setup,
    Non-Serving-RL-Preconfig-Info,
    CellCapabilityContainerExtension-TDD-LCR,
   Multi-Carrier-EDCH-Info,
   Multi-Carrier-EDCH-Reconfigure,
   Multi-Carrier-EDCH-Information-Response,
   MU-MIMO-InformationLCR,
   MU-MIMO-Indicator.
   Usefulness-Of-Battery-Optimization,
   MDT-Configuration,
    Neighbouring-UMTS-CellInformation-Ext,
    SourceID,
    TargetID,
    ClassmarkInformation2,
    ClassmarkInformation3,
    SpeechVersion,
    Cell-Capacity-Class-Value,
    LoadValue,
    Controlled-Object-Scope,
    CPC-RecoveryReport,
    UL-CLTD-Information,
    UL-CLTD-Information-Reconf,
    UL-CLTD-State-Update-Information,
    FTPICH-Information,
    FTPICH-Information-Reconf,
    FTPICH-Information-Response,
    FTPICH-Reconfiguration-Information
FROM RNSAP-IEs
    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-ContainerList{},
    ProtocolIE-ContainerPair{},
```

```
ProtocolIE-ContainerPairList{},
    ProtocolIE-Container{},
    ProtocolIE-Single-Container{},
    RNSAP-PRIVATE-IES,
    RNSAP-PROTOCOL-EXTENSION,
    RNSAP-PROTOCOL-IES,
    RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
    maxCellsMeas,
    maxNoOfDSCHs,
    maxNoOfUSCHs,
    maxNrOfCCTrCHs,
    maxNoOfCommonRGCells.
    maxNrOfDCHs,
    maxNrOfTS,
    maxNrOfDPCHs,
    maxNrOfDPCHs768,
    maxNrOfDPCHsPerRL-1,
    maxNrOfDPCHs768PerRL-1,
    maxNrOfInterfaces,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLSets-1,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfULTs,
    maxNrOfDLTs,
    maxResetContext,
    maxResetContextGroup,
    maxNoOfDSCHsLCR,
    maxNoOfUSCHsLCR,
    maxNrOfCCTrCHsLCR,
    maxNrOfTsLCR,
    maxNrOfDLTsLCR,
    maxNrOfULTsLCR,
    maxNrOfDPCHsLCR,
    maxNrOfDPCHsLCRPerRL-1,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfMeasNCell,
    maxNrOfMACdFlows,
    maxNrOfMACdPDUSize,
    maxNrOfMCCHMessages,
    maxNrOfMBMSL3,
    maxNrOfEDCHMACdFlows,
    maxNrOfHSSICHs,
    maxNrOfHSSICHs-1,
    maxNrOfActiveMBMSServices,
    maxNrOfMBMSServices,
    maxNrofSiqSeqERGHICH-1,
    maxNrOfCells,
    maxNrOfHSDSCH-1,
    maxNrOfEDCH-1,
    maxNrOfULCarriersLCR-1,
    maxNoOfGsmCell,
```

```
maxNrOfANRCells,
id-Active-MBMS-Bearer-ServiceFDD.
id-Active-MBMS-Bearer-ServiceFDD-PFL.
id-Active-MBMS-Bearer-ServiceTDD.
id-Active-MBMS-Bearer-ServiceTDD-PFL,
id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AllowedQueuingTime,
id-AlternativeFormatReportingIndicator,
id-AntennaColocationIndicator,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN.
id-CFNReportingIndicator,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd.
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainerExtension-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-CellPortionID,
id-ChipOffset,
id-ClosedLoopModel-SupportIndicator,
id-CNOriginatedPage-PagingRqst,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonTransportChannelResourcesInitialisationNotRequired,
id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD,
id-Common-EDCH-Support-Indicator,
id-CongestionCause,
id-Continuous-Packet-Connectivity-DTX-DRX-Information,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response,
id-CPC-Information,
id-CoverageIndicator,
id-CriticalityDiagnostics,
id-CellPortionLCRID,
id-D-RNTI.
id-D-RNTI-ReleaseIndication,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
```

```
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD.
id-DCH-DeleteList-RL-ReconfRastFDD.
id-DCH-DeleteList-RL-ReconfRastTDD.
id-DCH-FDD-Information.
id-DCH-TDD-Information.
id-DCH-Indicator-For-E-DCH-HSDPA-Operation,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DCH-InformationResponse,
id-DCH-Rate-InformationItem-RL-CongestInd,
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD.
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRgstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-FDD-DL-CodeInformation,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRgstFDD,
id-DL-DPCH-Information-RL-ReconfRgstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD.
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-DL-DPCH-TimingAdjustment,
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD,
id-DL-Physical-Channel-Information-RL-SetupRgstTDD,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-PowerBalancing-UpdatedIndicator,
id-DL-ReferencePowerInformation.
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rgst,
id-DL-ReferencePowerInformation-DL-PC-Rgst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Fail,
id-DedicatedMeasurementObjectType-DM-Fail-Ind,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rgst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
```

```
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD.
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DPC-Mode,
id-DPC-Mode-Change-SupportIndicator,
id-DSCHs-to-Add-TDD,
id-DSCH-DeleteList-RL-ReconfPrepTDD,
id-DSCH-InformationListIE-RL-AdditionRspTDD,
id-DSCH-InformationListIEs-RL-SetupRspTDD,
id-DSCH-TDD-Information,
id-DSCH-ModifyList-RL-ReconfPrepTDD,
id-DSCH-RNTI,
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-Dual-Band-Secondary-Serving-Cell-List,
id-EDPCH-Information,
id-EDCH-RL-Indication,
id-EDCH-FDD-Information,
id-Serving-EDCHRL-Id,
id-EDCH-FDD-DL-ControlChannelInformation,
id-EDCH-FDD-InformationResponse,
id-E-DCH-FDD-Update-Information,
id-EDCH-MACdFlows-To-Add,
id-EDCH-FDD-Information-To-Modify,
id-EDCH-MACdFlows-To-Delete.
id-EDPCH-Information-RLReconfRequest-FDD,
id-EDPCH-Information-RLAdditionReg-FDD,
id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd,
id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd,
id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd,
id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd,
id-Enhanced-FACH-Support-Indicator,
id-Enhanced-FACH-Information-ResponseFDD,
id-Enhanced-PCH-Capability,
id-ExtendedPropagationDelay,
id-Extended-SRNC-ID,
id-Extended-RNC-ID,
id-Extended-S-RNTI,
id-Extended-S-RNTI-Group,
id-Serving-cell-change-CFN,
id-E-DCH-Serving-cell-change-informationResponse,
id-E-RNTI-For-FACH,
id-H-RNTI-For-FACH,
id-RNTI-Allocation-Indicator,
id-Enhanced-PrimaryCPICH-EcNo.
id-E-RNTI,
id-F-DPCH-SlotFormat,
id-F-DPCH-SlotFormatSupportRequest,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
id-Fast-Reconfiguration-Mode,
id-Fast-Reconfiguration-Permission,
id-FrameOffset,
```

```
id-F-DPCH-Information-RL-ReconfPrepFDD,
id-F-DPCH-Information-RL-SetupRgstFDD.
id-GA-Cell.
id-GA-CellAdditionalShapes,
id-GSM-Cell-InfEx-Rgst,
id-HCS-Prio,
id-HSDSCH-Configured-Indicator,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Update-Information,
id-HSDSCH-TDD-Update-Information,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-Information-to-Modify-Unsynchronised,
id-HSDSCH-MACdFlows-to-Add,
id-HSDSCH-MACdFlows-to-Delete,
id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd,
id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd,
id-HSDSCH-Physical-Layer-Category,
id-HSDSCH-RNTI,
id-HS-DSCH-serving-cell-change-information,
id-HS-DSCH-serving-cell-change-informationResponse,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSPDSCH-RL-ID,
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD,
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rgst,
id-HSSICH-Info-DM,
id-IMSI,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationExchangeObjectType-InfEx-Rgst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationReportCharacteristics.
id-InformationType,
id-Initial-DL-DPCH-TimingAdjustment,
id-Initial-DL-DPCH-TimingAdjustment-Allowed,
id-InnerLoopDLPCStatus,
id-InterfacesToTraceItem,
id-Inter-Frequency-Cell-List,
id-L3-Information,
id-AdjustmentPeriod,
id-ListOfInterfacesToTrace,
id-MaxAdjustmentStep,
id-Max-UE-DTX-Cvcle,
id-MBMS-Bearer-Service-List,
id-MBMS-Bearer-Service-List-InfEx-Rsp,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt,
id-MBMS-Cell-InfEx-Rgst,
id-MBMS-Cell-InfEx-Rsp,
id-MBMS-Cell-InfEx-Rprt,
```

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id-MBSFN-Cluster-Identity,
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List,
id-MCCH-Configuration-Info.
id-MCCH-Message-List,
id-MeasurementFilterCoefficient.
id-MeasurementID.
id-MeasurementRecoveryBehavior,
id-MeasurementRecoveryReportingIndicator,
id-MeasurementRecoverySupportIndicator,
id-Multiple-PLMN-List,
id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD,
id-NACC-Related-Data,
id-Neighbouring-E-UTRA-CellInformation.
id-Old-URA-ID,
id-PagingArea-PagingRgst,
id-PartialReportingIndicator,
id-PDSCH-RL-ID,
id-Permanent-NAS-UE-Identity,
id-Phase-Reference-Update-Indicator,
id-FACH-FlowControlInformation,
id-PLCCH-Information-PhyChReconfRqstTDD,
id-PowerAdjustmentType,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
id-Primary-CPICH-Usage-For-Channel-Estimation,
id-PropagationDelay,
id-ProvidedInformation.
id-RANAP-EnhancedRelocationInformationRequest,
id-RANAP-EnhancedRelocationInformationResponse,
id-RANAP-RelocationInformation,
id-ResetIndicator,
id-Released-CN-Domain,
id-EDCH-RLSet-Id,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRgstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRgst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRgstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-RL-CongestInd,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rgst,
id-RL-InformationItem-DM-Rsp.
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-CongestInd,
id-RL-InformationList-RL-AdditionRgstFDD,
id-RL-InformationList-RL-DeletionRgst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
```

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id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD.
id-RL-InformationResponse-RL-ReconfRspTDD.
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD.
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRspFDD,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRspFDD,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item,
id-RL-ParameterUpdateIndicationFDD-RL-InformationList.
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationRequestFDD-RL-InformationList.
id-RL-ReconfigurationRequestFDD-RL-Information-IEs,
id-RL-ReconfigurationRequestTDD-RL-Information,
id-RL-ReconfigurationResponseTDD-RL-Information,
id-RL-Specific-DCH-Info,
id-RL-Specific-EDCH-Information,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rgst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-Set-Successful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind,
id-RL-Successful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporing-Object-RL-RestoreInd,
id-RNC-ID.
id-RxTimingDeviationForTA,
id-S-RNTI,
id-SAI,
id-Secondary-CPICH-Information,
id-Secondary-CPICH-Information-Change,
id-Secondary-Serving-Cell-List,
id-SixtyfourOAM-DL-SupportIndicator,
id-SFN,
id-SFNReportingIndicator,
id-SNA-Information,
id-SRNC-ID,
id-STTD-SupportIndicator,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD.
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-TDD-maxNrDLPhysicalchannels.
id-TDD-Support-8PSK,
id-TDD-Support-PLCCH,
id-timeSlot-ISCP,
```

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id-TimeSlot-RL-SetupRspTDD,
id-TnlOos.
id-TraceDepth.
id-TraceRecordingSessionReference,
id-TraceReference.
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID.
id-ContextInfoItem-Reset,
id-ContextGroupInfoItem-Reset,
id-Transmission-Gap-Pattern-Sequence-Information,
id-UE-AggregateMaximumBitRate,
id-UEIdentity,
id-UEMeasurementType,
id-UEMeasurementTimeslotInfoHCR,
id-UEMeasurementTimeslotInfoLCR,
id-UEMeasurementReportCharacteristics,
id-UEMeasurementParameterModAllow,
id-UEMeasurementValueInformation,
id-UE-State,
id-UE-with-enhanced-HS-SCCH-support-indicator,
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRgstFDD,
id-UL-DPCH-Information-RL-SetupRgstFDD,
id-UL-DPDCHIndicatorEDCH,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-UL-Physical-Channel-Information-RL-SetupRqstTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URA-Information,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD,
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id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD.
id-USCHs-to-Add.
id-USCH-DeleteList-RL-ReconfPrepTDD,
id-USCH-InformationListIE-RL-AdditionRspTDD.
id-USCH-InformationListIEs-RL-SetupRspTDD,
id-USCH-Information.
id-USCH-ModifyList-RL-ReconfPrepTDD,
id-USCHToBeAddedOrModifiedList-RL-ReconfReadvTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRgstTDD,
id-RL-LCR-InformationResponse-RL-SetupRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRgstTDD,
id-RL-LCR-InformationResponse-RL-AdditionRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD.
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationList-PhyChReconfRgstTDD,
id-DL-Timeslot-LCR-InformationList-PhyChReconfRgstTDD,
id-timeSlot-ISCP-LCR-List-DL-PC-Rgst-TDD,
id-TSTD-Support-Indicator-RL-SetupRgstTDD,
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD,
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD.
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD,
id-neighbouringTDDCellMeasurementInformationLCR,
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD,
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD,
id-TrafficClass,
id-UL-Synchronisation-Parameters-LCR,
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-MAChs-ResetIndicator,
id-UL-TimingAdvanceCtrl-LCR,
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD,
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD,
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD,
```

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id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRgstTDD.
id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD.
id-UL-CCTrCH-InformationItem-RL-AdditionRgstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD.
id-DL-CCTrCH-InformationItem-RL-AdditionRgstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD,
id-PrimaryCCPCH-RSCP-Delta,
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp,
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp,
id-SynchronisationIndicator,
id-secondary-LCR-CCPCH-Info-TDD,
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp,
id-CellCapabilityContainer-TDD768,
id-neighbouringTDDCellMeasurementInformation768,
id-RL-InformationResponse-RL-SetupRspTDD768,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD768.
id-UL-DPCH-InformationItem-RL-SetupRspTDD768,
id-DL-DPCH-InformationItem-RL-SetupRspTDD768,
id-TDD768-minimumSpreadingFactor-UL,
id-TDD768-minimumSpreadingFactor-DL,
id-TDD768-maxNrDLPhysicalchannels,
id-TDD768-maxNrDLPhysicalchannelsTS,
id-RL-InformationResponse-RL-AdditionRspTDD768,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD768,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD768,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD768,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768,
id-UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768,
id-DL-DPCH-InformationAddListIE-RL-ReconfReadvTDD768,
id-DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768.
id-secondary-CCPCH-Info-RL-ReconfReadyTDD768,
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD768,
id-UL-Timeslot-InformationList-PhyChReconfRgstTDD768,
id-DL-Timeslot-InformationList-PhyChReconfRgstTDD768,
id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp,
id-UEMeasurementTimeslotInfo768.
id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD,
id-DPCH-ID768-DM-Rsp,
id-DPCH-ID768-DM-Rgst,
id-DPCH-ID768-DM-Rprt,
id-RxTimingDeviationForTAext,
id-RxTimingDeviationForTA768.
id-E-DCH-Information,
id-E-DCH-Information-Reconfig,
id-E-DCH-Serving-RL-ID,
id-E-DCH-Information-Response,
id-E-DCH-768-Information,
id-E-DCH-768-Information-Reconfig,
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id-E-DCH-768-Information-Response,
id-E-DCH-LCR-Information.
id-E-DCH-LCR-Information-Reconfig.
id-E-DCH-LCR-Information-Response,
id-PowerControlGAP.
id-IdleIntervalInformation,
id-NeedforIdleInterval.
id-IdleIntervalConfigurationIndicator,
id-UARFCNforNt.
id-HS-SICH-ID-Extension,
id-HSSICH-Info-DM-Rqst-Extension,
id-UPPCHPositionLCR,
id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR,
id-Enhanced-FACH-Information-ResponseLCR,
id-HSDSCH-PreconfigurationSetup,
id-HSDSCH-PreconfigurationInfo,
id-NoOfTargetCellHS-SCCH-Order,
id-EnhancedHSServingCC-Abort,
id-GANSS-Time-ID,
id-Additional-HS-Cell-Information-RL-Setup,
id-Additional-HS-Cell-Information-Response,
id-Additional-HS-Cell-Information-RL-Addition,
id-Additional-HS-Cell-Change-Information-Response,
id-Additional-HS-Cell-Information-RL-Reconf-Prep.
id-Additional-HS-Cell-Information-RL-Reconf-Reg.
id-Additional-HS-Cell-RL-Reconf-Response,
id-Additional-HS-Cell-Information-RL-Param-Upd,
id-MinimumReducedE-DPDCH-GainFactor,
id-ContinuousPacketConnectivity-DRX-InformationLCR,
id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR,
id-CPC-InformationLCR,
id-E-DCH-Semi-PersistentScheduling-Information-LCR,
id-HS-DSCH-Semi-PersistentScheduling-Information-LCR,
id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR,
id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR,
id-ActivationInformation,
id-Additional-EDCH-Cell-Information-RL-Setup-Reg.
id-Additional-EDCH-Cell-Information-Response,
id-Additional-EDCH-Cell-Information-RL-Add-Reg,
id-Additional-EDCH-Cell-Information-Response-RLAdd,
id-Additional-EDCH-Cell-Information-RL-Reconf-Prep,
id-Additional-EDCH-Cell-Information-RL-Reconf-Reg,
id-Additional-EDCH-Cell-Information-RL-Param-Upd,
id-Additional-EDCH-Cell-Information-ResponseRLReconf,
id-DCH-MeasurementOccasion-Information,
id-DCH-MeasurementType-Indicator,
id-Non-Serving-RL-Preconfig-Info.
id-Non-Serving-RL-Preconfig-Setup,
id-Non-Serving-RL-Preconfig-Removal,
id-CellCapabilityContainerExtension-TDD-LCR,
id-Multi-Carrier-EDCH-Setup,
id-Multi-Carrier-EDCH-Reconfigure,
id-Multi-Carrier-EDCH-Response,
id-MU-MIMO-InformationLCR,
```

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id-MU-MIMO-Indicator,
   id-Usefulness-Of-Battery-Optimization,
   id-MDT-Configuration.
   id-Neighbouring-UMTS-CellInformation-Ext,
   id-Extension-CommonMeasurementObjectType-CM-Rprt,
   id-Extension-CommonMeasurementObjectType-CM-Rgst,
   id-Extension-CommonMeasurementObjectType-CM-Rsp,
   id-Extension-FailureIndicationMeasurementList,
   id-Extension-FailureMeasurementList.
   id-Extension-TerminationMeasurementList,
   id-GsmCellList-CM-Rprt,
   id-GsmCellList-CM-Rqst,
   id-GsmCellList-CM-Rsp,
   id-SpeechVersion,
   id-SourceID,
   id-TargetID,
   id-ClassmarkInformation2,
   id-ClassmarkInformation3,
   id-GSM-Cell-CM-Rqst,
   id-LoadValue,
   id-EventH,
   id-Cell-Capacity-Class-Value,
   id-Control-Type-InformationTransferControlReg,
   id-ANR-Cell-InfEx-Rost,
   id-ANR-Cell-InfEx-Rsp,
   id-Trace-Collection-Entity-IP-Address,
   id-CPC-RecoveryReport,
   id-UL-CLTD-Information,
   id-UL-CLTD-Information-Reconf,
   id-UL-CLTD-State-Update-Information,
   id-FTPICH-Information,
   id-FTPICH-Information-Reconf,
   id-FTPICH-Information-Response,
   id-FTPICH-Reconfiguration-Information,
   id-Common-E-RGCH-Cell-InfEx-Rgst,
   id-Common-E-RGCH-Cell-InfEx-Rsp,
   id-Common-E-RGCH-Cell-InfEx-Rprt
FROM RNSAP-Constants;
       -- RADIO LINK SETUP REQUEST FDD
__ ********************
RadioLinkSetupRequestFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                            {{RadioLinkSetupRequestFDD-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}
                                                                                                                   OPTIONAL
RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
```

```
ID id-SRNC-ID
                                   CRITICALITY reject TYPE RNC-ID
                                                                                       PRESENCE mandatory}
     ID id-S-RNTI
                                   CRITICALITY reject TYPE S-RNTI
                                                                                       PRESENCE mandatory
                                                                                                               } |
     ID id-D-RNTI
                                   CRITICALITY reject TYPE D-RNTI
                                                                                   PRESENCE optional
     ID id-AllowedQueuingTime
                                       CRITICALITY reject TYPE AllowedOueuingTime
                                                                                               PRESENCE optional
     ID id-UL-DPCH-Information-RL-SetupRgstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRgstFDD
                                                                                                                       PRESENCE mandatory
     ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD
                                                                                                                       PRESENCE optional
     ID id-DCH-FDD-Information
                                   CRITICALITY reject TYPE DCH-FDD-Information
                                                                                       PRESENCE mandatory
     ID id-RL-Information-RL-SetupRqstFDD
                                               CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD
                                                                                                                       PRESENCE mandatory
    { ID id-Transmission-Gap-Pattern-Sequence-Information
                                                               CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE
    { ID id-Active-Pattern-Sequence-Information CRITICALITY reject TYPE Active-Pattern-Sequence-Information
                                                                                                                PRESENCE optional },
    . . .
UL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE
    ul-ScramblingCode
                                   UL-ScramblingCode,
    minUL-ChannelisationCodeLength
                                           MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs
                                   MaxNrOfUL-DPCHs
                                                           OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 -- ,
                                   PunctureLimit,
    ul-PunctureLimit
    ul-TECS
                                   TECS.
    ul-DPCCH-SlotFormat
                                   UL-DPCCH-SlotFormat,
    ul-SIRTarget
                                   UL-SIR
                                                   OPTIONAL,
    diversityMode
                                   DiversityMode,
    not-Used-sSDT-CellIdLength
                                   NULL
                                                   OPTIONAL,
    not-Used-s-FieldLength
                                   NULL
                                                   OPTIONAL.
                                    ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-Information-RL-SetupRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
     ID id-DPC-Mode
                                   CRITICALITY reject
                                                           EXTENSION DPC-Mode
                                                                                           PRESENCE optional } |
    EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional },
    . . .
DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    t.FCS
                                   TFCS,
    dl-DPCH-SlotFormat
                                   DL-DPCH-SlotFormat,
    nrOfDLchannelisationcodes
                                   NrOfDLchannelisationcodes,
    tFCI-SignallingMode
                                   TFCI-SignallingMode,
    tFCI-Presence
                                   TFCI-Presence
                                                           OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is equal to any of the values from 12 to 16 --,
    multiplexingPosition
                                       MultiplexingPosition,
    powerOffsetInformation
                                       PowerOffsetInformation-RL-SetupRgstFDD,
    fdd-dl-TPC-DownlinkStepSize
                                   FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                   LimitedPowerIncrease,
    innerLoopDLPCStatus
                                   InnerLoopDLPCStatus,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
PowerOffsetInformation-RL-SetupRgstFDD ::= SEOUENCE
       pol-ForTFCI-Bits
                                      PowerOffset.
       po2-ForTPC-Bits
                                      PowerOffset.
       po3-ForPilotBits
                                      PowerOffset.
       iE-Extensions
                                      ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-SetupRgstFDD
                                          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
SetupRqstFDD} }
RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
                                  RL-ID,
   C-TD
                                  C-ID,
    firstRLS-indicator
                                   FirstRLS-Indicator,
    frameOffset
                                   FrameOffset.
    chipOffset
                                   ChipOffset,
   propagationDelay
                                   PropagationDelay
                                                          OPTIONAL,
   diversityControlField
                                  DiversityControlField
                                                             OPTIONAL
    -- This IE shall be present if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
   dl-InitialTX-Power
                                  DL-Power
                                                      OPTIONAL,
   primaryCPICH-EcNo
                                   PrimaryCPICH-EcNo
                                                             OPTIONAL,
   not-Used-sSDT-CellID
                                   NULL
                                                  OPTIONAL,
    transmitDiversityIndicator
                                   TransmitDiversityIndicator
                                                                  OPTIONAL,
    -- This IE shall be present unless Diversity Mode IE in UL DPCH Information group is "none"
                                   ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-InformationItem-RL-SetupRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Enhanced-PrimaryCPICH-EcNo
                                              CRITICALITY ignore
                                                                       EXTENSION Enhanced-PrimaryCPICH-EcNo
                                                                                                               PRESENCE optional
     ID id-RL-Specific-DCH-Info
                                              CRITICALITY ignore
                                                                      EXTENSION RL-Specific-DCH-Info
                                                                                                               PRESENCE optional
     ID id-DelayedActivation
                                              CRITICALITY reject
                                                                      EXTENSION DelayedActivation
                                                                                                               PRESENCE optional
     ID id-CellPortionID
                                              CRITICALITY ignore
                                                                       EXTENSION CellPortionID
                                                                                                               PRESENCE optional
     ID id-RL-Specific-EDCH-Information
                                              CRITICALITY reject
                                                                      EXTENSION RL-Specific-EDCH-Information
                                                                                                               PRESENCE optional
                                                                                                               PRESENCE optional
     ID id-EDCH-RL-Indication
                                              CRITICALITY reject
                                                                      EXTENSION EDCH-RL-Indication
     ID id-ExtendedPropagationDelay
                                              CRITICALITY ignore
                                                                      EXTENSION ExtendedPropagationDelay
                                                                                                               PRESENCE optional
     ID id-SynchronisationIndicator
                                              CRITICALITY reject
                                                                      EXTENSION SynchronisationIndicator
                                                                                                               PRESENCE optional
     ID id-HSDSCH-PreconfigurationSetup
                                              CRITICALITY ignore
                                                                      EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                               PRESENCE optional
     ID id-Non-Serving-RL-Preconfig-Setup
                                              CRITICALITY ignore
                                                                      EXTENSION Non-Serving-RL-Preconfig-Setup PRESENCE optional }
     ID id-FTPICH-Information
                                              CRITICALITY ignore
                                                                      EXTENSION FTPICH-Information
                                                                                                               PRESENCE optional },
```

```
RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                                      CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                                               PRESENCE optional } |
     ID id-DL-PowerBalancing-Information
                                                      CRITICALITY ignore EXTENSION DL-PowerBalancing-Information
                                                                                                                               PRESENCE optional}
     ID id-HSDSCH-FDD-Information
                                                      CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                               PRESENCE optional}
     ID id-HSPDSCH-RL-ID
                                                      CRITICALITY reject EXTENSION RL-ID
                                                                                                                               PRESENCE
conditional }
    -- This IE shall be present if HS-DSCH Information IE is present.
     ID id-MBMS-Bearer-Service-List
                                                                                                                               PRESENCE optional } |
                                                      CRITICALITY notify EXTENSION MBMS-Bearer-Service-List
     ID id-EDPCH-Information
                                                      CRITICALITY reject EXTENSION EDPCH-Information-FDD
                                                                                                                               PRESENCE optional } |
     ID id-EDCH-FDD-Information
                                                      CRITICALITY reject
                                                                           EXTENSION EDCH-FDD-Information
                                                                                                                               PRESENCE
conditional |
    -- This IE is present if E-DPCH Information IE is present.
    { ID id-Serving-EDCHRL-Id
                                                       CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                               PRESENCE optional |
    -- This IE is present if E-DCHInformation IE is present.
     ID id-F-DPCH-Information-RL-SetupRgstFDD
                                                       CRITICALITY reject EXTENSION F-DPCH-Information-RL-SetupRqstFDD
                                                                                                                               PRESENCE optional }
                                                      CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
     ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                                                                                               PRESENCE optional }
     ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                      CRITICALITY reject EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                                                                                               PRESENCE optional }
     ID id-Serving-cell-change-CFN
                                                      CRITICALITY reject EXTENSION CFN
                                                                                                                               PRESENCE optional }
     ID id-Continuous-Packet-Connectivity-DTX-DRX-Information
                                                                    CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-DTX-DRX-
Information
    PRESENCE optional } |
    { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-
Information
                                                                                                                               PRESENCE optional }
                                                                                                                               PRESENCE optional }
     ID id-Extended-SRNC-ID
                                                       CRITICALITY reject EXTENSION Extended-RNC-ID
     ID id-Additional-HS-Cell-Information-RL-Setup
                                                       CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Setup-List
                                                                                                                                      PRESENCE
optional}|
     ID id-UE-AggregateMaximumBitRate
                                                       CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate
                                                                                                                               PRESENCE optional }
     ID id-Additional-EDCH-Cell-Information-RL-Setup-Reg
                                                                    CRITICALITY reject EXTENSION Additional-EDCH-Setup-Info
                                                                                                                               PRESENCE optional }
     ID id-Usefulness-Of-Battery-Optimization
                                                       CRITICALITY ignore EXTENSION Usefulness-Of-Battery-Optimization
                                                                                                                               PRESENCE optional }
     ID id-UL-CLTD-Information
                                                       CRITICALITY reject EXTENSION UL-CLTD-Information
                                                                                                                               PRESENCE optional}
     ID id-Extended-S-RNTI
                                                                                                                               PRESENCE optional },
                                                      CRITICALITY reject EXTENSION Extended-RNTI
Additional-HS-Cell-Information-RL-Setup-List
                                               ::= SEOUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Setup-ItemIEs
Additional-HS-Cell-Information-RL-Setup-ItemIEs ::=SEOUENCE{
   hSPDSCH-RL-ID
                                                   RL-ID,
    c-ID
                                                   C-ID,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                   HS-DSCH-FDD-Secondary-Serving-Information,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
F-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    powerOffsetInformation
                                    PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD,
    fdd-dl-TPC-DownlinkStepSize
                                    FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                   LimitedPowerIncrease,
```

```
innerLoopDLPCStatus
                                  InnerLoopDLPCStatus,
   iE-Extensions
                                  ProtocolExtensionContainer { { F-DPCH-Information-RL-SetupRqstFDD-ExtIEs} }
   OPTIONAL.
F-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-F-DPCH-SlotFormatSupportReguest
                                             CRITICALITY reject
                                                                        EXTENSION F-DPCH-SlotFormatSupportRequest
                                                                                                                         PRESENCE optional
    { ID id-F-DPCH-SlotFormat
                                         CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                           PRESENCE optional },
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD ::= SEQUENCE {
                                  PowerOffset,
   po2-ForTPC-Bits
   -- This IE shall be ignored by DRNS
                                  ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
       -- RADIO LINK SETUP REQUEST TDD
  RadioLinkSetupRequestTDD ::= SEOUENCE {
   protocolIEs
                                                            {{RadioLinkSetupRequestTDD-IEs}},
                                  ProtocolIE-Container
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
                                                                                                                   OPTIONAL.
RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-SRNC-ID
                                                         CRITICALITY reject TYPE RNC-ID
                                                                                                          PRESENCE mandatory
     ID id-S-RNTI
                                                                                                          PRESENCE mandatory }
                                                         CRITICALITY reject TYPE S-RNTI
     ID id-D-RNTI
                                                         CRITICALITY reject TYPE D-RNTI
                                                                                                          PRESENCE optional }
     ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                             PRESENCE mand
     ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                             PRESENCE mand
     ID id-AllowedQueuingTime
                                                         CRITICALITY reject TYPE AllowedQueuingTime
                                                                                                          PRESENCE optional } |
     ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                         CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                                                                                          PRESENCE optional
     ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                         CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                                                                                           PRESENCE optional
     ID id-DCH-TDD-Information
                                                         CRITICALITY reject TYPE DCH-TDD-Information
                                                                                                          PRESENCE optional
     ID id-DSCH-TDD-Information
                                                         CRITICALITY reject TYPE DSCH-TDD-Information
                                                                                                          PRESENCE optional
     ID id-USCH-Information
                                                         CRITICALITY reject TYPE USCH-Information
                                                                                                          PRESENCE optional
     ID id-RL-Information-RL-SetupRqstTDD
                                                         CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD
                                                                                                                           PRESENCE mandatory
```

```
UL-Physical-Channel-Information-RL-SetupRgstTDD ::= SEQUENCE {
    maxNrTimeslots-UL
                                  MaxNrTimeslots.
   minimumSpreadingFactor-UL
                                  MinimumSpreadingFactor,
   maxNrULPhysicalchannels
                                  MaxNrULPhysicalchannels,
                                  ProtocolExtensionContainer { {UL-Physical-Channel-InformationItem-RL-SetupRgstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-TDD-Support-8PSK
                                  CRITICALITY ignore
                                                         EXTENSION Support-8PSK
                                                                                                           } |
                                                                                    PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
    { ID id-TDD768-minimumSpreadingFactor-UL
                                                  CRITICALITY ignore
                                                                            EXTENSION MinimumSpreadingFactor768
                                                                                                                          PRESENCE optional
    },
DL-Physical-Channel-Information-RL-SetupRgstTDD ::= SEQUENCE {
   maxNrTimeslots-DL
                                  MaxNrTimeslots,
                                  MinimumSpreadingFactor,
   minimumSpreadingFactor-DL
    maxNrDLPhysicalchannels
                                  MaxNrDLPhysicalchannels,
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-maxNrDLPhysicalchannels
                                                  CRITICALITY ignore
                                                                                                                                 PRESENCE
                                                                            EXTENSION MaxNrDLPhysicalchannelsTS
optional }|
    { ID id-TDD-Support-8PSK
                                                  CRITICALITY ignore
                                                                            EXTENSION Support-8PSK
    PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-TDD-Support-PLCCH
                                                  CRITICALITY ignore
                                                                            EXTENSION Support-PLCCH
    PRESENCE optional }
    { ID id-TDD768-minimumSpreadingFactor-DL
                                                 CRITICALITY ignore
                                                                            EXTENSION MinimumSpreadingFactor768
                                                                                                                                 PRESENCE
optional }|
     ID id-TDD768-maxNrDLPhysicalchannels
                                                  CRITICALITY ignore
                                                                            EXTENSION MaxNrDLPhysicalchannels768
                                                                                                                          PRESENCE optional
     ID id-TDD768-maxNrDLPhysicalchannelsTS
                                                  CRITICALITY ignore
                                                                            EXTENSION MaxNrDLPhysicalchannelsTS768
                                                                                                                          PRESENCE optional
                                                  ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
UL-CCTrCH-InformationList-RL-SetupRqstTDD
InformationItemIEs-RL-SetupRqstTDD} }
UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
     PRESENCE mandatory
UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                  CCTrCH-ID,
    ul-TFCS
                                  TFCS,
    tFCI-Coding
                                  TFCI-Coding,
```

```
ul-PunctureLimit
                                  PunctureLimit,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD
                                                                               EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                               PRESENCE
                                                        CRITICALITY reject
optional },
   -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
   . . .
DL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-SetupRgstTDD} }
DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
     PRESENCE mandatory
DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                 CCTrCH-ID,
   dl-TFCS
                                 TFCS,
   tFCI-Coding
                                 TFCI-Coding
   dl-PunctureLimit
                                 PunctureLimit,
   tdd-TPC-DownlinkStepSize
                                 TDD-TPC-DownlinkStepSize,
                                 CCTrCH-TPCList-RL-SetupRgstTDD OPTIONAL,
   cCTrCH-TPCList
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRgstTDD-ExtIEs} } OPTIONAL,
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD
CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                                     CCTrCH-ID,
   iE-Extensions
                                     ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs} } OPTIONAL,
CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
RL-Information-RL-SetupRgstTDD ::= SEQUENCE {
   rL-ID
                                 RL-ID,
   C-TD
                                 C-ID,
   frameOffset
                                 FrameOffset,
   specialBurstScheduling
                                  SpecialBurstScheduling,
   primaryCCPCH-RSCP
                                 PrimaryCCPCH-RSCP
                                                        OPTIONAL,
   dL-TimeSlot-ISCP
                                 DL-TimeSlot-ISCP-Info OPTIONAL,
```

```
--for 3.84Mcps TDD and 7.68Mcps TDD only
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-Information-RL-SetupRgstTDD-ExtIEs} } OPTIONAL.
   . . .
RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRgstTDD
                                                            CRITICALITY reject
                                                                                   EXTENSION
                                                                                                   DL-TimeSlot-ISCP-LCR-Information
   PRESENCE optional }|
   { ID id-TSTD-Support-Indicator-RL-SetupRqstTDD
                                                            CRITICALITY ignore
                                                                                   EXTENSION
                                                                                                   TSTD-Support-Indicator
   PRESENCE optional }
   -- for 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info
                                                                                                                        } |
                                 CRITICALITY ignore
                                                        EXTENSION RL-Specific-DCH-Info
                                                                                          PRESENCE
                                                                                                          optional
     ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
    ID id-UL-Synchronisation-Parameters-LCR
                                                    CRITICALITY reject
                                                                           EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                                PRESENCE
             } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-PrimaryCCPCH-RSCP-Delta
                                     CRITICALITY ignore
                                                            EXTENSION PrimaryCCPCH-RSCP-Delta
                                                                                                          PRESENCE
                                                                                                                        optional
     ID id-IdleIntervalConfigurationIndicator
                                                                    CRITICALITY ignore EXTENSION
                                                                                                   NULL
                                                                                                                                PRESENCE
optional }
   RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                                            CRITICALITY ignore
                                                                                EXTENSION Permanent-NAS-UE-Identity
                                                                                                                        PRESENCE optional }
                                                                                                                        PRESENCE optional
     ID id-HSDSCH-TDD-Information
                                                            CRITICALITY reject
                                                                                EXTENSION HSDSCH-TDD-Information
     ID id-HSPDSCH-RL-ID
                                                            CRITICALITY reject
                                                                                EXTENSION RL-ID
                                                                                                                        PRESENCE
conditional |
   -- This IE shall be present if HS-DSCH Information IE is present.
     ID id-PDSCH-RL-ID
                                                                                                                        PRESENCE optional }
                                                            CRITICALITY ignore
                                                                                EXTENSION RL-ID
     ID id-MBMS-Bearer-Service-List
                                                            CRITICALITY notify
                                                                                                                        PRESENCE optional}
                                                                                EXTENSION MBMS-Bearer-Service-List
                                                                                                                        PRESENCE optional }
     ID id-E-DCH-Information
                                                            CRITICALITY reject
                                                                                EXTENSION E-DCH-Information
     ID id-E-DCH-Serving-RL-ID
                                                            CRITICALITY reject
                                                                                                                        PRESENCE optional }
                                                                                EXTENSION RL-ID
                                                                                                                        PRESENCE optional
     ID id-E-DCH-768-Information
                                                            CRITICALITY reject
                                                                                EXTENSION E-DCH-768-Information
     ID id-E-DCH-LCR-Information
                                                            CRITICALITY reject
                                                                                EXTENSION E-DCH-LCR-Information
                                                                                                                        PRESENCE optional }
     ID id-Extended-SRNC-ID
                                                                                                                        PRESENCE optional
                                                            CRITICALITY reject
                                                                                EXTENSION Extended-RNC-ID
                                                            CRITICALITY reject
     ID id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                                                EXTENSION ContinuousPacketConnectivity-DRX-InformationLCR
   PRESENCE optional } |
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                                EXTENSION HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                            CRITICALITY reject
   PRESENCE optional } |
                                                            CRITICALITY reject EXTENSION E-DCH-Semi-PersistentScheduling-Information-LCR
   { ID id-E-DCH-Semi-PersistentScheduling-Information-LCR
   PRESENCE optional } |
     ID id-RNTI-Allocation-Indicator
                                                                                                                        PRESENCE optional }
                                                            CRITICALITY ignore EXTENSION RNTI-Allocation-Indicator
     ID id-DCH-MeasurementType-Indicator
                                                            CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator
                                                                                                                        PRESENCE optional }
     ID id-Multi-Carrier-EDCH-Setup
                                                            CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Info
                                                                                                                        PRESENCE optional}
     ID id-MU-MIMO-Indicator
                                                            CRITICALITY reject EXTENSION MU-MIMO-Indicator
                                                                                                                        PRESENCE optional}
     ID id-Extended-S-RNTI
                                                            CRITICALITY reject EXTENSION Extended-RNTI
                                                                                                                        PRESENCE optional }.
     ************
-- RADIO LINK SETUP RESPONSE FDD
   *****************
```

```
RadioLinkSetupResponseFDD ::= SEQUENCE {
    protocolIEs
                                   ProtocolIE-Container
                                                             {{RadioLinkSetupResponseFDD-IEs}}.
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}
                                                                                                                      OPTIONAL.
RadioLinkSetupResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
     TD id-D-RNTT
                                                      CRITICALITY ignore
                                                                          TYPE D-RNTI
                                                                                                                         PRESENCE optional }
     ID id-CN-PS-DomainIdentifier
                                                      CRITICALITY ignore
                                                                          TYPE CN-PS-DomainIdentifier
                                                                                                                         PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                                      CRITICALITY ignore
                                                                          TYPE CN-CS-DomainIdentifier
                                                                                                                         PRESENCE optional }
                                                                                                                        PRESENCE mandatory }
     ID id-RL-InformationResponseList-RL-SetupRspFDD
                                                      CRITICALITY ignore
                                                                          TYPE RL-InformationResponseList-RL-SetupRspFDD
                                                                                                                         PRESENCE optional }
     ID id-UL-SIRTarget
                                                      CRITICALITY ignore
                                                                          TYPE UL-SIR
    ID id-CriticalityDiagnostics
                                                      CRITICALITY ignore
                                                                          TYPE CriticalityDiagnostics
                                                                                                                         PRESENCE optional }.
RL-InformationResponseList-RL-SetupRspFDD
                                              ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-SetupRspFDD} }
RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
     PRESENCE mandatory
RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
   rL-ID
                                  RL-ID,
    rL-Set-ID
                                  RL-Set-ID.
   uRA-Information
                                  URA-Information
                                                      OPTIONAL,
                                  SAI.
   qA-Cell
                                  GA-Cell
                                              OPTIONAL.
   gA-AccessPointPosition
                                  GA-AccessPointPosition
                                                             OPTIONAL,
   received-total-wide-band-power
                                  Received-total-wide-band-power,
   not-Used-secondary-CCPCH-Info
                                                      OPTIONAL,
                                          NULL
   dl-CodeInformation
                                  FDD-DL-CodeInformation,
   diversityIndication
                                  DiversityIndication-RL-SetupRspFDD,
    sSDT-SupportIndicator
                                  SSDT-SupportIndicator,
   maxUL-SIR
                                  UL-SIR,
   minUL-SIR
                                  UL-SIR,
    closedlooptimingadjustmentmode
                                  Closedlooptimingadjustmentmode
                                                                         OPTIONAL,
   maximumAllowedULTxPower
                                  MaximumAllowedULTxPower,
   maximumDLTxPower
                                  DL-Power.
   minimumDLTxPower
                                  DL-Power,
                                   PrimaryScramblingCode
   primaryScramblingCode
                                                                         OPTIONAL,
   uL-UARFCN
                                  UARFCN
                                                                         OPTIONAL,
   dL-UARFCN
                                  UARFCN
                                                                         OPTIONAL,
   primaryCPICH-Power
                                   PrimaryCPICH-Power,
   not-Used-dSCHInformationResponse
                                                                         OPTIONAL,
    neighbouring-UMTS-CellInformation
                                      Neighbouring-UMTS-CellInformation
                                                                         OPTIONAL.
   neighbouring-GSM-CellInformation
                                      Neighbouring-GSM-CellInformation
                                                                         OPTIONAL,
   pC-Preamble
                                   PC-Preamble,
    sRB-Delay
                                   SRB-Delay,
    iE-Extensions
                                  ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
```

```
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                       CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                               PRESENCE optional }
     ID id-DL-PowerBalancing-ActivationIndicator
                                                       CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                               PRESENCE optional }
                                                                                                                               PRESENCE optional }
     ID id-HCS-Prio
                                                        CRITICALITY ignore EXTENSION HCS-Prio
     ID id-Primary-CPICH-Usage-For-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation
                                                                                                                                       PRESENCE
optional }|
     ID id-Secondary-CPICH-Information
                                                        CRITICALITY ignore EXTENSION Secondary-CPICH-Information
                                                                                                                               PRESENCE optional }
     ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                        CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                               PRESENCE optional
     ID id-EDCH-RLSet-Id
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                               PRESENCE optional }
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                        CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                               PRESENCE optional
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                               PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                                        CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                               PRESENCE optional }
     ID id-FrameOffset
                                                        CRITICALITY ignore EXTENSION FrameOffset
                                                                                                                               PRESENCE optional } |
     ID id-ChipOffset
                                                        CRITICALITY ignore EXTENSION ChipOffset
                                                                                                                               PRESENCE optional }
                                                        CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
     ID id-Neighbouring-E-UTRA-CellInformation
                                                                                                                               PRESENCE optional }
     ID id-HSDSCH-PreconfigurationInfo
                                                        CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                               PRESENCE optional }
      ID id-Non-Serving-RL-Preconfig-Info
                                                        CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                               PRESENCE optional }
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                       CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                               PRESENCE optional }
     ID id-FTPICH-Information-Response
                                                        CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                               PRESENCE optional },
    . . .
DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining
                                    Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL
                                   NonCombiningOrFirstRL-RL-SetupRspFDD
Combining-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID
    iE-Extensions
                                ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                           CRITICALITY ignore EXTENSION DCH-InformationResponse
     ID id-DCH-InformationResponse
                                                                                                                               PRESENCE optional
     ID id-EDCH-FDD-InformationResponse
                                           CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                        PRESENCE optional
NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse
                               DCH-InformationResponse,
    iE-Extensions
                               ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-EDCH-FDD-InformationResponse
                                           CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                        PRESENCE optional },
RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-HSDSCH-RNTI
                                               CRITICALITY ignore
                                                                       EXTENSION HSDSCH-RNTI
    PRESENCE optional }
     ID id-HSDSCH-FDD-Information-Response
                                               CRITICALITY ignore
                                                                       EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                              PRESENCE optional } |
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                   CRITICALITY ignore
                                                                                                               EXTENSION Continuous-Packet-
Connectivity-HS-SCCH-Less-Information-Response
                                                   PRESENCE optional } |
     ID id-SixtyfourOAM-DL-SupportIndicator
                                               CRITICALITY ignore
                                                                       EXTENSION SixtyfourOAM-DL-SupportIndicator
                                                                                                                              PRESENCE optional } |
     ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
                                                                           EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional } |
    { ID id-Additional-EDCH-Cell-Information-Response
                                                           CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-List
       PRESENCE optional },
Additional-HS-Cell-Information-Response-List ::= SEOUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-Response-ItemIEs
Additional-HS-Cell-Information-Response-ItemIEs ::=SEOUENCE{
    hSPDSCH-RL-ID
                                                       RL-ID,
    hSDSCH-RNTI
                                                       HSDSCH-RNTI,
   hs-DscH-FDD-secondary-serving-Information-Response Hs-DscH-FDD-secondary-serving-Information-Response,
                                                       SixtyfourQAM-DL-SupportIndicator
    sixtyfourQAM-DL-SupportIndicator
                                                                                          OPTIONAL,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-HS-Cell-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK SETUP RESPONSE TDD
   *****************
RadioLinkSetupResponseTDD ::= SEQUENCE {
                                                              {{RadioLinkSetupResponseTDD-IEs}},
    protocolIEs
                                   ProtocolIE-Container
                                   ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
    protocolExtensions
                                                                                                                        OPTIONAL,
    . . .
RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                                                                                                  PRESENCE optional
                                                   CRITICALITY ignore TYPE D-RNTI
     ID id-CN-PS-DomainIdentifier
                                                   CRITICALITY ignore TYPE CN-PS-DomainIdentifier
                                                                                                                  PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                                   CRITICALITY ignore TYPE CN-CS-DomainIdentifier
                                                                                                                  PRESENCE optional
     ID id-RL-InformationResponse-RL-SetupRspTDD
                                                   CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE optional
    -- Mandatory for 3.84Mcps TDD only
     ID id-UL-SIRTarget
                                                   CRITICALITY ignore TYPE UL-SIR
                                                                                                                  PRESENCE mandatory }
    ID id-CriticalityDiagnostics
                                                   CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                  PRESENCE optional },
RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE
```

```
rL-ID
                             RL-ID,
   uRA-Information
                             URA-Information
                                                OPTIONAL.
   sAI
                             SAI.
   gA-Cell
                             GA-Cell
                                        OPTIONAL.
   qA-AccessPointPosition
                             GA-AccessPointPosition OPTIONAL.
   ul-TimeSlot-ISCP-Info
                             UL-TimeSlot-ISCP-Info,
   maxUL-SIR
                             UL-SIR.
   minUL-SIR
                             UL-SIR,
   maximumAllowedIII.TxPower
                             MaximumAllowedULTxPower,
   maximumDLTxPower
                             DL-Power,
   minimumDLTxPower
                             DL-Power,
   uARFCNforNt
                             UARFCN
                                                OPTIONAL,
   cellParameterID
                             CellParameterID
                                                OPTIONAL,
   svncCase
                             SyncCase
                                                OPTIONAL,
   sCH-TimeSlot
                             SCH-TimeSlot
                                                OPTIONAL,
   -- This IE shall be present if Sync Case IE is equal to "Case2". --
                             SCTD-Indicator OPTIONAL,
   sCTD-Indicator
   pCCPCH-Power
                             PCCPCH-Power,
   timingAdvanceApplied
                             TimingAdvanceApplied,
   alphaValue
                             AlphaValue,
   ul-PhysCH-SF-Variation
                             UL-PhysCH-SF-Variation,
   synchronisationConfiguration
                                     SynchronisationConfiguration,
   secondary-CCPCH-Info-TDD
                                     Secondary-CCPCH-Info-TDD
                                                               OPTIONAL,
   ul-CCTrCHInformation
                                     UL-CCTrCHInformationList-RL-SetupRspTDD
                                                                              OPTIONAL,
   dl-CCTrCHInformation
                                     DL-CCTrCHInformationList-RL-SetupRspTDD
                                                                              OPTIONAL,
   dCH-InformationResponse
                                     DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
   dsch-InformationResponse
                                     DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
   usch-InformationResponse
                                     USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
   neighbouring-UMTS-CellInformation
                                            Neighbouring-UMTS-CellInformation OPTIONAL,
   neighbouring-GSM-CellInformation
                                            Neighbouring-GSM-CellInformation OPTIONAL,
                                 ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                      PRESENCE optional } |
                                                                                                               PRESENCE optional } |
     ID id-HCS-Prio
                                                CRITICALITY ignore EXTENSION HCS-Prio
    { ID id-TimeSlot-RL-SetupRspTDD
                                                                                                               PRESENCE conditional } |
                                                CRITICALITY ignore EXTENSION TimeSlot
   -- This IE shall be present if Sync Case IE is Casel. --
    { ID id-Neighbouring-E-UTRA-CellInformation
                                                CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                      PRESENCE optional } |
    PRESENCE optional },
   . . .
UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD
UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
```

```
cCTrCH-ID
                              CCTrCH-ID,
   ul-DPCH-Information
                                 UL-DPCH-InformationList-RL-SetupRspTDD
                                                                           OPTIONAL.
                                  ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   {ID id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD
                                                                CRITICALITY ignore
                                                                                      EXTENSION UL-SIR
                                                                                                                 PRESENCE optional },
UL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD} }
UL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-SetupRspTDD
                                                    CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-SetupRspTDD PRESENCE mandatory
UL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
   repetitionPeriod
                                 RepetitionPeriod,
   repetitionLength
                                 RepetitionLength,
   tDD-DPCHOffset
                                 TDD-DPCHOffset,
   uL-Timeslot-Information
                                 UL-Timeslot-Information,
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL.
UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD}}
DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD
DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
   cCTrCH-ID
                                 CCTrCH-ID,
   dl-DPCH-Information
                                 DL-DPCH-InformationList-RL-SetupRspTDD
                                                                           OPTIONAL.
                                 ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } | -- this is a DCH type CCTrCH power
    ID id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }, -- this is a DCH type CCTrCH power
DL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD} }
```

```
DL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-SetupRspTDD
                                                      CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD PRESENCE mandatory
DL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
                                   RepetitionPeriod,
   repetitionPeriod
   repetitionLength
                                   RepetitionLength,
   tDD-DPCHOffset
                                   TDD-DPCHOffset,
   dL-Timeslot-Information
                                   DL-Timeslot-Information,
                                   ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-SetupRspTDD}}
DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    TYPE DCH-InformationResponse PRESENCE mandatory }
DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationList-RL-SetupRspTDD}}
DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIEs-RL-SetupRspTDD
                                                      CRITICALITY ignore TYPE DSCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-SetupRspTDD
DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
   dsch-ID
                           DSCH-ID,
   dSCH-FlowControlInformation
                                   DSCH-FlowControlInformation,
   bindingID
                          BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
                           ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationList-RL-SetupRspTDD}}
USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationListIEs-RL-SetupRspTDD
                                                      CRITICALITY ignore TYPE USCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-SetupRspTDD
USCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
```

```
usch-ID
                              USCH-ID,
   bindingID
                              BindingID OPTIONAL.
    transportLayerAddress
                              Transport.LaverAddress
                                                     OPTIONAL.
    transportFormatManagement
                              TransportFormatManagement,
    iE-Extensions
                               ProtocolExtensionContainer { {USCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
USCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    -- Mandatory for 1.28Mcps TDD only
     ID id-HSDSCH-RNTI
                                                      CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                           PRESENCE optional}
     ID id-HSDSCH-TDD-Information-Response
                                                                                                                           PRESENCE optional }
                                                      CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
     ID id-DSCH-RNTI
                                                      CRITICALITY ignore EXTENSION DSCH-RNTI
                                                                                                                           PRESENCE optional}
                                                                                                                           PRESENCE optional }
     ID id-Active-MBMS-Bearer-ServiceTDD-PFL
                                                      CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL
     ID id-RL-InformationResponse-RL-SetupRspTDD768
                                                      CRITICALITY ignore EXTENSION RL-InformationResponse-RL-SetupRspTDD768 PRESENCE optional }
     ID id-E-DCH-Information-Response
                                                      CRITICALITY ignore EXTENSION E-DCH-Information-Response
                                                                                                                           PRESENCE optional}
                                                      CRITICALITY ignore EXTENSION E-DCH-768-Information-Response
                                                                                                                           PRESENCE optional }
     ID id-E-DCH-768-Information-Response
     ID id-E-DCH-LCR-Information-Response
                                                      CRITICALITY ignore EXTENSION E-DCH-LCR-Information-Response
                                                                                                                           PRESENCE optional }
     ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
ResponseLCR
               PRESENCE optional |
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR
                          PRESENCE optional |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                     CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR
               PRESENCE optional |
     ID id-E-RNTI-For-FACH
                                                                                                                           PRESENCE optional }
                                                      CRITICALITY ignore EXTENSION E-RNTI
     ID id-H-RNTI-For-FACH
                                                      CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                           PRESENCE optional}
     ID id-DCH-MeasurementOccasion-Information
                                                      CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information
                                                                                                                           PRESENCE optional }
     ID id-Multi-Carrier-EDCH-Response
                                                      CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response
                                                                                                                           PRESENCE optional
     ID id-MU-MIMO-InformationLCR
                                                      CRITICALITY reject EXTENSION MU-MIMO-InformationLCR
                                                                                                                           PRESENCE optional },
RL-LCR-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
   rL-ID
                              RL-ID,
    uRA-Information
                              URA-Information,
    sAI
                              SAI,
    gA-Cell
                              GA-Cell
                                          OPTIONAL.
   qA-AccessPointPosition
                              GA-AccessPointPosition OPTIONAL,
    ul-TimeSlot-ISCP-LCR-Info
                              UL-TimeSlot-ISCP-LCR-Info,
   maxUL-SIR
                              UL-SIR,
   minUL-STR
                              UL-SIR,
   maximumAllowedULTxPower
                              MaximumAllowedULTxPower,
   maximumDLTxPower
                              DL-Power,
   minimumDLTxPower
                              DL-Power,
    11ARFCNforNt
                              UARFCN
                                                      OPTIONAL
    cellParameterID
                              CellParameterID
                                                      OPTIONAL,
    sCTD-Indicator
                       SCTD-Indicator OPTIONAL,
    pCCPCH-Power
                              PCCPCH-Power,
                              AlphaValue,
    alphaValue
```

```
ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                            SynchronisationConfiguration,
    secondary-LCR-CCPCH-Info-TDD
                                            Secondary-LCR-CCPCH-Info-TDD
                                                                                            OPTIONAL.
    ul-LCR-CCTrCHInformation
                                            UL-LCR-CCTrCHInformationList-RL-SetupRspTDD
                                                                                            OPTIONAL,
    dl-LCR-CCTrCHInformation
                                            DL-LCR-CCTrCHInformationList-RL-SetupRspTDD
                                                                                            OPTIONAL.
    dCH-InformationResponse
                                            DCH-InformationResponseList-RL-SetupRspTDD
                                                                                            OPTIONAL,
    dsch-LCR-InformationResponse
                                            DSCH-LCR-InformationResponse-RL-SetupRspTDD
                                                                                            OPTIONAL.
                                            USCH-LCR-InformationResponse-RL-SetupRspTDD
    usch-LCR-InformationResponse
                                                                                            OPTIONAL,
    neighbouring-UMTS-CellInformation
                                            Neighbouring-UMTS-CellInformation
                                                                                            OPTIONAL,
                                            Neighbouring-GSM-CellInformation
    neighbouring-GSM-CellInformation
                                                                                            OPTIONAL,
                                            ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                PRESENCE optional }
     ID id-HCS-Prio
                                                    CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                                PRESENCE optional }
    { ID id-UL-TimingAdvanceCtrl-LCR
                                                                                                                                PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
    -- Mandatory for 1.28Mcps TDD only
    { ID id-PowerControlGAP
                                                    CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                                PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
    { ID id-SixtyfourQAM-DL-SupportIndicator
                                                                                                                                PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION SixtyfourQAM-DL-SupportIndicator
    -- Applicable to 1.28Mcps TDD only
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                PRESENCE optional }
     ID id-IdleIntervalInformation
                                                    CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                                PRESENCE optional } |
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                   CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                PRESENCE optional },
UL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}
UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD
    PRESENCE mandatory }
UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD
UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD ::= SEOUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-LCR-Information
                                UL-DPCH-LCR-InformationList-RL-SetupRspTDD
                                                                                OPTIONAL.
                                ProtocolExtensionContainer { {UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    {ID id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
                                                                        CRITICALITY ignore
                                                                                                EXTENSION UL-SIR
                                                                                                                         PRESENCE optional },
    . . .
UL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }
UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
```

```
ID id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-SetupRspTDD PRESENCE mandatory
UL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE
    repetitionPeriod
                                   RepetitionPeriod,
    repetitionLength
                                   RepetitionLength,
    tDD-DPCHOffset
                                   TDD-DPCHOffset,
    uL-TimeslotLCR-Information
                                   UL-TimeslotLCR-Information,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}
DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD PRESENCE
mandatory }
DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE
    cCTrCH-ID
                                CCTrCH-ID,
    dl-DPCH-LCR-Information
                               DL-DPCH-LCR-InformationList-RL-SetupRspTDD
                                                                                OPTIONAL,
                                ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }
DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
     ID id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD
                                                           CRITICALITY ignore TYPE DL-DPCH-LCR-InformationItem-RL-SetupRspTDD PRESENCE mandatory
DL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE
    repetitionPeriod
                                   RepetitionPeriod,
    repetitionLength
                                   RepetitionLength,
    tDD-DPCHOffset
                                   TDD-DPCHOffset,
    dL-Timeslot-LCR-Information
                                   DL-TimeslotLCR-Information,
    tSTD-Indicator
                                    TSTD-Indicator,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DSCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-LCR-InformationList-RL-SetupRspTDD}}
DSCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE DSCH-LCR-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory
DSCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-SetupRspTDD
DSCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dsch-ID
                                        DSCH-ID.
    dSCH-FlowControlInformation
                                        DSCH-FlowControlInformation,
    bindingID
                                        BindingID OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                OPTIONAL,
    transportFormatManagement
                                        TransportFormatManagement,
    iE-Extensions
                                        ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-SetupRspTDD}}
USCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-LCR-InformationListIEs-RL-SetupRspTDD
                                                            CRITICALITY ignore TYPE USCH-LCR-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory
USCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-SetupRspTDD
USCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    usch-ID
                                USCH-ID,
    bindingID
                                BindingID OPTIONAL,
    transportLayerAddress
                                TransportLayerAddress OPTIONAL,
    transportFormatManagement
                               TransportFormatManagement,
                                ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponse-RL-SetupRspTDD768 ::= SEQUENCE {
   rL-ID
                                RL-ID,
    uRA-Information
                                URA-Information
                                                    OPTIONAL,
    sAI
                                SAI,
    qA-Cell
                                GA-Cell
                                            OPTIONAL,
    qA-AccessPointPosition
                                GA-AccessPointPosition OPTIONAL,
```

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ul-TimeSlot-ISCP-Info
                                UL-TimeSlot-ISCP-Info,
    maxUL-SIR
                                UL-SIR.
    minUL-SIR
                                UL-SIR.
                                MaximumAllowedULTxPower,
    maximumAllowedULTxPower
    maximumDLTxPower
                                DL-Power.
    minimumDLTxPower
                                DL-Power,
    uARFCNforNt.
                                                    OPTIONAL.
                                UARECN
    cellParameterID
                                CellParameterID
                                                    OPTIONAL,
    svncCase
                                SyncCase
                                                    OPTIONAL,
    sCH-TimeSlot
                                SCH-TimeSlot
                                                    OPTIONAL,
    -- This IE shall be present if Sync Case IE is equal to "Case2". --
    sCTD-Indicator
                                SCTD-Indicator OPTIONAL,
    pCCPCH-Power
                                PCCPCH-Power,
    timingAdvanceApplied
                                TimingAdvanceApplied,
    alphaValue
                                AlphaValue,
    ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD768
                                        Secondary-CCPCH-Info-TDD768
                                                                         OPTIONAL,
    ul-CCTrCHInformation768
                                        UL-CCTrCHInformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
    dl-CCTrCHInformation768
                                        DL-CCTrCHInformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL.
    dCH-InformationResponse
                                        DCH-InformationResponseList-RL-SetupRspTDD
                                                                                    OPTIONAL,
                                        DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    dsch-InformationResponse
    usch-InformationResponse
                                        USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
                                                Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-UMTS-CellInformation
    neighbouring-GSM-CellInformation
                                                Neighbouring-GSM-CellInformation OPTIONAL,
    qA-CellAdditionalShapes
                                                GA-CellAdditionalShapes
                                                                             OPTIONAL.
    hCS-Prio
                                                        OPTIONAL,
                                        HCS-Prio
    timeSlot-RL-SetupRspTDD
                                        TimeSlot
                                                    OPTIONAL,
    -- This IE shall be present if Sync Case IE is Casel. --
                                    ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-InformationResponse-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Neighbouring-E-UTRA-CellInformation
                                                        CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                 PRESENCE optional } |
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                        CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                 PRESENCE optional }.
    . . .
UL-CCTrCHInformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD768}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768 CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-SetupRspTDD768
    PRESENCE mandatory }
UL-CCTrCHInformationListIE-RL-SetupRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD768
UL-CCTrCHInformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-Information768
                                        UL-DPCH-InformationList-RL-SetupRspTDD768
                                                                                         OPTIONAL,
    uL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD768
                                                                             OPTIONAL,
                                                                UL-SIR
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
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UL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD768} }
UL-DPCH-InformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
     ID id-UL-DPCH-InformationItem-RL-SetupRspTDD768
                                                        CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-SetupRspTDD768 PRESENCE mandatory
UL-DPCH-InformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   repetitionPeriod
                                 RepetitionPeriod,
   repetitionLength
                                 RepetitionLength,
   tDD-DPCHOffset
                                 TDD-DPCHOffset,
   uL-Timeslot-Information768
                                     UL-Timeslot-Information768,
                                 ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCHInformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD768}}
DL-CCTrCHInformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
   mandatory }
DL-CCTrCHInformationListIE-RL-SetupRspTDD768 ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD768
DL-CCTrCHInformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   cCTrCH-ID
                             CCTrCH-ID,
   dl-DPCH-Information768
                                     DL-DPCH-InformationList-RL-SetupRspTDD768
                                                                                  OPTIONAL,
   cCTrCH-Maximum-DL-Power
                                     DL-Power
                                                    OPTIONAL, -- this is a DCH type CCTrCH power
                                                    OPTIONAL, -- this is a DCH type CCTrCH power
   cCTrCH-Minimum-DL-Power
                                     DL-Power
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD768} }
DL-DPCH-InformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
     ID id-DL-DPCH-InformationItem-RL-SetupRspTDD768
                                                        CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD768 PRESENCE mandatory
```

```
DL-DPCH-InformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   repetitionPeriod
                                  RepetitionPeriod,
   repetitionLength
                                  RepetitionLength,
   tDD-DPCHOffset
                                  TDD-DPCHOffset,
   dL-Timeslot-Information768
                                  DL-Timeslot-Information768.
                                  ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
       *****************
-- RADIO LINK SETUP FAILURE FDD
__ *********************
RadioLinkSetupFailureFDD ::= SEQUENCE {
                                                            {{RadioLinkSetupFailureFDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL.
RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                                                                                 PRESENCE optional
                                          CRITICALITY ignore TYPE D-RNTI
     ID id-CN-PS-DomainIdentifier
                                                                                                 PRESENCE optional
                                          CRITICALITY ignore TYPE CN-PS-DomainIdentifier
     ID id-CN-CS-DomainIdentifier
                                          CRITICALITY ignore TYPE CN-CS-DomainIdentifier
                                                                                                 PRESENCE optional
     ID id-CauseLevel-RL-SetupFailureFDD
                                          CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD
                                                                                                PRESENCE mandatory }
     ID id-UL-SIRTarget
                                          CRITICALITY ignore TYPE UL-SIR
                                                                                                 PRESENCE optional
    ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                 PRESENCE optional },
CauseLevel-RL-SetupFailureFDD ::= CHOICE {
   generalCause
                      GeneralCauseList-RL-SetupFailureFDD,
   rLSpecificCause
                      RLSpecificCauseList-RL-SetupFailureFDD,
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
   cause
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} } 
   iE-Extensions
                                                                                                                                 OPTIONAL,
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
```

```
unsuccessful-RL-InformationRespList-RL-SetupFailureFDD
                                                                UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD
                                                                SuccessfulRL-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} }
    iE-Extensions
                                                                                                                                        OPTIONAL.
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI
                                                CRITICALITY ignore
                                                                        EXTENSION HSDSCH-RNTI
    PRESENCE optional } |
     ID id-HSDSCH-FDD-Information-Response
                                                CRITICALITY ignore
                                                                        EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                                PRESENCE optional } |
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                    CRITICALITY ignore
                                                                                                                 EXTENSION Continuous-Packet-
Connectivity-HS-SCCH-Less-Information-Response
                                                    PRESENCE optional } |
     ID id-SixtyfourQAM-DL-SupportIndicator
                                                CRITICALITY ignore
                                                                        EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                                                PRESENCE optional } |
     ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
                                                                            EXTENSION Additional-HS-Cell-Information-Response-List
    PRESENCE optional }
    { ID id-Additional-EDCH-Cell-Information-Response
                                                            CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-List
        PRESENCE optional },
UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
                                                                        CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
SetupFailureFDD
                    PRESENCE mandatory }
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
    cause
                                Cause.
                                    ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Max-UE-DTX-Cvcle
                                   CRITICALITY ignore
                                                            EXTENSION Max-UE-DTX-Cvcle
                                                                                                  PRESENCE conditional },
    -- This IE shall be present if the Cause IE is set to "Continuous Packet Connectivity UE DTX Cycle not Available".
SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEOUENCE (SIZE (0..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {SuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }
SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD
                                                                    CRITICALITY ignore TYPE SuccessfulRL-InformationResponse-RL-SetupFailureFDD
        PRESENCE mandatory }
SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEOUENCE
    rL-ID
                                            RL-ID,
    rL-Set-ID
                                            RL-Set-ID,
    uRA-Information
                                            URA-Information
                                                                                OPTIONAL,
    sAI
                                            SAI,
```

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GA-Cell
    qA-Cell
                                                        OPTIONAL,
    qA-AccessPointPosition
                                            GA-AccessPointPosition
                                                                                 OPTIONAL.
    received-total-wide-band-power
                                            Received-total-wide-band-power.
    not-Used-secondary-CCPCH-Info
                                                    NULL
                                                                        OPTIONAL.
    dl-CodeInformation
                                            FDD-DL-CodeInformation.
    diversityIndication
                                            DiversityIndication-RL-SetupFailureFDD,
    sSDT-SupportIndicator
                                            SSDT-SupportIndicator,
    maxUL-SIR
                                            UL-SIR,
    minUL-STR
                                            III.-STR.
    closedlooptimingadjustmentmode
                                            Closedlooptimingadjustmentmode
                                                                                OPTIONAL,
    maximumAllowedULTxPower
                                            MaximumAllowedULTxPower,
    maximumDLTxPower
                                            DL-Power,
    minimumDLTxPower
                                            DL-Power,
    primaryCPICH-Power
                                            PrimaryCPICH-Power,
    primaryScramblingCode
                                            PrimaryScramblingCode
                                                                                 OPTIONAL,
    uL-UARFCN
                                            UARECN
                                                                                 OPTIONAL,
    dL-UARFCN
                                            UARFCN
                                                                                 OPTIONAL,
    not-Used-dSCH-InformationResponse-RL-SetupFailureFDD
                                                            NULL
                                                                                 OPTIONAL,
    neighbouring-UMTS-CellInformation
                                            Neighbouring-UMTS-CellInformation
                                                                                OPTIONAL,
    neighbouring-GSM-CellInformation
                                            Neighbouring-GSM-CellInformation
                                                                                OPTIONAL,
    pC-Preamble
                                            PC-Preamble,
    sRB-Delay
                                            SRB-Delay,
    iE-Extensions
                                            ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    . . .
SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-GA-CellAdditionalShapes
                                                        CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                PRESENCE optional }
      ID id-DL-PowerBalancing-ActivationIndicator
                                                        CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                PRESENCE optional }
                                                                                                                                PRESENCE optional }
      ID id-HCS-Prio
                                                        CRITICALITY ignore EXTENSION HCS-Prio
     ID id-Primary-CPICH-Usage-For-Channel-Estimation
                                                       CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation
                                                                                                                                        PRESENCE
optional }
      ID id-Secondary-CPICH-Information
                                                        CRITICALITY ignore EXTENSION Secondary-CPICH-Information
                                                                                                                                 PRESENCE optional }
      ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                        CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                                PRESENCE optional
      ID id-EDCH-RLSet-Id
                                                        CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                                PRESENCE optional
      ID id-EDCH-FDD-DL-ControlChannelInformation
                                                        CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                                PRESENCE optional
      ID id-Initial-DL-DPCH-TimingAdjustment
                                                        CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                                PRESENCE optional }
      ID id-Neighbouring-E-UTRA-CellInformation
                                                        CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                PRESENCE optional }
      ID id-HSDSCH-PreconfigurationInfo
                                                        CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                                PRESENCE optional
      ID id-F-DPCH-SlotFormat
                                                        CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                                PRESENCE optional
      ID id-Non-Serving-RL-Preconfig-Info
                                                        CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                                PRESENCE optional }
                                                        CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                PRESENCE optional },
DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining
                                    Combining-RL-SetupFailureFDD,
                                NonCombiningOrFirstRL-RL-SetupFailureFDD
    nonCombiningOrFirstRL
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
    iE-Extensions
                                ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
```

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CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                       CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                     PRESENCE optional
   { ID id-EDCH-FDD-InformationResponse
                                       CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                            PRESENCE optional
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
   dCH-InformationResponse
                                       DCH-InformationResponse,
   iE-Extensions
                                       ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
   . . .
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional
   . . .
RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ****************
-- RADIO LINK SETUP FAILURE TDD
      ******************
RadioLinkSetupFailureTDD ::= SEQUENCE {
                                                         {{RadioLinkSetupFailureTDD-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
   . . .
RadioLinkSetupFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CauseLevel-RL-SetupFailureTDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD
                                                                                                     PRESENCE mandatory } |
     ID id-CriticalityDiagnostics
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                     PRESENCE optional
CauseLevel-RL-SetupFailureTDD ::= CHOICE {
                     GeneralCauseList-RL-SetupFailureTDD,
   generalCause
   rLSpecificCause
                     RLSpecificCauseList-RL-SetupFailureTDD,
   . . .
GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
   iE-Extensions
                            ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} }
                                                                                                            OPTIONAL,
GeneralCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
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RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
   unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
                                                        ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs} }
   iE-Extensions
   OPTIONAL,
RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                                       PRESENCE optional },
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD RNSAP-PROTOCOL-IES ::= {
         id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD
                                                                       CRITICALITY ignore
                                                                                           TYPE
                                                                                                  UnsuccessfulRL-InformationResponse-RL-
SetupFailureTDD
                  PRESENCE
                             mandatory
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
   rL-ID
                             RL-ID,
   cause
                              Cause,
                             ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
      -- RADIO LINK ADDITION REQUEST FDD
RadioLinkAdditionRequestFDD ::= SEQUENCE {
                                 ProtocolIE-Container
   protocolIEs
                                                           {{RadioLinkAdditionRequestFDD-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
                                                                                                                    OPTIONAL,
RadioLinkAdditionRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-UL-SIRTarget
                                     CRITICALITY reject TYPE UL-SIR
                                                                                  PRESENCE mandatory
     ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-InformationList-RL-AdditionRqstFDD
                                                                                                                                      } |
                                                                                                                PRESENCE mandatory
     ID id-Active-Pattern-Sequence-Information CRITICALITY reject TYPE Active-Pattern-Sequence-Information
                                                                                                          PRESENCE optional },
```

```
RL-InformationList-RL-AdditionRgstFDD
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Information-RL-
AdditionRgstFDD-IEs} }
RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
   rI.-ID
                                  RL-ID,
   c-TD
                                  C-ID,
    frameOffset
                                   FrameOffset,
    chipOffset
                                   ChipOffset,
    diversityControlField
                                   DiversityControlField,
   primaryCPICH-EcNo
                                   PrimaryCPICH-EcNo
                                                          OPTIONAL,
   not-Used-sSDT-CellID
                                  NULL
                                                  OPTIONAL,
    transmitDiversityIndicator
                                   TransmitDiversityIndicator
                                                                  OPTIONAL,
                                   ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-Information-RL-AdditionRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DLReferencePower
                                                  CRITICALITY ignore EXTENSION DL-Power
                                                                                                                            PRESENCE optional }
     ID id-Enhanced-PrimaryCPICH-EcNo
                                                  CRITICALITY ignore EXTENSION Enhanced-PrimaryCPICH-EcNo
                                                                                                                            PRESENCE optional } |
     ID id-RL-Specific-DCH-Info
                                                  CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                            PRESENCE optional }
     ID id-DelayedActivation
                                                  CRITICALITY reject EXTENSION DelayedActivation
                                                                                                                            PRESENCE optional
     ID id-RL-Specific-EDCH-Information
                                                  CRITICALITY reject EXTENSION RL-Specific-EDCH-Information
                                                                                                                            PRESENCE optional }
                                                  CRITICALITY reject EXTENSION EDCH-RL-Indication
     ID id-EDCH-RL-Indication
                                                                                                                            PRESENCE optional
     ID id-SynchronisationIndicator
                                                  CRITICALITY ignore EXTENSION SynchronisationIndicator
                                                                                                                            PRESENCE optional }
     ID id-HSDSCH-PreconfigurationSetup
                                                  CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                            PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Setup
                                                  CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                            PRESENCE optional }
     ID id-FTPICH-Information
                                                  CRITICALITY ignore EXTENSION FTPICH-Information
                                                                                                                            PRESENCE optional },
    . . .
RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DPC-Mode
                                                                                                                            PRESENCE optional }
                                                      CRITICALITY reject EXTENSION DPC-Mode
     ID id-Permanent-NAS-UE-Identity
                                                      CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                                            PRESENCE optional}
     ID id-Serving-EDCHRL-Id
                                                                                                                            PRESENCE optional}
                                                      CRITICALITY reject EXTENSION EDCH-Serving-RL
     ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                      CRITICALITY ignore EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed PRESENCE optional
     ID id-HS-DSCH-serving-cell-change-information
                                                      CRITICALITY reject EXTENSION HS-DSCH-serving-cell-change-information
                                                                                                                            PRESENCE optional }
     ID id-Serving-cell-change-CFN
                                                      CRITICALITY reject EXTENSION CFN
                                                                                                                            PRESENCE optional}
     ID id-EDPCH-Information
                                                      CRITICALITY reject EXTENSION EDPCH-Information-RLAdditionReg-FDD
                                                                                                                            PRESENCE optional }
                                                      CRITICALITY reject EXTENSION EDCH-FDD-Information
                                                                                                                            PRESENCE optional }
     ID id-EDCH-FDD-Information
     ID id-Additional-HS-Cell-Information-RL-Addition CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Addition-List PRESENCE
optional}|
    -- This IE shall be present if E-DPCH Information is present
    { ID id-UE-AggregateMaximumBitRate
                                                      CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate
                                                                                                                            PRESENCE optional } |
    { ID id-Additional-EDCH-Cell-Information-RL-Add-Req CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Add-Req
                                                                                                                                   PRESENCE
optional}
    { ID id-UL-CLTD-Information
                                                      CRITICALITY reject EXTENSION UL-CLTD-Information
                                                                                                                            PRESENCE optional },
```

```
Additional-HS-Cell-Information-RL-Addition-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Addition-ItemIEs
Additional-HS-Cell-Information-RL-Addition-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                                RL-ID,
    C-TD
                                                C-ID,
   hs-Dsch-fdd-secondary-serving-Information Hs-Dsch-fdd-secondary-serving-Information,
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-RL-Add-Req ::=SEQUENCE{
    setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency
                                                                                Setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency,
   iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-RL-Add-Req-ExtIEs} } OPTIONAL,
Additional-EDCH-Cell-Information-RL-Add-Req-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Setup-Or-Addition-Of-EDCH-On-secondary-UL-Frequency::= CHOICE {
                    Additional-EDCH-Setup-Info,
    addition
                    Additional-EDCH-Cell-Information-To-Add-List,
EDPCH-Information-RLAdditionReg-FDD::= SEQUENCE {
   maxSet-E-DPDCHs
                                                Max-Set-E-DPDCHs,
    ul-PunctureLimit
                                                PunctureLimit,
    e-TFCS-Information
                                                E-TFCS-Information,
    e-TTI
                                                E-TTI,
    e-DPCCH-PO
                                                E-DPCCH-PO,
    e-RGCH-2-IndexStepThreshold
                                                E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                                E-RGCH-3-IndexStepThreshold,
    hARO-Info-for-E-DCH
                                                HARQ-Info-for-E-DCH,
    iE-Extensions
                                                ProtocolExtensionContainer { { EDPCH-Information-RLAdditionReq-FDD-ExtIEs} } 
                                                                                                                                        OPTIONAL,
    . . .
EDPCH-Information-RLAdditionReq-FDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-HSDSCH-Configured-Indicator
                                        CRITICALITY reject EXTENSION HSDSCH-Configured-Indicator
                                                                                                                     PRESENCE mandatory |
-- This shall be present for EDPCH configuration with HSDCH
{ ID id-MinimumReducedE-DPDCH-GainFactor
                                                                                                                    PRESENCE optional },
                                                CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
    . . .
```

```
-- RADIO LINK ADDITION REQUEST TDD
  ****************
RadioLinkAdditionRequestTDD ::= SEQUENCE {
   protocolIEs
                                                           {{RadioLinkAdditionRequestTDD-IEs}},
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}
                                                                                                                   OPTIONAL,
RadioLinkAdditionRequestTDD-IES RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
RL-Information-RL-AdditionRgstTDD ::= SEQUENCE {
   rL-ID
                                 RL-ID,
   c-ID
                                 C-ID,
   frameOffset
                                 FrameOffset,
   diversityControlField
                                 DiversityControlField,
                                 PrimaryCCPCH-RSCP
   primaryCCPCH-RSCP
                                                       OPTIONAL,
                                 DL-TimeSlot-ISCP-Info
   dL-TimeSlot-ISCP-Info
                                                       OPTIONAL,
   --for 3.84Mcps TDD only
   iE-Extensions
                                 ProtocolExtensionContainer { {RL-Information-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
   . . .
RL-Information-RL-AdditionRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   EXTENSION DL-TimeSlot-ISCP-LCR-Information
   PRESENCE optional } |
   -- for 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info
                                                 CRITICALITY ignore
                                                                        EXTENSION RL-Specific-DCH-Info
                                                                                                                      PRESENCE optional }
     ID id-DelayedActivation
                                                 CRITICALITY reject
                                                                        EXTENSION DelayedActivation
                                                                                                                      PRESENCE optional }
    ID id-UL-Synchronisation-Parameters-LCR
                                                                        EXTENSION UL-Synchronisation-Parameters-LCR
                                                 CRITICALITY reject
                                                                                                                     PRESENCE optional }
   -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-PrimaryCCPCH-RSCP-Delta
                                                 CRITICALITY ignore
                                                                                                                      PRESENCE optional } |
                                                                        EXTENSION PrimaryCCPCH-RSCP-Delta
    { ID id-IdleIntervalConfigurationIndicator
                                                 CRITICALITY ignore
                                                                                                                      PRESENCE optional },
                                                                        EXTENSION NULL
   . . .
RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                                       CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                               PRESENCE optional } |
     ID id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD
                                                       CRITICALITY notify EXTENSION UL-CCTrCH-InformationList-RL-AdditionRgstTDD PRESENCE
optional}|
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD
                                                       CRITICALITY notify EXTENSION DL-CCTrCH-InformationList-RL-AdditionRgstTDD
   PRESENCE optional } |
     ID id-HSDSCH-TDD-Information
                                                       CRITICALITY reject EXTENSION HSDSCH-TDD-Information
                                                                                                               PRESENCE optional}
     ID id-HSPDSCH-RL-ID
                                                       CRITICALITY reject EXTENSION RL-ID
                                                                                                               PRESENCE optional}
                                                                                                               PRESENCE optional}
     ID id-E-DCH-Information
                                                       CRITICALITY reject EXTENSION E-DCH-Information
     ID id-E-DCH-Serving-RL-ID
                                                       CRITICALITY reject EXTENSION RL-ID
                                                                                                               PRESENCE optional}
     ID id-E-DCH-768-Information
                                                                                                               PRESENCE optional}
                                                       CRITICALITY reject EXTENSION E-DCH-768-Information
                                                                                                               PRESENCE optional }
     ID id-E-DCH-LCR-Information
                                                       CRITICALITY reject EXTENSION E-DCH-LCR-Information
```

```
{ ID id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                        CRITICALITY reject EXTENSION ContinuousPacketConnectivity-DRX-InformationLCR
   PRESENCE optional } |
   { ID id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                        CRITICALITY reject EXTENSION HS-DSCH-Semi-PersistentScheduling-Information-LCR
   PRESENCE optional } |
   { ID id-E-DCH-Semi-PersistentScheduling-Information-LCR
                                                        CRITICALITY reject EXTENSION E-DCH-Semi-PersistentScheduling-Information-LCR
   PRESENCE optional } |
     ID id-DCH-MeasurementType-Indicator
                                                     CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator PRESENCE optional
     ID id-Multi-Carrier-EDCH-Setup
                                                     CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Info
                                                                                                          PRESENCE optional |
   { ID id-MU-MIMO-Indicator
                                                     CRITICALITY reject EXTENSION MU-MIMO-Indicator
                                                                                                          PRESENCE optional },
   . . .
UL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                          ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationItemIEs-RL-AdditionRgstTDD } }
UL-CCTrCH-InformationItemIEs-RL-AdditionRgstTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE
optional},
   . . .
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                            CCTrCH-ID,
   uplinkStepSizeLCR
                            TDD-TPC-UplinkStepSize-LCR
                                                       OPTIONAL,
   -- Applicable to 1.28Mcps TDD only
   iE-Extensions
                            ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
DL-CCTrCH-InformationList-RL-AdditionRqstTDD
                                          ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-AdditionRgstTDD } }
DL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE
optional},
   . . .
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                            CCTrCH-ID,
   downlinkStepSize
                            TDD-TPC-DownlinkStepSize OPTIONAL,
   iE-Extensions
                            ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
   . . .
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
__ **********************
```

```
-- RADIO LINK ADDITION RESPONSE FDD
  RadioLinkAdditionResponseFDD ::= SEOUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                              {{RadioLinkAdditionResponseFDD-IEs}},
                                   ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
   protocolExtensions
                                                                                                                          OPTIONAL.
RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD
                                                          CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD
    PRESENCE mandatory } |
   { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                               PRESENCE optional
RL-InformationResponseList-RL-AdditionRspFDD
                                                   ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-AdditionRspFDD} }
RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
                                                              CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD PRESENCE
mandatory }
RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
   rL-ID
                                   RL-ID,
   rL-Set-ID
                                   RL-Set-ID,
    uRA-Information
                                   URA-Information
                                                       OPTIONAL,
    sAI
                                   SAI.
                                   GA-Cell
   qA-Cell
                                              OPTIONAL,
    gA-AccessPointPosition
                                   GA-AccessPointPosition OPTIONAL,
   received-total-wide-band-power Received-total-wide-band-power,
   not-Used-secondary-CCPCH-Info
                                          NULL
                                                      OPTIONAL,
   dl-CodeInformation
                                   DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication
                                   DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator
                                       SSDT-SupportIndicator,
   minUL-SIR
                                       UL-SIR,
   maxUL-SIR
                                       UL-SIR,
    closedlooptimingadjustmentmode
                                       Closedlooptimingadjustmentmode OPTIONAL,
   maximumAllowedULTxPower
                                       MaximumAllowedULTxPower,
   maximumDLTxPower
                                       DL-Power,
   minimumDLTxPower
                                       DL-Power,
   neighbouring-UMTS-CellInformation
                                       Neighbouring-UMTS-CellInformation OPTIONAL,
   neighbouring-GSM-CellInformation
                                       Neighbouring-GSM-CellInformation OPTIONAL,
   pC-Preamble
                                       PC-Preamble,
    sRB-Delay
                                       SRB-Delay,
   primaryCPICH-Power
                                       PrimaryCPICH-Power,
                                       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
```

```
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                  CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                            PRESENCE optional }
     ID id-DL-PowerBalancing-ActivationIndicator
                                                  CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                            PRESENCE optional
     ID id-HCS-Prio
                                                  CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                            PRESENCE optional
     ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                  CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                            PRESENCE optional
     ID id-EDCH-RLSet-Id
                                                  CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                            PRESENCE optional
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                  CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                            PRESENCE optional
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                                                                                            PRESENCE optional }
                                                  CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
     ID id-F-DPCH-SlotFormat
                                                  CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                            PRESENCE optional
     ID id-Neighbouring-E-UTRA-CellInformation
                                                  CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                            PRESENCE optional
     ID id-HSDSCH-PreconfigurationInfo
                                                  CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                            PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Info
                                                  CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                            PRESENCE optional }
     ID id-Neighbouring-UMTS-CellInformation-Ext
                                                  CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                            PRESENCE optional }
     ID id-FTPICH-Information-Response
                                                  CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                            PRESENCE optional },
DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}
DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
    combining
                                  Combining-RL-AdditionRspFDD,
   nonCombining
                                  NonCombining-RL-AdditionRspFDD
Combining-RL-AdditionRspFDD ::= SEQUENCE {
   rL-ID
                               ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                                                                                             PRESENCE optional
                                          CRITICALITY ignore EXTENSION DCH-InformationResponse
    { ID id-EDCH-FDD-InformationResponse
                                          CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                     PRESENCE optional
                                                                                                                                           },
    . . .
NonCombining-RL-AdditionRspFDD ::= SEQUENCE
   dCH-InformationResponse
                                          DCH-InformationResponse,
   iE-Extensions
                                              ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-FDD-InformationResponse
                                          CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                     PRESENCE optional
                                                                                                                                           },
    . . .
RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-DSCH-serving-cell-change-informationResponse CRITICALITY ignore EXTENSION HS-DSCH-serving-cell-change-informationResponse
       PRESENCE optional } |
```

```
{ ID id-E-DCH-Serving-cell-change-informationResponse
                                                          CRITICALITY ignore EXTENSION E-DCH-Serving-cell-change-informationResponse
           PRESENCE optional } |
    { ID id-MAChs-ResetIndicator
                                                          CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                           PRESENCE optional } |
    { ID id-Additional-HS-Cell-Change-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
    PRESENCE optional } |
    { ID id-Additional-EDCH-Cell-Information-Response-RLAdd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLAddList
    PRESENCE optional },
Additional-HS-Cell-Change-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Change-Information-Response-
ItemIEs
Additional-HS-Cell-Change-Information-Response-ItemIEs ::=SEOUENCE{
   hSPDSCH-RL-ID
                                                              RL-ID,
   hSDSCH-RNTI
                                                              HSDSCH-RNTI,
   hS-DSCH-Secondary-Serving-Cell-Change-Information-Response HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
   iE-Extensions
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
         *******************
-- RADIO LINK ADDITION RESPONSE TDD
  ******************
RadioLinkAdditionResponseTDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkAdditionResponseTDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
   protocolExtensions
                                                                                                                         OPTIONAL,
RadioLinkAdditionResponseTDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-RL-InformationResponse-RL-AdditionRspTDD
                                                          CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD PRESENCE optional
    --Mandatory for 3.84Mcps TDD only
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                               PRESENCE optional
                                                                                                                    },
   . . .
RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
                                      RL-ID,
   uRA-Information
                                      URA-Information
                                                          OPTIONAL,
    sAI
                                      SAI,
   qA-Cell
                                      GA-Cell
                                                  OPTIONAL,
```

```
gA-AccessPointPosition
                                    GA-AccessPointPosition OPTIONAL,
   ul-TimeSlot-ISCP-Info
                                    UL-TimeSlot-ISCP-Info.
   minUL-SIR
                                    UL-SIR.
   maxUL-SIR
                                    UL-SIR,
   maximumAllowedULTxPower
                                    MaximumAllowedULTxPower.
   maximumDLTxPower
                                    DL-Power,
   minimumDLTxPower
                                    DL-Power,
   pCCPCH-Power
                                    PCCPCH-Power,
   timingAdvanceApplied
                                    TimingAdvanceApplied,
   alphaValue
                                    AlphaValue,
                                    UL-PhysCH-SF-Variation,
   ul-PhysCH-SF-Variation
   synchronisationConfiguration
                                    SynchronisationConfiguration,
   secondary-CCPCH-Info-TDD
                                    Secondary-CCPCH-Info-TDD
                                                                                OPTIONAL,
   ul-CCTrCHInformation
                                    UL-CCTrCHInformationList-RL-AdditionRspTDD
                                                                                OPTIONAL,
   dl-CCTrCHInformation
                                    DL-CCTrCHInformationList-RL-AdditionRspTDD
                                                                                OPTIONAL,
   dCH-Information
                                    DCH-Information-RL-AdditionRspTDD
                                                                                OPTIONAL,
   dSCH-InformationResponse
                                    DSCH-InformationResponse-RL-AdditionRspTDD
                                                                                OPTIONAL,
   uSCH-InformationResponse
                                    USCH-InformationResponse-RL-AdditionRspTDD
                                                                                OPTIONAL,
                                    Neighbouring-UMTS-CellInformation OPTIONAL,
   neighbouring-UMTS-CellInformation
   neighbouring-GSM-CellInformation
                                    Neighbouring-GSM-CellInformation OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                               CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                    PRESENCE optional }
     ID id-HCS-Prio
                                               CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                    PRESENCE optional }
     ID id-Neighbouring-E-UTRA-CellInformation
                                               CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                    PRESENCE optional }
     PRESENCE optional },
UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD
UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   cCTrCH-ID
                             CCTrCH-ID,
   ul-DPCH-Information
                                UL-DPCH-InformationList-RL-AdditionRspTDD
                                                                             OPTIONAL.
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }
```

```
UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
     ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
                                    UL-Timeslot-Information,
    uL-Timeslot-Information
                                    ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCHInformationList-RL-AdditionRspTDD ::= Protocolie-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD
    PRESENCE mandatory }
DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD
DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    dl-DPCH-Information
                                    DL-DPCH-InformationList-RL-AdditionRspTDD
                                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                                           PRESENCE optional
                                                                                                                                } | -- this is a DCH
                                                                                    EXTENSION DL-Power
type CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD
                                                                                                                                }, -- this is a DCH
                                                            CRITICALITY ignore
                                                                                    EXTENSION DL-Power
                                                                                                           PRESENCE optional
type CCTrCH power
DL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD} }
DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
     ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
                                    RepetitionPeriod,
    repetitionPeriod
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    dL-Timeslot-Information
                                    DL-Timeslot-Information,
```

```
ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication
                                       DiversityIndication-RL-AdditionRspTDD,
                                    ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-Information-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining
                   Combining-RL-AdditionRspTDD,
    nonCombining NonCombining-RL-AdditionRspTDD
Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
                               ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse
                                           CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                                PRESENCE optional
    . . .
NonCombining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse
                               DCH-InformationResponse,
                                    ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationListIEs-RL-AdditionRspTDD}}
DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIE-RL-AdditionRspTDD
                                                     CRITICALITY ignore TYPE DSCH-InformationListIE-RL-AdditionRspTDD
                                                                                                                                       PRESENCE
mandatory }
DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-AdditionRspTDD
```

```
DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   dsch-ID
                          DSCH-ID.
   transportFormatManagement TransportFormatManagement,
   dSCH-FlowControlInformation
                                 DSCH-FlowControlInformation,
   diversityIndication
                          DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
   -- diversityIndication present, if CHOICE = nonCombining
   iE-Extensions
                          ProtocolExtensionContainer { {DSCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
   bindingID
                         BindingID OPTIONAL,
   transportLayerAddress TransportLayerAddress
                                                OPTIONAL,
   iE-Extensions
                          ProtocolExtensionContainer { { DiversityIndication-RL-AdditionRspTDD2-ExtIEs} } OPTIONAL,
   . . .
DiversityIndication-RL-AdditionRspTDD2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationListIEs-RL-AdditionRspTDD}}
USCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
   { ID id-USCH-InformationListIE-RL-AdditionRspTDD
                                                   CRITICALITY ignore TYPE USCH-InformationListIE-RL-AdditionRspTDD
                                                                                                                                PRESENCE
mandatory }
USCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-AdditionRspTDD
USCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   uSCH-ID
                          USCH-ID,
   transportFormatManagement TransportFormatManagement,
   diversityIndication
                         DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
   -- diversityIndication present, if CHOICE = nonCombining
   iE-Extensions
                          ProtocolExtensionContainer { {USCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   . . .
USCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }
   -- Mandatory for 1.28Mcps TDD only
     ID id-Active-MBMS-Bearer-ServiceTDD-PFL
                                                 CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL
                                                                                                                        PRESENCE optional }
     ID id-HSDSCH-TDD-Information-Response
                                                 CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                        PRESENCE optional}
    { ID id-DSCH-RNTI
                                                 CRITICALITY ignore EXTENSION DSCH-RNTI
                                                                                                                        PRESENCE optional }
```

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{ ID id-RL-InformationResponse-RL-AdditionRspTDD768 CRITICALITY ignore EXTENSION RL-InformationResponse-RL-AdditionRspTDD768
                                                                                                                                        PRESENCE
optional}|
      ID id-E-DCH-Information-Response
                                                    CRITICALITY ignore EXTENSION E-DCH-Information-Response
                                                                                                                                 PRESENCE optional}
      ID id-E-DCH-768-Information-Response
                                                    CRITICALITY ignore
                                                                        EXTENSION E-DCH-768-Information-Response
                                                                                                                                 PRESENCE optional }
      ID id-E-DCH-LCR-Information-Response
                                                    CRITICALITY ignore
                                                                        EXTENSION E-DCH-LCR-Information-Response
                                                                                                                                 PRESENCE optional }
      ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                        CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
ResponseLCR
                PRESENCE optional } |
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                        CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR
                            PRESENCE optional } |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                        CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR PRESENCE optional } |
      ID id-DCH-MeasurementOccasion-Information
                                                    CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information
                                                                                                                                 PRESENCE optional }
      ID id-Multi-Carrier-EDCH-Response
                                                    CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response
                                                                                                                                 PRESENCE optional }
     ID id-MU-MIMO-InformationLCR
                                                    CRITICALITY reject EXTENSION MU-MIMO-InformationLCR
                                                                                                                                 PRESENCE optional }.
RL-LCR-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE
    rL-ID
                                RL-ID,
    uRA-Information
                                URA-Information,
    SAT
                                SAT.
    qA-Cell
                                GA-Cell
                                            OPTIONAL,
                                GA-AccessPointPosition OPTIONAL,
    gA-AccessPointPosition
    ul-TimeSlot-ISCP-LCR-Info
                                UL-TimeSlot-ISCP-LCR-Info,
    maxUL-SIR
                                UL-SIR,
    minUL-SIR
                                UL-SIR.
                                PCCPCH-Power,
    pCCPCH-Power
    maximumAllowedULTxPower
                                MaximumAllowedULTxPower,
    maximumDLTxPower
                                DL-Power,
    minimumDLTxPower
                                DL-Power,
    alphaValue
                                AlphaValue,
    ul-PhysCH-SF-Variation
                                UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
    secondary-LCR-CCPCH-Info-TDD
                                        Secondary-LCR-CCPCH-Info-TDD
                                                                                             OPTIONAL,
                                        UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD
    ul-CCTrCH-LCR-Information
                                                                                             OPTIONAL,
    dl-CCTrCH-LCR-Information
                                        DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                             OPTIONAL,
    dCH-InformationResponse
                                        DCH-InformationResponseList-RL-AdditionRspTDD
                                                                                             OPTIONAL,
                                        DSCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL,
    dsch-LCR-InformationResponse
    usch-LCR-InformationResponse
                                            USCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformation
                                                Neighbouring-UMTS-CellInformation
    neighbouring-GSM-CellInformation
                                                Neighbouring-GSM-CellInformation
                                                                                              OPTIONAL,
                                                ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
      ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                 PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION HCS-Prio
      ID id-HCS-Prio
                                                                                                                                 PRESENCE optional }
     ID id-UL-TimingAdvanceCtrl-LCR
                                                    CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
                                                                                                                                 PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD only
    { ID id-PowerControlGAP
                                                    CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                                 PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
    { ID id-UARFCNforNt
                                                                                                                                 PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION UARFON
```

```
-- Applicable to 1.28Mcps TDD only
     PRESENCE optional } |
     ID id-IdleIntervalInformation
                                           CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                           PRESENCE optional }
    ID id-Neighbouring-UMTS-CellInformation-Ext CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                           PRESENCE optional },
UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD }}
UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
                          CCTrCH-ID,
   cCTrCH-ID
   ul-DPCH-LCR-Information
                                 UL-DPCH-LCR-InformationList-RL-AdditionRspTDD
                              ProtocolExtensionContainer { {UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }
UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
   { ID id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
                                                    CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
mandatory }
UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE
   repetitionPeriod
                              RepetitionPeriod,
   repetitionLength
                              RepetitionLength,
                              TDD-DPCHOffset,
   tDD-DPCHOffset
   uL-TimeslotLCR-Information
                              UL-TimeslotLCR-Information,
   iE-Extensions
                              ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD}}
DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
```

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DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEOUENCE {
   cCTrCH-ID
                              CCTrCH-ID.
   dl-DPCH-LCR-Information
                              DL-DPCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                OPTIONAL.
                              ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }
DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
                                                             CRITICALITY ignore TYPE DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
mandatory }
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
                                  RepetitionPeriod,
   repetitionPeriod
   repetitionLength
                                  RepetitionLength,
   tDD-DPCHOffset
                                  TDD-DPCHOffset,
   dL-TimeslotLCR-Information
                                  DL-TimeslotLCR-Information,
    tSTD-Indicator
                                  TSTD-Indicator.
                                  ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-AdditionRspTDD}}
DCH-InformationResponseListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    DSCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-LCR-InformationList-RL-AdditionRspTDD}}
DSCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD
                                                             CRITICALITY ignore TYPE DSCH-LCR-InformationListIEs-RL-AdditionRspTDD PRESENCE
mandatory }
DSCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-AdditionRspTDD
DSCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   dsch-ID
                          DSCH-ID,
   dSCH-FlowControlInformation
                                  DSCH-FlowControlInformation,
   bindingID
                          BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
```

```
transportFormatManagement TransportFormatManagement,
    iE-Extensions
                            ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    . . .
DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-AdditionRspTDD}}
USCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD
                                                                 CRITICALITY ignore TYPE USCH-LCR-InformationListIEs-RL-AdditionRspTDD PRESENCE
mandatory }
USCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-AdditionRspTDD
USCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    usch-ID
                                USCH-ID,
    transportFormatManagement
                                TransportFormatManagement,
    diversityIndication
                                DiversityIndication-RL-AdditionRspTDD2
                                                                             OPTIONAL,
                                ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponse-RL-AdditionRspTDD768 ::= SEQUENCE {
    rI.-ID
                                        RL-ID,
    uRA-Information
                                        URA-Information
                                                             OPTIONAL,
    sAI
                                        SAI,
    qA-Cell
                                        GA-Cell
                                                    OPTIONAL,
    qA-AccessPointPosition
                                        GA-AccessPointPosition OPTIONAL.
    ul-TimeSlot-ISCP-Info
                                        UL-TimeSlot-ISCP-Info,
    minUL-SIR
                                        UL-SIR,
    maxUL-SIR
                                        UL-SIR,
    maximumAllowedULTxPower
                                        MaximumAllowedULTxPower,
    maximumDLTxPower
                                        DL-Power,
    minimumDLTxPower
                                        DL-Power,
    pCCPCH-Power
                                        PCCPCH-Power,
    timingAdvanceApplied
                                        TimingAdvanceApplied,
    alphaValue
                                        AlphaValue,
    ul-PhysCH-SF-Variation
                                        UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                        SynchronisationConfiguration,
                                                                                         OPTIONAL,
    secondary-CCPCH-Info-TDD768
                                        Secondary-CCPCH-Info-TDD768
    ul-CCTrCHInformation768
                                        UL-CCTrCHInformationList-RL-AdditionRspTDD768
                                                                                             OPTIONAL,
    dl-CCTrCHInformation768
                                        DL-CCTrCHInformationList-RL-AdditionRspTDD768
                                                                                             OPTIONAL,
    dCH-Information
                                        DCH-Information-RL-AdditionRspTDD
                                                                                         OPTIONAL,
    dSCH-InformationResponse
                                        DSCH-InformationResponse-RL-AdditionRspTDD
                                                                                         OPTIONAL,
    uSCH-InformationResponse
                                        USCH-InformationResponse-RL-AdditionRspTDD
                                                                                         OPTIONAL,
                                        Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-UMTS-CellInformation
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neighbouring-GSM-CellInformation
                                      Neighbouring-GSM-CellInformation OPTIONAL,
   qA-CellAdditionalShapes
                                      GA-CellAdditionalShapes
                                                                     OPTIONAL.
   hCS-Prio
                                      HCS-Prio
                                                                     OPTIONAL.
   iE-Extensions
                                      ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
RL-InformationResponse-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Neighbouring-E-UTRA-CellInformation
                                                 CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                          PRESENCE optional } |
     PRESENCE optional },
UL-CCTrCHInformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768 CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-AdditionRspTDD768
    PRESENCE mandatory }
UL-CCTrCHInformationListIE-RL-AdditionRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD768
UL-CCTrCHInformationItem-RL-AdditionRspTDD768 ::= SEQUENCE {
   cCTrCH-ID
                              CCTrCH-ID,
   ul-DPCH-Information768
                                      UL-DPCH-InformationList-RL-AdditionRspTDD768
                                                                                        OPTIONAL,
                                  ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
UL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-DPCH-InformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD768} }
UL-DPCH-InformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD
                                                         CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD768 PRESENCE
mandatory }
UL-DPCH-InformationItem-RL-AdditionRspTDD768 ::= SEQUENCE
   repetitionPeriod
                                      RepetitionPeriod,
   repetitionLength
                                      RepetitionLength,
                                      TDD-DPCHOffset,
    tDD-DPCHOffset
   uL-Timeslot-Information768
                                      UL-Timeslot-Information768,
   iE-Extensions
                                      ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
    . . .
UL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCHInformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD768}}
```

```
DL-CCTrCHInformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-CCTrCHInformationListIE-RL-AdditionRspTDD768 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD768
DL-CCTrCHInformationItem-RL-AdditionRspTDD768 ::= SEQUENCE {
   cCTrCH-ID
                                   CCTrCH-ID,
   dl-DPCH-Information768
                                   DL-DPCH-InformationList-RL-AdditionRspTDD768
                                                                                  OPTIONAL,
   cCTrCH-Maximum-DL-Power
                                   DL-Power
                                              OPTIONAL, -- this is a DCH type CCTrCH power
                                   DL-Power OPTIONAL, -- this is a DCH type CCTrCH power
   cCTrCH-Minimum-DL-Power
   iE-Extensions
                                   ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL.
DL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD768} }
DL-DPCH-InformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
   { ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD768
                                                         CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD768 PRESENCE
mandatory }
DL-DPCH-InformationItem-RL-AdditionRspTDD768 ::= SEQUENCE
                                RepetitionPeriod,
   repetitionPeriod
   repetitionLength
                                RepetitionLength,
   tDD-DPCHOffset
                                TDD-DPCHOffset,
   dL-Timeslot-Information768
                                DL-Timeslot-Information768,
                                ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  *******************
-- RADIO LINK ADDITION FAILURE FDD
__ *********************
RadioLinkAdditionFailureFDD ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{RadioLinkAdditionFailureFDD-IEs}},
                                ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}
   protocolExtensions
                                                                                                               OPTIONAL,
RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
```

```
TYPE CauseLevel-RL-AdditionFailureFDD
    { ID id-CauseLevel-RL-AdditionFailureFDD
                                                                CRITICALITY
                                                                                ignore
                    PRESENCE
                               mandatory }
    { ID id-CriticalityDiagnostics
                                            CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                  PRESENCE optional
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause
                       GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause
                        RLSpecificCauseList-RL-AdditionFailureFDD,
GeneralCauseList-RL-AdditionFailureFDD ::= SEOUENCE {
    cause
                                                Cause,
    iE-Extensions
                                                ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    OPTIONAL,
    . . .
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEOUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                    SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {
{UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD
                                                                       CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
                        PRESENCE mandatory }
AdditionFailureFDD
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE
   rL-ID
                                    RL-ID,
    cause
                                    Cause,
    iE-Extensions
                                    ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL.
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= Sequence { SuccessfulRL-InformationFailureFDD ::= Sequence { SuccessfulRL-Informati
InformationResponse-RL-AdditionFailureFDD-IEs} }
SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IES RNSAP-PROTOCOL-IES ::= {
       { ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD
                                                                                                                   CRITICALITY ignore TYPE SuccessfulRL-InformationResponse-RL-
AdditionFailureFDD
                                      PRESENCE mandatory }
SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
      rI.-ID
                                                               RL-ID,
      rL-Set-ID
                                                               RL-Set-ID,
      uRA-Information
                                                               URA-Information
                                                                                                OPTIONAL,
      SAT
                                                               SAI,
      qA-Cell
                                                               GA-Cell
                                                                                   OPTIONAL,
      qA-AccessPointPosition
                                                               GA-AccessPointPosition
                                                                                                            OPTIONAL.
      received-total-wide-band-power
                                                               Received-total-wide-band-power,
      not-Used-secondary-CCPCH-Info
                                                                            NULL
                                                                                               OPTIONAL,
      dl-CodeInformation
                                                               DL-CodeInformationList-RL-AdditionFailureFDD,
      diversityIndication
                                                               DiversityIndication-RL-AdditionFailureFDD,
      -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
      -- the tabular message format in subclause 9.1.
      sSDT-SupportIndicator
                                                               SSDT-SupportIndicator,
      minUL-SIR
                                                               UL-SIR,
      maxUL-SIR
                                                               UL-SIR,
      closedlooptimingadjustmentmode
                                                               Closedlooptimingadjustmentmode OPTIONAL,
      maximumAllowedULTxPower
                                                               MaximumAllowedULTxPower,
      maximumDLTxPower
                                                               DL-Power,
      minimumDLTxPower
                                                               DL-Power,
                                                               Neighbouring-UMTS-CellInformation OPTIONAL,
      neighbouring-UMTS-CellInformation
                                                               Neighbouring-GSM-CellInformation OPTIONAL,
      neighbouring-GSM-CellInformation
      primaryCPICH-Power
                                                               PrimaryCPICH-Power,
      pC-Preamble
                                                               PC-Preamble,
      sRB-Delay
                                                               SRB-Delay,
                                                               ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
      iE-Extensions
SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
         ID id-GA-CellAdditionalShapes
                                                                                         CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                                                                                                           PRESENCE optional }
         ID id-DL-PowerBalancing-ActivationIndicator
                                                                                         CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                                                                                                           PRESENCE optional
         ID id-HCS-Prio
                                                                                         CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                                                                                                           PRESENCE optional
         ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                                                         CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                                                                                                           PRESENCE optional
         ID id-EDCH-RLSet-Id
                                                                                                                                                                                                           PRESENCE optional
                                                                                         CRITICALITY ignore EXTENSION RL-Set-ID
         ID id-EDCH-FDD-DL-ControlChannelInformation
                                                                                         CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                                                                                                           PRESENCE optional
         ID id-Initial-DL-DPCH-TimingAdjustment
                                                                                         CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                                                                                                           PRESENCE optional }
         ID id-Neighbouring-E-UTRA-CellInformation
                                                                                         CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                                                                                                           PRESENCE optional }
         ID id-HSDSCH-PreconfigurationInfo
                                                                                         CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                                                                                                           PRESENCE optional }
                                                                                         CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
         ID id-F-DPCH-SlotFormat
                                                                                                                                                                                                           PRESENCE optional }
         ID id-Non-Serving-RL-Preconfig-Info
                                                                                         CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                                                                                                           PRESENCE optional }
         ID id-Neighbouring-UMTS-CellInformation-Ext
                                                                                         CRITICALITY ignore EXTENSION Neighbouring-UMTS-CellInformation-Ext
                                                                                                                                                                                                           PRESENCE optional },
DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }}
```

```
DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
   combining
                               Combining-RL-AdditionFailureFDD,
   nonCombining
                               NonCombining-RL-AdditionFailureFDD
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
   iE-Extensions
                           ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
     ID id-DCH-InformationResponse
                                      CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                 PRESENCE optional
   { ID id-EDCH-FDD-InformationResponse
                                                                                                        PRESENCE optional
                                      CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
NonCombining-RL-AdditionFailureFDD ::= SEQUENCE {
   dCH-InformationResponse
                           DCH-InformationResponse,
                                         ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-EDCH-FDD-InformationResponse
                                      CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                        PRESENCE optional
   . . .
RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-HS-DSCH-serving-cell-change-informationResponse CRITICALITY ignore EXTENSION HS-DSCH-serving-cell-change-informationResponse
      PRESENCE optional |
   PRESENCE optional } |
   { ID id-Additional-HS-Cell-Change-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
          PRESENCE optional |
   { ID id-MAChs-ResetIndicator
                                                    CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                        PRESENCE optional |
   { ID id-Additional-EDCH-Cell-Information-Response-RLAdd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-RLAddList
   PRESENCE optional },
   -- RADIO LINK ADDITION FAILURE TDD
RadioLinkAdditionFailureTDD ::= SEQUENCE {
```

```
{{RadioLinkAdditionFailureTDD-IEs}},
                                  ProtocolIE-Container
   protocolIEs
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}
                                                                                                                      OPTIONAL,
RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
     PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics
                                   CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                            PRESENCE optional
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
   generalCause
                      GeneralCauseList-RL-AdditionFailureTDD,
   rLSpecificCause
                      RLSpecificCauseList-RL-AdditionFailureTDD,
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
                              ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
   iE-Extensions
                                                                                                                  OPTIONAL,
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
   unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                            Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
                                                            ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs} }
   iE-Extensions
       OPTIONAL,
RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD } }
Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD RNSAP-PROTOCOL-IES ::= {
          id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD
                                                                     CRITICALITY ignore
                                                                                            TYPE
                                                                                                   UnsuccessfulRL-InformationResponse-RL-
AdditionFailureTDD PRESENCE mandatory}
UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD ::= SEQUENCE {
   rL-ID
                              RL-ID,
    cause
                              Cause,
   iE-Extensions
                              ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs} } OPTIONAL,
UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK DELETION REQUEST
  *****************
RadioLinkDeletionRequest ::= SEQUENCE {
                                                       {{RadioLinkDeletionRequest-IEs}},
   protocolIEs
                              ProtocolIE-Container
   protocolExtensions
                              ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}}
                                                                                                        OPTIONAL
RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
   . . .
                                     ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-DeletionRqst-
RL-InformationList-RL-DeletionRqst
IEs} }
RL-Information-RL-DeletionRqst-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Information-RL-DeletionRgst
                                      CRITICALITY notify TYPE RL-Information-RL-DeletionRqst
                                                                                                PRESENCE mandatory
RL-Information-RL-DeletionRqst ::= SEQUENCE {
                           RL-ID,
                           ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK DELETION RESPONSE
  RadioLinkDeletionResponse ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                      {{RadioLinkDeletionResponse-IEs}},
                               ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
```

```
RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                            PRESENCE optional
RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  RADIO LINK RECONFIGURATION PREPARE FDD
RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
                                                           {{RadioLinkReconfigurationPrepareFDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
                                                                                                                           OPTIONAL,
   . . .
RadioLinkReconfigurationPrepareFDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedOueuingTime
                                     CRITICALITY reject TYPE AllowedQueuingTime
                                                                                          PRESENCE optional
     ID id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                        CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD
   PRESENCE optional } |
   { ID id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                        CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD
   PRESENCE optional
     ID id-FDD-DCHs-to-Modify
                                 CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                               PRESENCE optional
                             CRITICALITY reject TYPE DCH-FDD-Information
                                                                               PRESENCE optional
     ID id-DCHs-to-Add-FDD
     ID id-DCH-DeleteList-RL-ReconfPrepFDD
                                             CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
                                                                                                          PRESENCE optional
     ID id-RL-InformationList-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD
                                                                                                          PRESENCE optional
     PRESENCE
optional },
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
   ul-ScramblingCode
                                 UL-ScramblingCode
                                                        OPTIONAL,
   ul-SIRTarget
                                 UL-SIR
                                                        OPTIONAL,
   minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
   maxNrOfUL-DPDCHs
                                 MaxNrOfUL-DPCHs
                                                        OPTIONAL
   -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 --,
   ul-PunctureLimit
                                 PunctureLimit
                                                        OPTIONAL,
   tFCS
                                 TFCS
                                        OPTIONAL,
   ul-DPCCH-SlotFormat
                                 UL-DPCCH-SlotFormat
                                                        OPTIONAL,
   diversityMode
                                 DiversityMode
                                                        OPTIONAL,
   not-Used-sSDT-CellIDLength
                                 NULL
                                             OPTIONAL,
   not-Used-s-FieldLength
                                 NULL
                                                 OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
```

```
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
                                  TFCS OPTIONAL,
   dl-DPCH-SlotFormat
                                   DL-DPCH-SlotFormat
                                                          OPTIONAL,
   nrOfDLchannelisationcodes
                                  NrOfDLchannelisationcodes OPTIONAL,
   tFCI-SignallingMode
                                  TFCI-SignallingMode
                                                          OPTIONAL,
   tFCI-Presence
                                   TFCI-Presence
                                                          OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is from 12 to 16 --,
   multiplexingPosition
                                  MultiplexingPosition
                                                              OPTIONAL,
   limitedPowerIncrease
                                  LimitedPowerIncrease
                                                              OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-Power-Information-RL-ReconfPrepFDD CRITICALITY reject EXTENSION DL-DPCH-Power-Information-RL-ReconfPrepFDD
                                                                                                                                    PRESENCE
optional },
DL-DPCH-Power-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   powerOffsetInformation
                                           PowerOffsetInformation-RL-ReconfPrepFDD,
    fdd-TPC-DownlinkStepSize
                                           FDD-TPC-DownlinkStepSize,
   innerLoopDLPCStatus
                                           InnerLoopDLPCStatus,
                                           ProtocolExtensionContainer { { DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs } }
   iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
                                           PowerOffset,
   pO1-ForTFCI-Bits
   pO2-ForTPC-Bits
                                           PowerOffset,
   pO3-ForPilotBits
                                           PowerOffset,
   iE-Extensions
                                           ProtocolExtensionContainer { { PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs} } }
                                                                                                                            OPTIONAL,
PowerOffsetInformation-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepFDD
                                          ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD
DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                                   ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
```

```
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfPrepFDD
                                            ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-ReconfPrepFDD-
IEs} }
RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-ReconfPrepFDD
                                                CRITICALITY reject TYPE RL-Information-RL-ReconfPrepFDD
                                                                                                                PRESENCE mandatory
RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
                                RL-ID.
    not-Used-sSDT-Indication
                                        NULL
                                                    OPTIONAL,
    not-Used-sSDT-CellIdentity
                                        NULL
                                                    OPTIONAL,
    transmitDiversityIndicator
                                    TransmitDiversityIndicator
                                                                    OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and is not equal to "none"
    iE-Extensions
                                    ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-DLReferencePower
                                                CRITICALITY ignore EXTENSION DL-Power
                                                                                                                        PRESENCE optional
     ID id-RL-Specific-DCH-Info
                                                CRITICALITY ignore EXTENSION RL-Specific-DCH-Info
                                                                                                                        PRESENCE optional
     ID id-DL-DPCH-TimingAdjustment
                                                CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                        PRESENCE optional
     ID id-Phase-Reference-Update-Indicator
                                                CRITICALITY ignore EXTENSION Phase-Reference-Update-Indicator
                                                                                                                        PRESENCE optional
     ID id-RL-Specific-EDCH-Information
                                                CRITICALITY reject EXTENSION RL-Specific-EDCH-Information
                                                                                                                        PRESENCE optional
     ID id-EDCH-RL-Indication
                                                CRITICALITY reject EXTENSION EDCH-RL-Indication
                                                                                                                        PRESENCE optional
     ID id-HSDSCH-PreconfigurationSetup
                                                CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                        PRESENCE optional
     ID id-Non-Serving-RL-Preconfig-Setup
                                                CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                        PRESENCE optional
     ID id-Non-Serving-RL-Preconfig-Removal
                                                CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                        PRESENCE optional }
     ID id-FTPICH-Information-Reconf
                                                CRITICALITY ignore EXTENSION FTPICH-Information-Reconf
                                                                                                                        PRESENCE optional }.
RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-HSDSCH-FDD-Information
                                                            CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                                PRESENCE optional}
     ID id-HSDSCH-Information-to-Modify
                                                                                                                                PRESENCE optional}
                                                            CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
     ID id-HSDSCH-MACdFlows-to-Add
                                                            CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                                PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Delete
                                                            CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                                PRESENCE optional}
     ID id-HSPDSCH-RL-ID
                                                                                                                                PRESENCE optional}
                                                            CRITICALITY reject EXTENSION RL-ID
     ID id-EDPCH-Information
                                                            CRITICALITY reject EXTENSION EDPCH-Information-RLReconfPrepare-FDD PRESENCE optional
     ID id-EDCH-FDD-Information
                                                            CRITICALITY reject EXTENSION EDCH-FDD-Information
                                                                                                                                PRESENCE optional}
                                                            CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify
     ID id-EDCH-FDD-Information-To-Modify
                                                                                                                                PRESENCE optional}
     ID id-EDCH-MACdFlows-To-Add
                                                            CRITICALITY reject EXTENSION EDCH-MACdFlows-Information
                                                                                                                                PRESENCE optional}
     ID id-EDCH-MACdFlows-To-Delete
                                                            CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete
                                                                                                                                PRESENCE optional}
     ID id-Serving-EDCHRL-Id
                                                            CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                                PRESENCE optional }
     ID id-F-DPCH-Information-RL-ReconfPrepFDD
                                                            CRITICALITY reject EXTENSION F-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                                PRESENCE optional }
     ID id-Fast-Reconfiguration-Mode
                                                            CRITICALITY ignore EXTENSION Fast-Reconfiguration-Mode
                                                                                                                                PRESENCE optional}
     ID id-CPC-Information
                                                            CRITICALITY reject EXTENSION CPC-Information
                                                                                                                                PRESENCE optional }
```

```
{ ID id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                            CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Prep
    PRESENCE optional } |
     ID id-UE-AggregateMaximumBitRate
                                                            CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate
                                                                                                                                PRESENCE optional | |
     ID id-Additional-EDCH-Cell-Information-RL-Reconf-Prep CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Reconf-Prep
    PRESENCE optional } |
    { ID id-UL-CLTD-Information-Reconf
                                                            CRITICALITY reject EXTENSION UL-CLTD-Information-Reconf
                                                                                                                                PRESENCE optional },
    . . .
Additional-HS-Cell-Information-RL-Reconf-Prep ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID
                                                                                                          OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information
                                                                                                          OPTIONAL,
    hs-DscH-secondary-serving-Information-To-Modify Hs-DscH-secondary-serving-Information-To-Modify
                                                                                                          OPTIONAL,
                                                    HS-DSCH-Secondary-Serving-Remove
    hS-HS-DSCH-Secondary-Serving-Remove
                                                                                        OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs
                                                                RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-RL-Reconf-Prep ::=SEQUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency
                                                                                                         Setup-Or-ConfigurationChange-Or-Removal-
Of-EDCH-On-secondary-UL-Frequency,
                                    ProtocolExtensionContainer { Additional-EDCH-Cell-Information-RL-Reconf-Prep-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-EDCH-Cell-Information-RL-Reconf-Prep-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    powerOffsetInformation
                                    PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD,
    fdd-dl-TPC-DownlinkStepSize
                                    FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                    LimitedPowerIncrease,
    innerLoopDLPCStatus
                                    InnerLoopDLPCStatus,
    iE-Extensions
                                    ProtocolExtensionContainer { { F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
    OPTIONAL,
F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-F-DPCH-SlotFormatSupportRequest
                                                CRITICALITY reject
                                                                            EXTENSION F-DPCH-SlotFormatSupportRequest
                                                                                                                                PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                            CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                PRESENCE optional },
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEQUENCE {
```

```
PowerOffset,
   po2-ForTPC-Bits
   -- This IE shall be ignored by DRNS
   iE-Extensions
                                 ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                           OPTIONAL.
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- RADIO LINK RECONFIGURATION PREPARE TDD
            RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                          {{RadioLinkReconfigurationPrepareTDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
                                ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}
   protocolExtensions
                                                                                                                       OPTIONAL.
RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                    CRITICALITY reject TYPE AllowedQueuingTime
                                                                                       PRESENCE optional
    PRESENCE
optional } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                          CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
   PRESENCE optional } |
                                                          CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
   { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
   PRESENCE optional } |
   { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                      CRITICALITY notify TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                                                                                           PRESENCE
optional
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                          CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
   PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                          CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
   PRESENCE optional } |
     ID id-TDD-DCHs-to-Modify
                                CRITICALITY reject TYPE TDD-DCHs-to-Modify
                                                                            PRESENCE optional
     ID id-DCHs-to-Add-TDD
                             CRITICALITY reject TYPE DCH-TDD-Information
                                                                            PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfPrepTDD
                                           CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
                                                                                                      PRESENCE optional
                                           CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepTDD
     ID id-DSCH-ModifyList-RL-ReconfPrepTDD
                                                                                                             PRESENCE optional
     ID id-DSCHs-to-Add-TDD
                                CRITICALITY reject TYPE DSCH-TDD-Information
                                                                                   PRESENCE optional
     ID id-DSCH-DeleteList-RL-ReconfPrepTDD
                                           CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepTDD
                                                                                                             PRESENCE optional
     ID id-USCH-ModifyList-RL-ReconfPrepTDD
                                           CRITICALITY reject TYPE USCH-ModifyList-RL-ReconfPrepTDD
                                                                                                             PRESENCE optional
     ID id-USCHs-to-Add
                             CRITICALITY reject TYPE USCH-Information
                                                                            PRESENCE optional
     ID id-USCH-DeleteList-RL-ReconfPrepTDD
                                           CRITICALITY reject TYPE USCH-DeleteList-RL-ReconfPrepTDD
                                                                                                             PRESENCE optional
   . . .
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                               ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
AddInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
```

```
ID id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-AddInformation-RL-ReconfPrepTDD
                                                                                                                         PRESENCE mandatory
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD ::= SEQUENCE {
                              CCTrCH-ID.
    cCTrCH-ID
    t.FCS
                              TFCS.
    tFCI-Coding
                              TFCI-Coding,
    punctureLimit
                                  PunctureLimit,
                                  ProtocolExtensionContainer { {UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget
                              CRITICALITY reject
                                                     EXTENSION
                                                                                PRESENCE optional } |
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                                PRESENCE
    optional },
    -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                     ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    PRESENCE
mandatory }
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD ::= SEQUENCE
                              CCTrCH-ID,
    cCTrCH-ID
    t FCS
                              TFCS
                                         OPTIONAL,
   tFCI-Coding
                              TFCI-Coding
                                                     OPTIONAL,
   punctureLimit
                                  PunctureLimit
                                                            OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget
                              CRITICALITY reject
                                                     EXTENSION
                                                                    UL-SIR
                                                                               PRESENCE optional } |
    -- This IE shall be applicable for 1.28Mcps TDD only.
    { ID id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION
                                                                                                          TDD-TPC-UplinkStepSize-LCR
       PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                     ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD
                                                        CRITICALITY notify TYPE UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD
                                                                                                                                PRESENCE
mandatory }
```

```
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                        CCTrCH-ID,
   iE-Extensions
                              ProtocolExtensionContainer { {UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                           ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
AddInformation-RL-ReconfPrepTDD-IEs} }
DL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory }
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                  CCTrCH-ID,
   t FCS
                           TFCS,
                         TFCI-Coding,
   tFCI-Coding
   punctureLimit
                            PunctureLimit,
   cCTrCH-TPCList
                              CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
                              ProtocolExtensionContainer { {DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE
   optional },
   . . .
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                               CCTrCH-ID,
                               ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                              ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs} }
DL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
   PRESENCE mandatory }
```

```
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
                           CCTrCH-ID,
   cCTrCH-ID
   t FCS
                                        OPTIONAL.
                           TFCI-Coding
   tFCI-Coding
                                                   OPTIONAL,
   punctureLimit
                             PunctureLimit
                                                           OPTIONAL.
                                 CCTrCH-TPCModifyList-RL-ReconfPrepTDD
   cCTrCH-TPCList
                                                                          OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD CRITICALITY reject
                                                                                      EXTENSION
                                                                                                        TDD-TPC-DownlinkStepSize
       PRESENCE optional },
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
                                   ::= SEOUENCE {
   cCTrCH-ID
                                 ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                  ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
DeleteInformation-RL-ReconfPrepTDD-IEs} }
DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                             CCTrCH-ID,
                                 ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfPrepTDD
                                        ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD
DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dCH-ID
                             DCH-ID,
   iE-Extensions
                             ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
```

```
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-ModifyList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-ReconfPrepTDD
DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dscH-ID
                                        DSCH-ID,
    dl-ccTrCHID
                                        CCTrCH-ID
                                                                         OPTIONAL,
                                        TrCH-SrcStatisticsDescr OPTIONAL,
    trChSourceStatisticsDescriptor
                                        TransportFormatSet
    transportFormatSet
                                                                         OPTIONAL,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                         OPTIONAL,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                         OPTIONAL,
                                                                         OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
                                    ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                                                                                                         PRESENCE optional
                                                                                                                                                } |
                                            CRITICALITY ignore EXTENSION TrafficClass
    { ID id-BindingID
                                            CRITICALITY ignore
                                                                    EXTENSION BindingID
                                                                                                           PRESENCE optional
                                                                                                                               } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                            CRITICALITY ignore
                                                                                TransportLayerAddress
                                                                                                                  PRESENCE optional
                                                                     EXTENSION
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                            CRITICALITY ignore
                                                                    EXTENSION
                                                                                Tnl0os
                                                                                                                         PRESENCE optional
                                                                                                                                                },
    -- Shall be ignored if bearer establishment with ALCAP.
DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-ReconfPrepTDD
DSCH-DeleteItem-RL-ReconfPrepTDD ::= SEOUENCE {
    dsch-id
    iE-Extensions
                                    ProtocolExtensionContainer { {DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-ReconfPrepTDD
USCH-ModifyItem-RL-ReconfPrepTDD ::= SEOUENCE {
    uSCH-ID
                                        USCH-ID.
    ul-ccTrCHID
                                        CCTrCH-ID
                                                                         OPTIONAL,
    trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet
                                        TransportFormatSet
                                                                         OPTIONAL,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                         OPTIONAL,
                                        SchedulingPriorityIndicator
    schedulingPriorityIndicator
                                                                         OPTIONAL,
    bLER
                                        BLER
                                                                         OPTIONAL,
```

```
transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    rb-Info
                                        RB-Info
                                                                        OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL.
USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                                                                            PRESENCE optional
                                   CRITICALITY ignore EXTENSION TrafficClass
    { ID id-BindingID
                                   CRITICALITY ignore EXTENSION
                                                                    BindingID
                                                                                PRESENCE
                                                                                                optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                                                                                                                               } |
                                           CRITICALITY ignore
                                                                    EXTENSION
                                                                                TransportLayerAddress
                                                                                                                 PRESENCE
                                                                                                                                optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                        CRITICALITY
                                                        ignore
                                                                    EXTENSION
                                                                                Tnl0os
                                                                                            PRESENCE
                                                                                                                optional
    . . .
USCH-DeleteList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-ReconfPrepTDD
USCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID
    iE-Extensions
                                    ProtocolExtensionContainer { {USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP
                                                                                                                        PRESENCE optional }
     ID id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeSlot-ISCP-Info
                                                                                                                        PRESENCE optional}
     ID id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional}
     ID id-HSDSCH-TDD-Information
                                                CRITICALITY reject EXTENSION HSDSCH-TDD-Information
                                                                                                                        PRESENCE optional}
     ID id-HSDSCH-Information-to-Modify
                                                CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                        PRESENCE optional
                                                                                                                        PRESENCE optional
     ID id-HSDSCH-MACdFlows-to-Add
                                                CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                        PRESENCE optional}
     ID id-HSDSCH-MACdFlows-to-Delete
                                                CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSPDSCH-RL-ID
                                                CRITICALITY reject EXTENSION RL-ID
                                                                                                                        PRESENCE optional}
     ID id-PDSCH-RL-ID
                                                CRITICALITY ignore EXTENSION RL-ID
                                                                                                                        PRESENCE optional}
     ID id-UL-Synchronisation-Parameters-LCR
                                                CRITICALITY ignore EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                        PRESENCE optional }
-- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
                                                                                                                        PRESENCE optional}
     ID id-RL-Information-RL-ReconfPrepTDD
                                                CRITICALITY ignore EXTENSION RL-Information-RL-ReconfPrepTDD
                                                                                                                        PRESENCE optional
     ID id-PrimaryCCPCH-RSCP-Delta
                                                CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP-Delta
     ID id-E-DCH-Information-Reconfig
                                                CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
                                                                                                                        PRESENCE optional}
     ID id-E-DCH-Serving-RL-ID
                                                                                                                        PRESENCE optional}
                                                CRITICALITY reject EXTENSION RL-ID
     ID id-E-DCH-768-Information-Reconfig
                                                CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                        PRESENCE optional }
     ID id-E-DCH-LCR-Information-Reconfig
                                                                                                                        PRESENCE optional }
                                                CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
     ID id-NeedforIdleInterval
                                                                                                                        PRESENCE optional }
                                                CRITICALITY ignore EXTENSION NeedforIdleInterval
     ID id-CPC-InformationLCR
                                                CRITICALITY reject EXTENSION CPC-InformationLCR
                                                                                                                        PRESENCE optional}
                                                CRITICALITY ignore EXTENSION RNTI-Allocation-Indicator
     ID id-RNTI-Allocation-Indicator
                                                                                                                        PRESENCE optional}
     ID id-DCH-MeasurementType-Indicator
                                                CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator
                                                                                                                        PRESENCE optional}
     ID id-Multi-Carrier-EDCH-Reconfigure
                                                CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Reconfigure
                                                                                                                        PRESENCE optional }
     ID id-MU-MIMO-Indicator
                                                CRITICALITY reject EXTENSION MU-MIMO-Indicator
                                                                                                                        PRESENCE optional },
```

```
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-InformationIE-RL-ReconfPrepTDD
RL-InformationIE-RL-ReconfPrepTDD ::= SEQUENCE {
   rL-ID
   rL-Specific-DCH-Info
                                    RL-Specific-DCH-Info
                                                                  OPTIONAL.
                                    ProtocolExtensionContainer { { RL-InformationIE-RL-ReconfPrepTDD-ExtIEs} }
   iE-Extensions
                                                                                                              OPTIONAL,
RL-InformationIE-RL-ReconfPrepTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION READY FDD
  ******************
RadioLinkReconfigurationReadyFDD ::= SEQUENCE {
                                                          {{RadioLinkReconfigurationReadyFDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
                                 ProtocolExtensionContainer {{RadioLinkReconfigurationReadyFDD-Extensions}}
   protocolExtensions
                                                                                                                       OPTIONAL,
RadioLinkReconfigurationReadyFDD-IES RNSAP-PROTOCOL-IES ::= {
    PRESENCE optional } |
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
   { ID id-CriticalityDiagnostics
                                                                                          PRESENCE optional
RL-InformationResponseList-RL-ReconfReadyFDD
                                                ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-
RL-ReconfReadyFDD-IEs} }
RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD
                                                      CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfReadyFDD
   PRESENCE mandatory }
RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE
   rL-ID
                                    RL-ID,
   max-UL-SIR
                                    UL-SIR
                                                                                                                      OPTIONAL,
   min-UL-SIR
                                    UL-SIR
                                                                                                                      OPTIONAL,
   maximumDLTxPower
                                    DL-Power
                                                                                                                      OPTIONAL,
   minimumDLTxPower
                                    DL-Power
                                                                                                                      OPTIONAL,
   not-Used-secondary-CCPCH-Info
                                                                                                                      OPTIONAL,
   dl-CodeInformationList
                                    DL-CodeInformationList-RL-ReconfReadyFDD
                                                                                                                      OPTIONAL,
   dCHInformationResponse
                                    DCH-InformationResponseList-RL-ReconfReadyFDD
                                                                                                                      OPTIONAL,
   not-Used-dSCHsToBeAddedOrModified
                                                                                                                      OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs} }
                                                                                                                      OPTIONAL,
   . . .
```

```
RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-UpdatedIndicator
                                                      CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                             PRESENCE optional } |
     ID id-Primary-CPICH-Usage-For-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation
                                                                                                                                    PRESENCE
optional }|
     ID id-Secondary-CPICH-Information-Change
                                                       CRITICALITY ignore EXTENSION Secondary-CPICH-Information-Change
                                                                                                                             PRESENCE optional }
                                                                                                                             PRESENCE optional }
     ID id-EDCH-FDD-InformationResponse
                                                      CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
     ID id-EDCH-RLSet-Id
                                                      CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                             PRESENCE optional }
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                      CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                             PRESENCE optional
     ID id-F-DPCH-SlotFormat
                                                      CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                             PRESENCE optional }
                                                                                                                             PRESENCE optional }
     ID id-HSDSCH-PreconfigurationInfo
                                                      CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
     ID id-Non-Serving-RL-Preconfig-Info
                                                      CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                             PRESENCE optional }
     ID id-FTPICH-Information-Response
                                                      CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                             PRESENCE optional },
DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfReadyFDD }}
DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
DCH-InformationResponseList-RL-ReconfReadyFDD
                                                          ::= ProtocolIE-Single-Container { { DCH-InformationResponseListIEs-RL-ReconfReadyFDD} }
DCH-InformationResponseListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse
                                      CRITICALITY ignore TYPE DCH-InformationResponse
                                                                                              PRESENCE mandatory
RadioLinkReconfigurationReadyFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI
                                               CRITICALITY ignore
                                                                      EXTENSION HSDSCH-RNTI
    PRESENCE optional } |
     ID id-HSDSCH-FDD-Information-Response
                                               CRITICALITY ignore
                                                                      EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                             PRESENCE optional } |
    { ID id-MAChs-ResetIndicator
                                               CRITICALITY ignore
                                                                      EXTENSION MAChs-ResetIndicator
    PRESENCE optional } |
     ID id-Fast-Reconfiguration-Permission
                                              CRITICALITY ignore
                                                                      EXTENSION Fast-Reconfiguration-Permission
                                                                                                                             PRESENCE optional } |
                                                                                                              EXTENSION Continuous-Packet-
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                  CRITICALITY ignore
Connectivity-HS-SCCH-Less-Information-Response
                                                   PRESENCE optional } |
    { ID id-Additional-HS-Cell-RL-Reconf-Response
                                                 CRITICALITY ignore
                                                                          EXTENSION Additional-HS-Cell-RL-Reconf-Response
                                                                                                                                    PRESENCE
optional }
    { ID id-Additional-EDCH-Cell-Information-ResponseRLReconf
                                                                  CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-
                       PRESENCE optional },
RLReconf-List
Additional-HS-Cell-RL-Reconf-Response
                                     ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-RL-Reconf-Response-ItemIEs
Additional-HS-Cell-RL-Reconf-Response-ItemIEs
                                              ::=SEOUENCE{
   hSPDSCH-RL-ID
                                                      RL-ID,
   hSDSCH-RNTI
                                                      HSDSCH-RNTI,
   hS-DSCH-FDD-Secondary-Serving-Information-Response HS-DSCH-FDD-Secondary-Serving-Information-Response,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-RL-Reconf-Response-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
Additional-HS-Cell-RL-Reconf-Response-ItemIEs-ExtIEs
                                                      RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RECONFIGURATION READY TDD
  RadioLinkReconfigurationReadyTDD ::= SEQUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                              {{RadioLinkReconfigurationReadvTDD-IEs}},
   protocolExtensions
                                   ProtocolExtensionContainer {{RadioLinkReconfigurationReadyTDD-Extensions}}
                                                                                                                              OPTIONAL,
RadioLinkReconfigurationReadyTDD-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-ReconfReadyTDD
                           CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfReadyTDD
                                                                                              PRESENCE optional
    --This RL-InformationResponse-RL-ReconfReadyTDD is for the first RL repetition in the list.
    --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfReadyTDD.
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
    { ID id-CriticalityDiagnostics
                                                                                               PRESENCE optional
RL-InformationResponse-RL-ReconfReadyTDD ::= SEOUENCE {
   rL-ID
                                   RL-ID,
   max-UL-SIR
                                   UL-SIR
                                                   OPTIONAL,
   min-UL-SIR
                                   UL-SIR
                                                   OPTIONAL,
   maximumDLTxPower
                                   DL-Power
                                                   OPTIONAL,
   minimumDLTxPower
                                   DL-Power
                                                   OPTIONAL,
                                   Secondary-CCPCH-Info-TDD
   secondary-CCPCH-Info-TDD
                                                              OPTIONAL,
   ul-CCTrCH-Information
                                   UL-CCTrCH-InformationList-RL-ReconfReadyTDD
                                                                                  OPTIONAL,
   dl-CCTrCH-Information
                                   DL-CCTrCH-InformationList-RL-ReconfReadyTDD OPTIONAL,
   dCHInformationResponse
                                   DCH-InformationResponseList-RL-ReconfReadyTDD OPTIONAL,
   dSCHsToBeAddedOrModified
                                   DSCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL,
    uSCHsToBeAddedOrModified
                                   USCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs} }
                                                                                                                     OPTIONAL,
RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimingAdvanceCtrl-LCR
                                                          CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
   PRESENCE optional } |
    --For 1.28Mcps TDD only
    { ID id-secondary-LCR-CCPCH-Info-TDD
                                                           CRITICALITY ignore EXTENSION Secondary-LCR-CCPCH-Info-TDD
                                                                                                                                    PRESENCE
optional }
    --For 1.28Mcps TDD only
    { ID id-secondary-CCPCH-Info-RL-ReconfReadyTDD768
                                                          CRITICALITY ignore EXTENSION Secondary-CCPCH-Info-TDD768
                                                                                                                                    PRESENCE
optional }
   { ID id-UARFCNforNt
                                                          CRITICALITY ignore EXTENSION UARFON
                                                                                                                                    PRESENCE
optional },
```

```
-- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationList-RL-ReconfReadyTDD
                                              ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-ReconfReadyTDD
UL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
   cCTrCH-ID
                                CCTrCH-ID.
   ul-DPCH-AddInformation
                                UL-DPCH-InformationAddList-RL-ReconfReadyTDD
                                                                                  OPTIONAL,
   --For 3.84Mcps TDD only
   ul-DPCH-ModifyInformation
                                UL-DPCH-InformationModifyList-RL-ReconfReadyTDD
                                                                                      OPTIONAL,
                                UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
   ul-DPCH-DeleteInformation
                                                                                      OPTIONAL,
                                ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD
                                                             CRITICALITY ignore
                                                                                  EXTENSION UL-DPCH-LCR-InformationAddList-RL-
ReconfReadyTDD
                 PRESENCE optional }
   --For 1.28Mcps TDD only
                                                                                  EXTENSION UL-DPCH-InformationAddList-RL-
   { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768
                                                             CRITICALITY ignore
                     PRESENCE optional },
ReconfReadyTDD768
   --For 7.68Mcps TDD only
   . . .
UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
   repetitionPeriod
                                RepetitionPeriod,
   repetitionLength
                                RepetitionLength,
   tDD-DPCHOffset
                                TDD-DPCHOffset,
                                UL-TimeslotLCR-Information,
   uL-TimeslotLCR-Info
   iE-Extensions
                                ProtocolExtensionContainer { {UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE optional }
UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
```

```
repetitionPeriod
                                RepetitionPeriod,
   repetitionLength
                                RepetitionLength,
   t.DD-DPCHOffset.
                                TDD-DPCHOffset.
   rxTimingDeviationForTA
                                RxTimingDeviationForTA
                                                             OPTIONAL,
   uL-Timeslot-Information
                                UL-Timeslot-Information,
   iE-Extensions
                                ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
   { ID id-RxTimingDeviationForTAext
                                                             EXTENSION RxTimingDeviationForTAext
                                                                                                     PRESENCE optional },
                                       CRITICALITY ignore
   . . .
UL-DPCH-InformationAddList-RL-ReconfReadyTDD768 ::= SEQUENCE {
   repetitionPeriod
                                RepetitionPeriod,
                                RepetitionLength,
   repetitionLength
   tDD-DPCHOffset
                                TDD-DPCHOffset,
   rxTimingDeviationForTA768
                                   RxTimingDeviationForTA768
                                                                    OPTIONAL,
   uL-Timeslot-Information768
                                   UL-Timeslot-Information768,
   iE-Extensions
                                ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
   . . .
UL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD::= SEQUENCE {
   repetitionPeriod
                                RepetitionPeriod
                                                         OPTIONAL,
   repetitionLength
                                RepetitionLength
                                                         OPTIONAL,
                                TDD-DPCHOffset
   tDD-DPCHOffset
                                                         OPTIONAL,
   uL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                         UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                                                                         OPTIONAL,
   --For 3.84Mcps TDD only
                                ProtocolExtensionContainer { {UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                  EXTENSION UL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD
                 PRESENCE optional }
   --For 1.28Mcps TDD only
   PRESENCE optional },
ReconfReadyTDD768
   --For 7.68Mcps TDD only
```

```
UL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationModifyItem-RL-
ReconfReadyTDD
UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlotLCR
                                  TimeSlotLCR,
   midambleShiftLCR
                                  MidambleShiftLCR
                                                            OPTIONAL.
                                  TFCI-Presence
   tFCI-Presence
                                                         OPTIONAL,
    tDD-uL-Code-LCR-Information
                                     TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD
                                                                                                   OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD
TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
                                  DPCH-ID,
    tDD-ChannelisationCodeLCR
                                     TDD-ChannelisationCodeLCR
                                                                    OPTIONAL,
                                  ProtocolExtensionContainer { {TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= ·
    PRESENCE optional },
UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlot
                                  TimeSlot,
   midambleShiftAndBurstType
                                             MidambleShiftAndBurstType
                                                                                OPTIONAL,
                                  TFCI-Presence
    tFCI-Presence
                                                         OPTIONAL,
    uL-Code-Information
                              TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD
                                                                                       OPTIONAL,
                                  ProtocolExtensionContainer { {UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
   dPCH-ID
                                  DPCH-ID,
    tDD-ChannelisationCode
                                  TDD-ChannelisationCode
                                                            OPTIONAL,
                                  ProtocolExtensionContainer { {TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
```

```
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768::= SEOUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
   timeSlot
                                 TimeSlot,
   midambleShiftAndBurstType768 MidambleShiftAndBurstType768
                                                                       OPTIONAL,
   tFCI-Presence
                                 TFCI-Presence
                                                        OPTIONAL,
   uL-Code-Information768
                                 TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD768
                                                                                         OPTIONAL,
                                 ProtocolExtensionContainer { {UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-UL-Code-InformationModifyItem-RL-
ReconfReadyTDD768
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
   dPCH-ID
                                 DPCH-ID,
   tDD-ChannelisationCode768
                                 TDD-ChannelisationCode768
                                                               OPTIONAL,
                                 ProtocolExtensionContainer { {TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}
UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD
UL-DPCH-InformationDeleteItem-RL-ReconfReadvTDD ::= SEOUENCE {
   dPCH-ID
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DL-CCTrCH-InformationList-RL-ReconfReadyTDD
                                               ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfReadyTDD
DL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
   cCTrCH-ID
                                 CCTrCH-ID,
   dl-DPCH-AddInformation
                                 DL-DPCH-InformationAddList-RL-ReconfReadvTDD
                                                                                     OPTIONAL,
   --For 3.84Mcps TDD only
   dl-DPCH-ModifyInformation
                                 DL-DPCH-InformationModifyList-RL-ReconfReadyTDD
                                                                                    OPTIONAL.
   dl-DPCH-DeleteInformation
                                 DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
                                                                                    OPTIONAL,
                                 ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    EXTENSION
                                                                                                 DI.-DPCH-LCR-InformationAddList-RI-
ReconfReadyTDD
                  PRESENCE optional |
   --For 1.28Mcps TDD only
   { ID id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD
                                                              CRITICALITY ignore
                                                                                     EXTENSION DL-Power
   PRESENCE optional }
   -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
   { ID id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD
                                                              CRITICALITY ignore
                                                                                     EXTENSION DL-Power
   PRESENCE optional }|
   -- Applicable to 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
   { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768
                                                              CRITICALITY ignore
                                                                                     EXTENSION DL-DPCH-InformationAddList-RL-
ReconfReadyTDD768
                                    PRESENCE optional}
   --For 7.68Mcps TDD only
                                                                                     EXTENSION DL-DPCH-InformationDeleteList768-RL-
    { ID id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD
                                                              CRITICALITY ignore
                 PRESENCE optional },
ReconfReadyTDD
   . . .
DL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
   repetitionPeriod
                                 RepetitionPeriod,
   repetitionLength
                                 RepetitionLength,
   tDD-DPCHOffset
                                 TDD-DPCHOffset,
   dL-TimeslotLCR-Info
                                 DL-TimeslotLCR-Information,
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocoliE-Single-Container {{DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}
```

```
DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD
   PRESENCE mandatory }
DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
   repetitionPeriod
                               RepetitionPeriod,
   repetitionLength
                              RepetitionLength,
   tDD-DPCHOffset
                              TDD-DPCHOffset,
                              DL-Timeslot-Information,
   dL-Timeslot-Information
   iE-Extensions
                              ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationAddList-RL-ReconfReadyTDD768 ::= SEQUENCE {
   repetitionPeriod
                              RepetitionPeriod,
   repetitionLength
                              RepetitionLength,
   tDD-DPCHOffset
                              TDD-DPCHOffset,
   dL-Timeslot-Information768
                              DL-Timeslot-Information768,
   iE-Extensions
                               ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
DL-DPCH-InformationAddItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}
DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE
   repetitionPeriod
                              RepetitionPeriod
                                                      OPTIONAL,
   repetitionLength
                              RepetitionLength
                                                      OPTIONAL,
   tDD-DPCHOffset
                              TDD-DPCHOffset
                                                      OPTIONAL,
   {\tt dL-Timeslot-InformationModifyList-RL-ReconfReadyTDD}
                                                      DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                                                                    OPTIONAL.
   --For 3.84Mcps TDD only
   iE-Extensions
                               ProtocolExtensionContainer { {DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   EXTENSION DL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD
                PRESENCE optional }
   --For 1.28Mcps TDD only
   ReconfReadyTDD768
                    PRESENCE optional },
```

```
--For 7.68Mcps TDD only
DL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationModifyItem-RL-
ReconfReadyTDD
DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                                 OPTIONAL
    t.FCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
    tDD-dL-Code-LCR-Information
                                    TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD
                                                                                                   OPTIONAL,
                                    ProtocolExtensionContainer { {DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD
TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID
                                    DPCH-ID,
    tDD-ChannelisationCodeLCR
                                    TDD-ChannelisationCodeLCR
                                                                     OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    . . .
TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD
                                                                             CRITICALITY reject
                                                                                                          EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR
        PRESENCE optional },
DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                                                                         PRESENCE
                                                                                                          EXTENSION
                                                                                                                      DL-Power
optional }
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                                                      DL-Power
                                                                                                                                         PRESENCE
                                                                                                          EXTENSION
optional },
    . . .
DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType
                                                                         OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                            OPTIONAL,
                                    {\tt TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD}
    dL-Code-Information
                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
```

```
TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD::= SEOUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE
                                DPCH-ID.
   tDD-ChannelisationCode
                               TDD-ChannelisationCode
                                                         OPTIONAL,
   iE-Extensions
                               ProtocolExtensionContainer { {TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
   -- This IE shall not be used
DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768::= SEOUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
   timeSlot
                                TimeSlot,
   midambleShiftAndBurstType768
                               MidambleShiftAndBurstType768
                                                                   OPTIONAL,
   tFCI-Presence
                               TFCI-Presence
                                                     OPTIONAL,
   dL-Code-Information768
                                TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD768
                                                                                       OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-InformationModifyItem-RL-
ReconfReadyTDD768
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
   dPCH-ID768
                               DPCH-ID768,
   tDD-ChannelisationCode768
                                TDD-ChannelisationCode768
                                                            OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { {TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs} } OPTIONAL,
   . . .
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}
DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD
```

```
DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
   dPCH-ID
                             DPCH-ID.
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs768)) OF DL-DPCH-InformationDeleteItem768-RL-ReconfReadyTDD
DL-DPCH-InformationDeleteItem768-RL-ReconfReadyTDD ::= SEOUENCE {
   dPCH-ID768
                                 DPCH-ID768.
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-ReconfReadyTDD
                                                        ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }
DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
                                     CRITICALITY ignore TYPE DCH-InformationResponse
    { ID id-DCH-InformationResponse
                                                                                          PRESENCE mandatory
                                                ::= ProtocolIE-Single-Container { {DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }
DSCHToBeAddedOrModified-RL-ReconfReadyTDD
DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
DSCHTOBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfDSCHs)) OF DSCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD
DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
   dsch-ID
                          DSCH-ID,
   transportFormatManagement TransportFormatManagement,
   dSCH-FlowControlInformation DSCH-FlowControlInformation,
   bindingID
                         BindingID OPTIONAL,
   transportLayerAddress TransportLayerAddress OPTIONAL,
                         ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DSCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCHToBeAddedOrModified-RL-ReconfReadyTDD
                                                ::= ProtocolIE-Single-Container { { USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }
}USCHTOBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
```

```
PRESENCE mandatory
USCHTOBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfUSCHs)) OF USCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD
USCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
   uSCH-ID
                          USCH-ID,
    transportFormatManagement TransportFormatManagement,
                          BindingID OPTIONAL,
   bindingID
    transportLayerAddress TransportLayerAddress OPTIONAL,
                          ProtocolExtensionContainer { {USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
USCHTOBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkReconfigurationReadyTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-RNTI
                                             CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                  PRESENCE optional }
     ID id-DSCH-RNTI
                                             CRITICALITY ignore EXTENSION DSCH-RNTI
                                                                                                                  PRESENCE optional
     ID id-HSDSCH-TDD-Information-Response
                                             CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                  PRESENCE optional}
                                             CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                                                                                                                  PRESENCE optional
     ID id-MAChs-ResetIndicator
     ID id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfReadyTDD
    PRESENCE optional } |
-- This is for RL repetitions 2 and on in RL list.
     ID id-E-DCH-Information-Response
                                             CRITICALITY ignore EXTENSION E-DCH-Information-Response
                                                                                                                  PRESENCE optional }
                                                                                                                  PRESENCE optional }
     ID id-E-DCH-768-Information-Response
                                             CRITICALITY ignore EXTENSION E-DCH-768-Information-Response
                                             CRITICALITY ignore EXTENSION E-DCH-LCR-Information-Response
     ID id-E-DCH-LCR-Information-Response
                                                                                                                  PRESENCE optional}
    { ID id-PowerControlGAP
                                                                                                                  PRESENCE optional }
                                             CRITICALITY ignore EXTENSION ControlGAP
    -- Applicable to 1.28Mcps TDD only
     ID id-IdleIntervalInformation
                                             CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                  PRESENCE optional } |
    ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                    CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
               PRESENCE optional } |
ResponseLCR
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                    CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
                          PRESENCE optional}
Information-ResponseLCR
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                    CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR
               PRESENCE optional |
     ID id-E-RNTI-For-FACH
                                             CRITICALITY ignore EXTENSION E-RNTI
                                                                                                                  PRESENCE optional }
     ID id-H-RNTI-For-FACH
                                                                                                                  PRESENCE optional}
                                             CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                  PRESENCE optional}
     ID id-DCH-MeasurementOccasion-Information CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information
     ID id-Multi-Carrier-EDCH-Response
                                             CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response
                                                                                                                  PRESENCE optional}
    { ID id-MU-MIMO-InformationLCR
                                             CRITICALITY reject EXTENSION MU-MIMO-InformationLCR
                                                                                                                  PRESENCE optional },
    . . .
Multiple-RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfReadyTDD
-- RADIO LINK RECONFIGURATION COMMIT
```

```
__ *********************
RadioLinkReconfigurationCommit ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{RadioLinkReconfigurationCommit-IEs}},
   protocolExtensions
                              ProtocolExtensionContainer {{RadioLinkReconfigurationCommit-Extensions}}
                                                                                                          OPTIONAL.
RadioLinkReconfigurationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-CFN
                          CRITICALITY ignore TYPE CFN
                                                                   PRESENCE mandatory
    ID id-Active-Pattern-Sequence-Information
                                           CRITICALITY ignore TYPE Active-Pattern-Sequence-Information
                                                                                                     PRESENCE optional },--FDD
only
RadioLinkReconfigurationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK RECONFIGURATION FAILURE
  RadioLinkReconfigurationFailure ::= SEOUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{RadioLinkReconfigurationFailure-IEs}},
                              ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
RadioLinkReconfigurationFailure-IES RNSAP-PROTOCOL-IES ::= {
    ID id-CauseLevel-RL-ReconfFailure
                                    CRITICALITY ignore TYPE CauseLevel-RL-Reconffailure PRESENCE mandatory }
   { ID id-CriticalityDiagnostics
                                    CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                 PRESENCE optional }.
   . . .
CauseLevel-RL-ReconfFailure ::= CHOICE {
   generalCause
                    GeneralCauseList-RL-ReconfFailure,
   rLSpecificCause
                   RLSpecificCauseList-RL-ReconfFailure,
GeneralCauseList-RL-ReconfFailure ::= SEOUENCE {
   cause
   iE-Extensions
                                        ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
   OPTIONAL,
GeneralCauseItem-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                                     RL-ReconfigurationFailureList-RL-ReconfFailure
   iE-Extensions
                                                     ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }
   OPTIONAL,
   . . .
RLSpecificCauseItem-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-ReconfigurationFailureList-RL-Reconffailure ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-ReconfigurationFailure-RL-
ReconfFailure-IEs} }
RL-ReconfigurationFailure-RL-ReconfFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationFailure-RL-ReconfFail CRITICALITY ignore TYPE RL-ReconfigurationFailure-RL-ReconfFail
                                                                                                                  PRESENCE mandatory
RL-ReconfigurationFailure-RL-ReconfFail ::= SEQUENCE {
   rL-ID
                              RL-ID,
   cause
                              ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Max-UE-DTX-Cycle
                                  CRITICALITY ignore
                                                        EXTENSION Max-UE-DTX-Cycle
                                                                                            PRESENCE conditional },
    -- This IE shall be present if the Cause IE is set to "Continuous Packet Connectivity UE DTX Cycle not Available".
RadioLinkReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK RECONFIGURATION CANCEL
__ *********************
RadioLinkReconfigurationCancel ::= SEQUENCE {
                                                            {{RadioLinkReconfigurationCancel-IEs}},
   protocolIEs
                                  ProtocolIE-Container
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
                                                                                                                         OPTIONAL,
RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
RadioLinkReconfigurationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK RECONFIGURATION REQUEST FDD
   ******************
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
                                                              {{RadioLinkReconfigurationRequestFDD-IEs}},
   protocolIEs
                                   ProtocolIE-Container
                                   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                                                OPTIONAL,
   . . .
RadioLinkReconfigurationRequestFDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                                         CRITICALITY reject TYPE AllowedOueuingTime
                                                                                                                               PRESENCE optional
     ID id-UL-DPCH-Information-RL-ReconfRqstFDD
                                                         CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRgstFDD
                                                                                                                               PRESENCE optional
     ID id-DL-DPCH-Information-RL-ReconfRgstFDD
                                                         CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                               PRESENCE optional
     ID id-FDD-DCHs-to-Modify
                                                                                                                               PRESENCE optional
                                                         CRITICALITY reject TYPE FDD-DCHs-to-Modify
     ID id-DCHs-to-Add-FDD
                                                         CRITICALITY reject TYPE DCH-FDD-Information
                                                                                                                               PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfRqstFDD
                                                        CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD
                                                                                                                               PRESENCE optional
     ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional
UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
   iE-Extensions
                                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPDCHINdicatorEDCH CRITICALITY reject
                                                       EXTENSION UL-DPDCHIndicatorEDCH
                                                                                             PRESENCE optional },
    . . .
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS
                                  TFCS OPTIONAL,
   tFCI-SignallingMode
                                   TFCI-SignallingMode OPTIONAL,
   limitedPowerIncrease
                                  LimitedPowerIncrease
                                                          OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
DL-DPCH-Information-RL-ReconfRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DCH-DeleteList-RL-ReconfRqstFDD
                                           ::= SEOUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
    4CH-TD
                                    ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-DeleteItem-RL-ReconfRastFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-ReconfigurationRequestFDD-RL-InformationList CRITICALITY ignore EXTENSION RL-ReconfigurationRequestFDD-RL-InformationList
    PRESENCE optional } |
     ID id-DL-ReferencePowerInformation
                                                                                                                               PRESENCE optional}
                                                    CRITICALITY ignore EXTENSION DL-ReferencePowerInformation
     ID id-HSDSCH-FDD-Information
                                                    CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                               PRESENCE optional }
     ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                       PRESENCE
optional}
     ID id-HSDSCH-MACdFlows-to-Add
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                               PRESENCE optional }
                                                                                                                               PRESENCE optional}
     ID id-HSDSCH-MACdFlows-to-Delete
                                                    CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                               PRESENCE optional }
     ID id-HSPDSCH-RL-ID
                                                    CRITICALITY reject EXTENSION RL-ID
     ID id-EDPCH-Information-RLReconfRequest-FDD
                                                   CRITICALITY reject EXTENSION EDPCH-Information-RLReconfRequest-FDD
                                                                                                                               PRESENCE optional}
     ID id-EDCH-FDD-Information
                                                    CRITICALITY reject EXTENSION EDCH-FDD-Information
                                                                                                                               PRESENCE optional }
     ID id-EDCH-FDD-Information-To-Modify
                                                    CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify
                                                                                                                               PRESENCE optional}
                                                                                                                               PRESENCE optional }
     ID id-EDCH-MACdFlows-To-Add
                                                    CRITICALITY reject EXTENSION EDCH-MACdFlows-Information
     ID id-EDCH-MACdFlows-To-Delete
                                                    CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete
                                                                                                                               PRESENCE optional}
     ID id-Serving-EDCHRL-Id
                                                    CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                               PRESENCE optional }
     ID id-CPC-Information
                                                    CRITICALITY reject EXTENSION CPC-Information
                                                                                                                               PRESENCE optional }
     ID id-NoOfTargetCellHS-SCCH-Order
                                                    CRITICALITY ignore EXTENSION NoOfTargetCellHS-SCCH-Order
                                                                                                                               PRESENCE optional }
     ID id-Additional-HS-Cell-Information-RL-Reconf-Req
                                                           CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Req
    PRESENCE optional } |
     ID id-UE-AggregateMaximumBitRate
                                                    CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate
                                                                                                                               PRESENCE optional |
     ID id-Additional-EDCH-Cell-Information-RL-Reconf-Reg CRITICALITY reject EXTENSION Additional-EDCH-Cell-Information-RL-Reconf-Reg
    PRESENCE optional } |
    { ID id-UL-CLTD-Information-Reconf
                                                    CRITICALITY reject EXTENSION UL-CLTD-Information-Reconf
                                                                                                                               PRESENCE optional },
Additional-HS-Cell-Information-RL-Reconf-Reg
                                               ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Req-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Req-ItemIEs
                                                      ::=SEOUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID
                                                                                                OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information OPTIONAL,
   hS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
                                                                           HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
    hS-DSCH-Secondary-Serving-Remove
                                                    HS-DSCH-Secondary-Serving-Remove
                                                                                        OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Req-ExtIEs} } OPTIONAL,
Additional-HS-Cell-Information-RL-Reconf-Req-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Additional-EDCH-Cell-Information-RL-Reconf-Reg ::=SEOUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency
                                                                                Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-
UL-Frequency,
   iE-Extensions
                                  ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-RL-Reconf-Req-ExtIEs} } OPTIONAL,
Additional-EDCH-Cell-Information-RL-Reconf-Req-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
RL-ReconfigurationRequestFDD-RL-InformationList ::= SEOUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    {RL-ReconfigurationRequestFDD-RL-Information-ListItem} }
RL-ReconfigurationRequestFDD-RL-Information-ListItem RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-ReconfigurationRequestFDD-RL-Information-IEs CRITICALITY ignore TYPE RL-ReconfigurationRequestFDD-RL-Information-IEs
optional }
RL-ReconfigurationRequestFDD-RL-Information-IEs ::= SEOUENCE {
                          RL-ID,
   rL-Specific-DCH-Info
                        RL-Specific-DCH-Info OPTIONAL,
   iE-Extensions
                          ProtocolExtensionContainer { { RL-ReconfigurationRequestFDD-RL-Information-ExtIEs} } OPTIONAL,
RL-ReconfigurationRequestFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-RL-Specific-EDCH-Information
                                              CRITICALITY reject EXTENSION RL-Specific-EDCH-Information
                                                                                                                   PRESENCE optional }
     ID id-EDCH-RL-Indication
                                              CRITICALITY reject EXTENSION EDCH-RL-Indication
                                                                                                                   PRESENCE optional
     ID id-HSDSCH-PreconfigurationSetup
                                              CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                   PRESENCE optional
     ID id-Non-Serving-RL-Preconfig-Setup
                                              CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                   PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Removal
                                              CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Setup
                                                                                                                   PRESENCE optional } |
    ID id-FTPICH-Information-Reconf
                                              CRITICALITY ignore EXTENSION FTPICH-Information-Reconf
                                                                                                                   PRESENCE optional },
     *****************
-- RADIO LINK RECONFIGURATION REQUEST TDD
   ******************
RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkReconfigurationRequestTDD-IEs}},
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                              OPTIONAL,
RadioLinkReconfigurationRequestTDD-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime
                                      CRITICALITY reject TYPE AllowedQueuingTime
                                                                                            PRESENCE optional
```

```
{ ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                        CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
   PRESENCE optional
   { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                         CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
   PRESENCE optional
   { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                         CRITICALITY notify TYPE DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
   PRESENCE optional } |
   { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                         CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
   PRESENCE optional } |
   { ID id-TDD-DCHs-to-Modify
                               CRITICALITY reject TYPE TDD-DCHs-to-Modify
                                                                          PRESENCE optional
                            CRITICALITY reject TYPE DCH-TDD-Information
     ID id-DCHs-to-Add-TDD
                                                                          PRESENCE optional
   ID id-DCH-DeleteList-RL-ReconfRqstTDD
                                          CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD
                                                                                                    PRESENCE optional
   . . .
UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
                                                 ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }
UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IES RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                            CCTrCH-ID,
   tFCS
                            TFCS
                                       OPTIONAL,
                                ProtocolExtensionContainer { {UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-SIRTarget
                          CRITICALITY reject
                                               EXTENSION
                                                             UL-SIR
                                                                        PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
   . . .
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                 ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
                            CCTrCH-ID,
   cCTrCH-ID
   iE-Extensions
                                ProtocolExtensionContainer { {UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs} } OPTIONAL.
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
InformationModifyList-RL-ReconfRqstTDD-IEs} }
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IES RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                           CCTrCH-ID,
                           TFCS
                                      OPTIONAL,
   t FCS
                               ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }
DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory }
DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD ::= SEQUENCE {
   cCTrCH-ID
                           CCTrCH-ID,
                               ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRqstTDD
                                      ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD
DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   dCH-ID
                               ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-ReconfigurationRequestTDD-RL-Information CRITICALITY ignore EXTENSION Multiple-RL-ReconfigurationRequestTDD-RL-Information
   PRESENCE optional } |
   { ID id-HSDSCH-TDD-Information
                                         CRITICALITY reject EXTENSION HSDSCH-TDD-Information
                                                                                                         PRESENCE optional }
```

```
{ ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised
                                                                                                                                  PRESENCE
optional}|
     ID id-HSDSCH-MACdFlows-to-Add
                                              CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                   PRESENCE optional}
                                              CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSDSCH-MACdFlows-to-Delete
                                                                                                                   PRESENCE optional}
     ID id-HSPDSCH-RL-ID
                                              CRITICALITY reject EXTENSION RL-ID
                                                                                                                   PRESENCE optional}
                                                                                                                   PRESENCE optional
     ID id-E-DCH-Information-Reconfig
                                              CRITICALITY reject EXTENSION E-DCH-Information-Reconfig
     ID id-E-DCH-Serving-RL-ID
                                              CRITICALITY reject EXTENSION RL-ID
                                                                                                                   PRESENCE optional}
     ID id-E-DCH-768-Information-Reconfig
                                                                                                                   PRESENCE optional}
                                              CRITICALITY reject EXTENSION E-DCH-768-Information-Reconfig
     ID id-E-DCH-LCR-Information-Reconfig
                                              CRITICALITY reject EXTENSION E-DCH-LCR-Information-Reconfig
                                                                                                                   PRESENCE optional}
                                                                                                                   PRESENCE optional }
     ID id-CPC-InformationLCR
                                              CRITICALITY reject EXTENSION CPC-InformationLCR
     ID id-RNTI-Allocation-Indicator
                                              CRITICALITY ignore EXTENSION RNTI-Allocation-Indicator
                                                                                                                   PRESENCE optional}
                                                                                                                   PRESENCE optional}
     ID id-DCH-MeasurementType-Indicator
                                              CRITICALITY reject EXTENSION DCH-MeasurementType-Indicator
     ID id-Multi-Carrier-EDCH-Reconfigure
                                                                                                                   PRESENCE optional
                                              CRITICALITY reject EXTENSION Multi-Carrier-EDCH-Reconfigure
     ID id-MU-MIMO-Indicator
                                              CRITICALITY reject EXTENSION MU-MIMO-Indicator
                                                                                                                   PRESENCE optional },
Multiple-RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-ReconfigurationRequestTDD-RL-Information
RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE {
   rI.-ID
                          RL-ID,
   rL-Specific-DCH-Info
                          RL-Specific-DCH-Info OPTIONAL,
                          ProtocolExtensionContainer { { RL-ReconfigurationRequestTDD-RL-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-ReconfigurationRequestTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
          id-UL-Synchronisation-Parameters-LCR
                                                         CRITICALITY ignore
                                                                                EXTENSION UL-Synchronisation-Parameters-LCR
               optional
                          } -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    PRESENCE
    { ID id-NeedforIdleInterval
                                                     CRITICALITY ignore EXTENSION NeedforIdleInterval
                                                                                                                                  PRESENCE
optional },
    -- RADIO LINK RECONFIGURATION RESPONSE FDD
  ****************
RadioLinkReconfigurationResponseFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkReconfigurationResponseFDD-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationResponseFDD-Extensions}}
                                                                                                                               OPTIONAL,
RadioLinkReconfigurationResponseFDD-IEs RNSAP-PROTOCOL-IES ::=
    { ID id-RL-InformationResponseList-RL-ReconfRspFDD
                                                         CRITICALITY ignore TYPE RL-InformationResponseList-RL-ReconfRspFDD
    PRESENCE optional } |
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional
                                                                                                                   },
```

```
RL-InformationResponseList-RL-ReconfRspFDD
                                             ReconfRspFDD-IEs} }
RL-InformationResponse-RL-ReconfRspFDD-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationResponseItem-RL-ReconfRspFDD
                                                        CRITICALITY ignore TYPE RL-InformationResponseItem-RL-ReconfRspFDD
                                                                                                                                PRESENCE
mandatory }
RL-InformationResponseItem-RL-ReconfRspFDD ::= SEQUENCE {
   rI.-ID
                                  RL-ID,
   max-UL-SIR
                                  UL-SIR
                                                 OPTIONAL,
   min-UL-SIR
                                  UL-SIR
                                                 OPTIONAL,
   maximumDLTxPower
                                  DL-Power
                                                 OPTIONAL,
   minimumDLTxPower
                                  DL-Power
                                                 OPTIONAL,
   not-Used-secondary-CCPCH-Info
                                                    OPTIONAL,
                                         NULL
   dCHsInformationResponseList
                                  DCH-InformationResponseList-RL-ReconfRspFDD OPTIONAL,
   dL-CodeInformationList-RL-ReconfResp
                                         DL-CodeInformationList-RL-ReconfRspFDD OPTIONAL,
                                  ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DL-PowerBalancing-UpdatedIndicator
                                                 CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator
                                                                                                                        PRESENCE optional }
     ID id-EDCH-FDD-InformationResponse
                                                 CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                                        PRESENCE optional
     ID id-EDCH-RLSet-Id
                                                 CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                        PRESENCE optional }
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                 CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                        PRESENCE optional }
     ID id-F-DPCH-SlotFormat
                                                 CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                        PRESENCE optional }
     ID id-HSDSCH-PreconfigurationInfo
                                                 CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                        PRESENCE optional }
     ID id-Non-Serving-RL-Preconfig-Info
                                                 CRITICALITY ignore EXTENSION Non-Serving-RL-Preconfig-Info
                                                                                                                        PRESENCE optional }
    ID id-FTPICH-Information-Response
                                                 CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                        PRESENCE optional },
   . . .
                                                    ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspFDD} }
DCH-InformationResponseList-RL-ReconfRspFDD
DCH-InformationResponseListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse
                                     CRITICALITY ignore TYPE DCH-InformationResponse
                                                                                          PRESENCE mandatory
DL-CodeInformationList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfRspFDD }}
DL-CodeInformationListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE optional
RadioLinkReconfigurationResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-HSDSCH-RNTI
                                             CRITICALITY ignore
                                                                    EXTENSION HSDSCH-RNTI
   PRESENCE optional }
     ID id-HSDSCH-FDD-Information-Response
                                             CRITICALITY ignore
                                                                    EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                        PRESENCE optional }
    ID id-MAChs-ResetIndicator
                                             CRITICALITY ignore
                                                                    EXTENSION MAChs-ResetIndicator
   PRESENCE optional }
    { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                       CRITICALITY ignore
                                                                                                                 EXTENSION Continuous-
Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                       PRESENCE optional } |
```

```
{ ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
                                                                         EXTENSION Additional-HS-Cell-Information-Response-List
   PRESENCE optional } |
    { ID id-Additional-EDCH-Cell-Information-ResponseRLReconf
                                                                 CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-Response-
RLReconf-List
                       PRESENCE optional },
    -- RADIO LINK RECONFIGURATION RESPONSE TDD
  *****************
RadioLinkReconfigurationResponseTDD ::= SEOUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                              {RadioLinkReconfigurationResponseTDD-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationResponseTDD-Extensions}}
                                                                                                                               OPTIONAL,
RadioLinkReconfigurationResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-ReconfRspTDD
                                                     CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfRspTDD
                                                                                                                                  PRESENCE
optional
    --This RL-InformationResponse-RL-ReconfRspTDD is for the first RL repetition in the list.
    --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfRspTDD.
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional
    . . .
RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE {
   rL-ID
                                  RL-ID,
   max-UL-SIR
                                  UL-SIR
                                                  OPTIONAL,
                                                  OPTIONAL,
   min-UL-STR
                                  UL-SIR
   maximumDLTxPower
                                  DL-Power
                                                  OPTIONAL,
   minimumDLTxPower
                                                  OPTIONAL,
                                  DL-Power
   dCHsInformationResponseList
                                  DCH-InformationResponseList-RL-ReconfRspTDD OPTIONAL.
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfRspTDD-ExtIEs} } OPTIONAL,
RL-InformationResponse-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-CCTrCH-InformationList-RL-ReconfRspTDD CRITICALITY ignore EXTENSION DL-CCTrCH-InformationList-RL-ReconfRspTDD
                                                                                                                                  PRESENCE
optional }|
    { ID id-UL-TimingAdvanceCtrl-LCR
                                                                                                                    PRESENCE optional },
                                                     CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
    --For 1.28Mcps TDD only
    . . .
DL-CCTrCH-InformationList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfRspTDD
DL-CCTrCH-InformationItem-RL-ReconfRspTDD ::= SEQUENCE {
   cCTrCH-ID
   dl-DPCH-ModifyInformation-LCR
                                              DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD
                                                                                                            OPTIONAL,
    --For 1.28Mcps TDD only
    cCTrCH-Maximum-DL-Power
                                              DL-Power
                                                                     OPTIONAL,
```

```
--For 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    cCTrCH-Minimum-DL-Power
                                                DL-Power
    --For 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs} }
    OPTIONAL,
    . . .
DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD }}
DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    {ID id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD CRITICALITY ignore TYPE DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD
    PRESENCE optional },
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD ::= SEQUENCE {
  dL-Timeslot-LCR-InformationModifyList-RL-ReconfRqstTDD
                                                                DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD
                                                                                                                                        OPTIONAL.
  iE-ExtensionsProtocolExtensionContainer { { DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-Timeslot-LCR-InformationModifyLitem-RL-
ReconfRspTDD
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD
                                                         ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    maxPowerLCR
                                            DL-Power
                                                        OPTIONAL,
   minPowerLCR
                                            DL-Power
                                                        OPTIONAL,
                                            ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-ReconfRspTDD
                                                        ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspTDD} }
DCH-InformationResponseListIEs-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse
                                                                                        PRESENCE optional
RadioLinkReconfigurationResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI
                                                CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                         PRESENCE optional }
```

```
ID id-HSDSCH-TDD-Information-Response
                                               CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response
                                                                                                                       PRESENCE optional }
     ID id-MAChs-ResetIndicator
                                               CRITICALITY ignore EXTENSION MAChs-ResetIndicator
                                                                                                                       PRESENCE optional}
     ID id-RL-ReconfigurationResponseTDD-RL-Information CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfrspTDD
    PRESENCE optional } |
     ID id-E-DCH-Information-Response
                                               CRITICALITY ignore EXTENSION E-DCH-Information-Response
                                                                                                                       PRESENCE optional}
     ID id-E-DCH-768-Information-Response
                                               CRITICALITY ignore EXTENSION E-DCH-768-Information-Response
                                                                                                                       PRESENCE optional
     ID id-E-DCH-LCR-Information-Response
                                               CRITICALITY ignore EXTENSION E-DCH-LCR-Information-Response
                                                                                                                       PRESENCE optional}
    { ID id-PowerControlGAP
                                               CRITICALITY ignore EXTENSION ControlGAP
                                                                                                                       PRESENCE optional }
    -- Applicable to 1.28Mcps TDD only
     ID id-IdleIntervalInformation
                                               CRITICALITY ignore EXTENSION IdleIntervalInformation
                                                                                                                       PRESENCE optional } |
     ID id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR
                                                                       CRITICALITY ignore EXTENSION ContinuousPacketConnectivity-DRX-Information-
ResponseLCR PRESENCE optional } |
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                       CRITICALITY ignore EXTENSION HS-DSCH-Semi-PersistentScheduling-
Information-ResponseLCR PRESENCE optional} |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR
                                                                       CRITICALITY ignore EXTENSION E-DCH-Semi-PersistentScheduling-Information-
ResponseLCR PRESENCE optional }
     ID id-E-RNTI-For-FACH
                                               CRITICALITY ignore EXTENSION E-RNTI
                                                                                                                       PRESENCE optional}
     ID id-H-RNTI-For-FACH
                                               CRITICALITY ignore EXTENSION HSDSCH-RNTI
                                                                                                                       PRESENCE optional}
                                                                                                                       PRESENCE optional}
      ID id-DCH-MeasurementOccasion-Information CRITICALITY reject EXTENSION DCH-MeasurementOccasion-Information
     ID id-Multi-Carrier-EDCH-Response
                                                                                                                       PRESENCE optional }
                                               CRITICALITY ignore EXTENSION Multi-Carrier-EDCH-Information-Response
     ID id-MU-MIMO-InformationLCR
                                               CRITICALITY reject EXTENSION MU-MIMO-InformationLCR
                                                                                                                       PRESENCE optional },
Multiple-RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfRspTDD
--Includes the 2<sup>nd</sup> through the max number of radio link information repetitions.
-- RADIO LINK FAILURE INDICATION
  ******************
RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs
                                   ProtocolIE-Container
                                                               {{RadioLinkFailureIndication-IEs}},
    protocolExtensions
                                   ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
                                                                                                                          OPTIONAL.
RadioLinkFailureIndication-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-Reporting-Object-RL-FailureInd CRITICALITY ignore TYPE Reporting-Object-RL-FailureInd
                                                                                                               PRESENCE mandatory
    . . .
Reporting-Object-RL-FailureInd ::= CHOICE {
   rΤ.
                           RL-RL-FailureInd,
   rL-Set
                           RL-Set-RL-FailureInd, --FDD only
    . . . ,
                           CCTrCH-RL-FailureInd --TDD only
    cCTrCH
RL-RL-FailureInd
                           ::= SEOUENCE {
    rL-InformationList-RL-FailureInd
                                           RL-InformationList-RL-FailureInd,
    iE-Extensions
                                           ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs} } OPTIONAL,
```

```
RLItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-FailureInd
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-FailureInd-IEs}
RL-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-FailureInd
                                           CRITICALITY ignore TYPE RL-Information-RL-FailureInd
                                                                                                               PRESENCE mandatory
RL-Information-RL-FailureInd ::= SEQUENCE {
    cause
    iE-Extensions
                                   ProtocolExtensionContainer { {RL-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
RL-Information-RL-FailureInd-ExtIEs RNSAP-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 RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-FailureInd
                                             ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
FailureInd-IEs} }
RL-Set-Information-RL-FailureInd-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Information-RL-FailureInd
                                               CRITICALITY ignore TYPE RL-Set-Information-RL-FailureInd
                                                                                                                       PRESENCE mandatory
RL-Set-Information-RL-FailureInd ::= SEQUENCE {
   rL-Set-ID
                                   RL-Set-ID,
    cause
    iE-Extensions
                                   ProtocolExtensionContainer { {RL-Set-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
RL-Set-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
CCTrCH-RL-FailureInd ::= SEQUENCE {
                                        RL-ID.
   cCTrCH-InformationList-RL-FailureInd
                                        CCTrCH-InformationList-RL-FailureInd,
   iE-Extensions
                                     ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }
                                                                                                      OPTIONAL,
CCTrCHItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}
CCTrCH-InformationItemIE-RL-FailureInd RNSAP-PROTOCOL-IES ::= {
         id-CCTrCH-InformationItem-RL-FailureInd
                                                   CRITICALITY
                                                                ignore
                                                                              TYPE CCTrCH-InformationItem-RL-FailureInd
   PRESENCE
             mandatory}
CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
   cCTrCH-ID
                                        CCTrCH-ID,
   cause
                                        Cause,
   iE-Extensions
                                        OPTIONAL,
CCTrCH-InformationItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK PREEMPTION REQUIRED INDICATION
  **************************
RadioLinkPreemptionRequiredIndication ::= SEQUENCE
   protocolIEs
                              ProtocolIE-Container
                                                      {{RadioLinkPreemptionRequiredIndication-IEs}},
   protocolExtensions
                              ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
                                                                                                                  OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE
optional
RL-InformationList-RL-PreemptRequiredInd
                                    ::= SEQUENCE (SIZE (1..maxNrOfrLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
PreemptRequiredInd} }
```

```
RL-InformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-PreemptRequiredInd
                                                     CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd
                                                                                                                       PRESENCE
mandatory }
RL-InformationItem-RL-PreemptRequiredInd::= SEQUENCE {
                            RL-ID.
   iE-Extensions
                            ProtocolExtensionContainer { {RL-Information-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
RL-Information-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PreemptRequiredInd PRESENCE optional },
RadioLinkPreemptionRequiredIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   PreemptRequiredInd PRESENCE optional },
HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEOUENCE (SIZE (1.. maxNrOfMACdFlows)) OF ProtocolIE-Single-Container {
{HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd} }
HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
   { ID id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd
                                                                 CRITICALITY ignore TYPE HSDSCHMacdFlowSpecificInformationItem-RL-
PreemptRequiredInd PRESENCE mandatory }
HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
   hSDSCH-MACdFlow-ID
                                      HSDSCH-MACdFlow-ID,
                            ProtocolExtensionContainer { { HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF ProtocolIE-Single-Container { {EDCH-
MacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd} }
EDCH-MacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
                                                                  CRITICALITY ignore TYPE EDCH-MacdFlowSpecificInformationItem-RL-
   { ID id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd
PreemptRequiredInd PRESENCE mandatory }
EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
   eDCH-MACdFlow-ID
                            EDCH-MACdFlow-ID,
   iE-Extensions
                            ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
```

```
EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RESTORE INDICATION
__ *********************
RadioLinkRestoreIndication ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{RadioLinkRestoreIndication-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
                                                                                                                OPTIONAL,
RadioLinkRestoreIndication-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
Reporting-Object-RL-RestoreInd ::= CHOICE {
                        RL-RL-RestoreInd, --TDD only
                         RL-Set-RL-RestoreInd, --FDD only
   rL-Set
   . . . ,
   cCTrCH
                         CCTrCH-RL-RestoreInd --TDD only
RL-RL-RestoreInd ::= SEOUENCE {
   rL-InformationList-RL-RestoreInd
                                       RL-InformationList-RL-RestoreInd,
   iE-Extensions
                                        ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
RLItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                       ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-RestoreInd-IEs}
RL-InformationList-RL-RestoreInd
RL-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Information-RL-RestoreInd
                                      CRITICALITY ignore TYPE RL-Information-RL-RestoreInd
                                                                                                      PRESENCE mandatory
RL-Information-RL-RestoreInd ::= SEQUENCE {
   rI.-ID
   iE-Extensions
                                ProtocolExtensionContainer { {RL-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
RL-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd
                                           RL-Set-InformationList-RL-RestoreInd.
                                           ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-SetItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd
                                               ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
RestoreInd-IEs} }
RL-Set-Information-RL-RestoreInd-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Information-RL-RestoreInd
                                                   CRITICALITY ignore TYPE RL-Set-Information-RL-RestoreInd
                                                                                                                       PRESENCE mandatory
RL-Set-Information-RL-RestoreInd ::= SEQUENCE {
   rL-Set-ID
                                    ProtocolExtensionContainer { {RL-Set-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkRestoreIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-RestoreInd ::= SEOUENCE {
                                               RL-ID,
    cCTrCH-InformationList-RL-RestoreInd
                                               CCTrCH-InformationList-RL-RestoreInd,
                                           ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                                       OPTIONAL,
CCTrCHItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
RestoreInd } }
CCTrCH-InformationItemIE-RL-RestoreInd RNSAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd
                                                     CRITICALITY
                                                                           ignore
                                                                                           TYPE CCTrCH-InformationItem-RL-RestoreInd
    PRESENCE mandatory}
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
```

. . .

```
cCTrCH-ID
                                               CCTrCH-ID,
   iE-Extensions
                                            OPTIONAL.
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- DOWNLINK POWER CONTROL REQUEST
   DL-PowerControlRequest ::= SEQUENCE {
                                                          {{DL-PowerControlRequest-IEs}},
   protocolIEs
                                 ProtocolIE-Container
                                 ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
   . . .
DL-PowerControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PowerAdjustmentType
                                         CRITICALITY ignore
                                                                   TYPE PowerAdjustmentType
                                                                                                                   PRESENCE mandatory }
     ID id-DLReferencePower
                                         CRITICALITY ignore
                                                                   TYPE DL-Power
                                                                                                                   PRESENCE conditional
   -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    { ID id-InnerLoopDLPCStatus
                                                                                                                   PRESENCE optional }
                                         CRITICALITY ignore
                                                                   TYPE InnerLoopDLPCStatus
    TYPE DL-ReferencePowerInformationList-DL-PC-Rgst
                                                                                                                   PRESENCE conditional
   -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
                                         CRITICALITY ignore
   { ID id-MaxAdjustmentStep
                                                                   TYPE MaxAdjustmentStep
                                                                                                                   PRESENCE conditional }
   -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                                                                                                   PRESENCE conditional
    { ID id-AdjustmentPeriod
                                         CRITICALITY ignore
                                                                   TYPE AdjustmentPeriod
} |
   -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
   { ID id-AdiustmentRatio
                                         CRITICALITY ignore
                                                                   TYPE ScaledAdjustmentRatio
                                                                                                                   PRESENCE conditional
   -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
   . . .
DL-ReferencePowerInformationList-DL-PC-Rqst
                                               ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {DL-
ReferencePowerInformation-DL-PC-Rqst-IEs} }
DL-ReferencePowerInformation-DL-PC-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformation-DL-PC-Rgst CRITICALITY ignore TYPE DL-ReferencePowerInformation-DL-PC-Rgst
                                                                                                              PRESENCE mandatory
DL-ReferencePowerInformation-DL-PC-Rqst ::= SEQUENCE {
                             RL-ID,
   dl-Reference-Power
                             DL-Power,
   iE-Extensions
                             ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs} } OPTIONAL,
```

```
DL-ReferencePowerInformation-DL-PC-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
       -- DOWNLINK POWER TIMESLOT CONTROL REQUEST TDD
  ****************
DL-PowerTimeslotControlRequest ::= SEOUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                    {{DL-PowerTimeslotControlRequest-IEs}},
                             ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
   protocolExtensions
                                                                                                        OPTIONAL,
DL-PowerTimeslotControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
   --Mandatory for 3.84Mcps TDD and 7.68 Mcps TDD only
   . . .
DL-PowerTimeslotControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional |
   -- Mandatory for 1.28Mcps TDD only
   { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD
                                          CRITICALITY ignore
                                                              EXTENSION PrimaryCCPCH-RSCP
   PRESENCE optional } |
   { ID id-PrimaryCCPCH-RSCP-Delta
                                          CRITICALITY ignore
                                                              EXTENSION PrimaryCCPCH-RSCP-Delta
   PRESENCE optional },
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST FDD
  PhysicalChannelReconfigurationRequestFDD ::= SEOUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                    {{PhysicalChannelReconfigurationRequestFDD-IEs}},
   protocolExtensions
                             ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestFDD-Extensions}}
                                                                                                                OPTIONAL,
PhysicalChannelReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Information-PhyChReconfRqstFDD CRITICALITY reject TYPE RL-Information-PhyChReconfRqstFDD
                                                                                                  PRESENCE mandatory
```

```
RL-Information-PhyChReconfRgstFDD ::= SEQUENCE {
   dl-CodeInformation
                                DL-CodeInformationList-PhyChReconfRqstFDD,
   iE-Extensions
                                ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstFDD-ExtIEs} } OPTIONAL,
RL-Information-PhyChReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-F-DPCH-SlotFormat
                                          CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                           PRESENCE optional }
   ID id-FTPICH-Reconfiguration-Information CRITICALITY ignore EXTENSION FTPICH-Reconfiguration-Information
                                                                                                           PRESENCE optional },
   . . .
DL-CodeInformationList-PhyChReconfRqstFDD
                                          ::= ProtocolIE-Single-Container { {DL-CodeInformationListIEs-PhyChReconfRgstFDD} }
DL-CodeInformationListIEs-PhyChReconfRqstFDD RNSAP-PROTOCOL-IES ::= {
   { ID id-FDD-DL-CodeInformation CRITICALITY notify TYPE FDD-DL-CodeInformation PRESENCE mandatory
PhysicalChannelReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
        -- PHYSICAL CHANNEL RECONFIGURATION REQUEST TDD
  PhysicalChannelReconfigurationRequestTDD ::= SEQUENCE {
                                ProtocolIE-Container
                                                         {{PhysicalChannelReconfigurationRequestTDD-IEs}},
   protocolIEs
   protocolExtensions
                                ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestTDD-Extensions}}
                                                                                                                           OPTIONAL,
PhysicalChannelReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
RL-Information-PhyChReconfRqstTDD ::= SEQUENCE {
   ul-CCTrCH-Information
                            UL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                       OPTIONAL,
   dl-CCTrCH-Information
                            DL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                       OPTIONAL,
                            ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
RL-Information-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-
PhyChReconfRqstTDD
                     PRESENCE optional } |
   --For 3.84Mcps TDD only
```

```
{ ID id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD
                                                                    CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationListLCR-
PhyChReconfRgstTDD PRESENCE optional }
   --For 1.28Mcps TDD only
    { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                                    CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-
PhyChReconfRqstTDD768
                          PRESENCE optional } |
   --For 7.68Mcps TDD only
   { ID id-UARFCNforNt
                                                                    CRITICALITY ignore EXTENSION UARFON
                                                                                                                 PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
                                                ::= ProtocolIE-Single-Container { {UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }
UL-CCTrCH-InformationList-PhyChReconfRqstTDD
UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
                                                            CRITICALITY reject TYPE UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD
   PRESENCE mandatory }
UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
                                 CCTrCH-ID,
   cCTrCH-ID
   ul-DPCH-Information
                                 UL-DPCH-InformationList-PhyChReconfRqstTDD,
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRgstTDD-ExtIEs} } OPTIONAL.
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}
UL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
   { ID id-UL-DPCH-InformationItem-PhyChReconfRgstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-PhyChReconfRgstTDD
                                                                                                                               PRESENCE
mandatory }
UL-DPCH-InformationItem-PhyChReconfRgstTDD ::= SEQUENCE
   repetitionPeriod
                                 RepetitionPeriod
                                                        OPTIONAL,
                                 RepetitionLength
   repetitionLength
                                                        OPTIONAL,
   tDD-DPCHOffset
                                 TDD-DPCHOffset
                                                        OPTIONAL,
   \verb"uL-Timeslot-InformationList-PhyChReconfRqstTDD"
                                                        UL-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                                                                 OPTIONAL,
   --For 3.84Mcps TDD only
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    EXTENSION UL-TimeslotLCR-InformationList-
PhyChReconfRqstTDD
                      PRESENCE optional }
   --For 1.28Mcps TDD only
    EXTENSION UL-Timeslot-InformationList-
PhyChReconfRqstTDD768
                          PRESENCE optional },
```

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```
--For 7.68Mcps TDD only
UL-TimeslotLCR-InformationList-PhyChReconfRgstTDD::= SEOUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD
UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD ::= SEQUENCE {
    timeSlotLCR
                                   TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                            OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-LCR-Information
                                    TDD-UL-Code-LCR-Information
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-PLCCH-Information-PhyChReconfRqstTDD
                                                                                                                         PRESENCE optional },
                                                       CRITICALITY reject
                                                                                EXTENSION PLCCHinformation
UL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD
UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   midambleShiftAndBurstType
                                                MidambleShiftAndBurstType
                                                                                OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-Information
                                TDD-UL-Code-Information
                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationList-PhyChReconfRqstTDD768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD768
UL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                    MidambleShiftAndBurstType768
                                                                        OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-Information768
                                    TDD-UL-Code-Information768
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs} } OPTIONAL,
    iE-Extensions
UL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                    ::= ProtocolIE-Single-Container { {DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }
DL-CCTrCH-InformationList-PhyChReconfRqstTDD
DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
                                                                CRITICALITY reject TYPE DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
    PRESENCE mandatory
DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRqstTDD
DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    cCTrCH-ID
                                    CCTrCH-ID,
    dl-DPCH-Information
                                    DL-DPCH-InformationList-PhyChReconfRqstTDD,
                                    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-CCTrCH-InformationItem-PhyChreconfrostTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}
DL-DPCH-InformationListIEs-PhyChReconfRgstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-PhyChReconfRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-PhyChReconfRqstTDD
                                                                                                                                        PRESENCE
mandatory }
DL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    repetitionPeriod
                                                    RepetitionPeriod
                                                                                                                                           OPTIONAL,
                                                    RepetitionLength
    repetitionLength
                                                                                                                                           OPTIONAL,
    tDD-DPCHOffset
                                                    TDD-DPCHOffset
                                                                                                                                           OPTIONAL,
    dL-Timeslot-InformationList-PhyChReconfRgstTDD DL-Timeslot-InformationList-PhyChReconfRgstTDD
                                                                                                                                           OPTIONAL,
                                                    ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} }
    iE-Extensions
                                                                                                                                           OPTIONAL,
    . . .
DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-LCR-InformationList-PhyChReconfRgstTDD
                                                                    CRITICALITY reject
                                                                                             EXTENSION DL-TimeslotLCR-InformationList-
PhyChReconfRastTDD
                        PRESENCE optional }
    --For 1.28Mcps TDD only
    { ID id-DL-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                                    CRITICALITY reject
                                                                                             EXTENSION DL-Timeslot-InformationList-
                            PRESENCE optional },
PhyChReconfRqstTDD768
    --For 7.68Mcps TDD only
    . . .
DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD
DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    timeSlotLCR
                                    TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                            OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    dL-Code-LCR-Information
                                    TDD-DL-Code-LCR-Information
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    . . .
```

```
DL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEOUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD
DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                                MidambleShiftAndBurstType
                                                                                OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    dL-Code-Information
                               TDD-DL-Code-Information
                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationList-PhyChReconfRgstTDD768::= SEOUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRgstTDD768
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                   MidambleShiftAndBurstType768
                                                                        OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                       OPTIONAL,
    dL-Code-Information768
                                    TDD-DL-Code-Information768
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs } }
           OPTIONAL,
HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF HSPDSCH-Timeslot-InformationItemLCR-
PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD::= SEQUENCE {
    timeslotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
```

```
ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs } }
   iE-Extensions
           OPTIONAL.
   . . .
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationList-PhyChreconfRqstTDD768 ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-
PhyChReconfRqstTDD768
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD768::= SEQUENCE {
                                                TimeSlot,
   midambleShiftAndBurstType768
                                                MidambleShiftAndBurstType768,
   iE-Extensions
                                                ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs }
           OPTIONAL,
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PhysicalChannelReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    -- PHYSICAL CHANNEL RECONFIGURATION COMMAND
  *****************
PhysicalChannelReconfigurationCommand ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{PhysicalChannelReconfigurationCommand-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{PhysicalChannelReconfigurationCommand-Extensions}}
                                                                                                                             OPTIONAL,
PhysicalChannelReconfigurationCommand-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-CFN
                             CRITICALITY ignore TYPE CFN
                                                                           PRESENCE mandatory
    { ID id-CriticalityDiagnostics
                                    CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                           PRESENCE optional
PhysicalChannelReconfigurationCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- PHYSICAL CHANNEL RECONFIGURATION FAILURE
```

```
__ *********************
PhysicalChannelReconfigurationFailure ::= SEOUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{PhysicalChannelReconfigurationFailure-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{PhysicalChannelReconfigurationFailure-Extensions}}
                                                                                                                        OPTIONAL.
PhysicalChannelReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-Cause
                               CRITICALITY ignore TYPE Cause
                                                                           PRESENCE mandatory }
   ID id-CriticalityDiagnostics
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                       PRESENCE optional
   . . .
PhysicalChannelReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK CONGESTION INDICATION
    RadioLinkCongestionIndication ::= SEQUENCE {
                                ProtocolIE-Container
                                                         {{RadioLinkCongestionIndication-IEs}},
   protocolIEs
                                ProtocolExtensionContainer {{RadioLinkCongestionIndication-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
RadioLinkCongestionIndication-IES RNSAP-PROTOCOL-IES ::= {
     ID id-CongestionCause
                                                                                                              PRESENCE optional } |
                                          CRITICALITY ignore TYPE CongestionCause
   PRESENCE mandatory },
   . . .
RL-InformationList-RL-CongestInd
                                      ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
CongestInd } }
RL-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-CongestInd
                                              CRITICALITY ignore TYPE RL-InformationItem-RL-CongestInd
                                                                                                           PRESENCE mandatory
RL-InformationItem-RL-CongestInd ::= SEQUENCE {
   rL-ID
                                   RL-ID,
   dCH-Rate-Information
                            DCH-Rate-Information-RL-CongestInd,
   iE-Extensions
                            ProtocolExtensionContainer { {RL-Information-RL-CongestInd-ExtIEs} } OPTIONAL,
DCH-Rate-Information-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF ProtocolIE-Single-Container { {DCH-Rate-InformationItemIEs-RL-
CongestInd }
DCH-Rate-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
```

```
ID id-DCH-Rate-InformationItem-RL-CongestInd
                                                  CRITICALITY ignore TYPE DCH-Rate-InformationItem-RL-CongestInd
                                                                                                                  PRESENCE mandatory
DCH-Rate-InformationItem-RL-CongestInd ::= SEQUENCE {
                            DCH-ID,
   allowed-Rate-Information Allowed-Rate-Information OPTIONAL,
                            ProtocolExtensionContainer { { DCH-Rate-InformationItem-RL-CongestInd-ExtIEs} } OPTIONAL,
   iE-Extensions
DCH-Rate-InformationItem-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional }
   { ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                  CRITICALITY ignore EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                         PRESENCE optional },
RadioLinkCongestionIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-MacdFlowSpecificInformationList-RL-CongestInd ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF ProtocolIE-Single-Container { {EDCH-
MacdFlowSpecificInformationItemIEs-RL-CongestInd } }
EDCH-MacdFlowSpecificInformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
   { ID id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
                                                             CRITICALITY ignore TYPE EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
   PRESENCE mandatory }
EDCH-MacdFlowSpecificInformationItem-RL-CongestInd ::= SEQUENCE {
   eDCH-MACdFlow-ID
                            EDCH-MACdFlow-ID,
                            ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-CongestInd-ExtIEs} } OPTIONAL,
   iE-Extensions
EDCH-MacdFlowSpecificInformation-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
  UplinkSignallingTransferIndicationFDD ::= SEQUENCE
                                                         {{UplinkSignallingTransferIndicationFDD-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{UplinkSignallingTransferIndicationFDD-Extensions}}
   protocolExtensions
                                                                                                                        OPTIONAL,
```

```
UplinkSignallingTransferIndicationFDD-IES RNSAP-PROTOCOL-IES ::= {
                                                          CRITICALITY ignore
     ID id-UC-ID
                                                                             TYPE UC-ID
                                                                                                                           PRESENCE mandatory
     ID id-SAI
                                                          CRITICALITY ignore
                                                                             TYPE SAI
                                                                                                                           PRESENCE mandatory
     TD id-GA-Cell
                                                         CRITICALITY ignore
                                                                             TYPE GA-Cell
                                                                                                                          PRESENCE optional
     TD id-C-RNTT
                                                         CRITICALITY ignore
                                                                             TYPE C-RNTI
                                                                                                                          PRESENCE mandatory
     ID id-S-RNTI
                                                         CRITICALITY ignore
                                                                                                                          PRESENCE mandatory
                                                                             TYPE S-RNTI
     ID id-D-RNTI
                                                         CRITICALITY ignore
                                                                             TYPE D-RNTI
                                                                                                                          PRESENCE optional
     ID id-PropagationDelay
                                                                             TYPE PropagationDelay
                                                                                                                          PRESENCE mandatory
                                                         CRITICALITY ignore
                                                                                                                           PRESENCE mandatory }
     ID id-STTD-SupportIndicator
                                                          CRITICALITY ignore
                                                                             TYPE STTD-SupportIndicator
    { ID id-ClosedLoopModel-SupportIndicator
                                                         CRITICALITY ignore
                                                                             TYPE ClosedLoopModel-SupportIndicator
                                                                                                                           PRESENCE mandatory }
     ID id-L3-Information
                                                                             TYPE L3-Information
                                                                                                                           PRESENCE mandatory
                                                         CRITICALITY ignore
     ID id-CN-PS-DomainIdentifier
                                                                             TYPE CN-PS-DomainIdentifier
                                                                                                                          PRESENCE optional
                                                         CRITICALITY ignore
     ID id-CN-CS-DomainIdentifier
                                                         CRITICALITY ignore
                                                                             TYPE CN-CS-DomainIdentifier
                                                                                                                          PRESENCE optional
                                                                                                                          PRESENCE optional
     ID id-URA-Information
                                                         CRITICALITY ignore
                                                                             TYPE URA-Information
UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                         CRITICALITY ignore
                                                                             EXTENSION GA-CellAdditionalShapes
                                                                                                                           PRESENCE optional }
     ID id-DPC-Mode-Change-SupportIndicator
                                                         CRITICALITY ignore EXTENSION DPC-Mode-Change-SupportIndicator
                                                                                                                          PRESENCE optional }
     EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired
                                                         PRESENCE optional }
     ID id-CellCapabilityContainer-FDD
                                                                                                                          PRESENCE optional }
                                                         CRITICALITY ignore
                                                                             EXTENSION CellCapabilityContainer-FDD
     ID id-SNA-Information
                                                         CRITICALITY ignore
                                                                              EXTENSION SNA-Information
                                                                                                                           PRESENCE optional
     ID id-CellPortionID
                                                         CRITICALITY ignore
                                                                              EXTENSION CellPortionID
                                                                                                                           PRESENCE optional
                                                                                                                          PRESENCE optional }
     ID id-Active-MBMS-Bearer-ServiceFDD
                                                         CRITICALITY ignore
                                                                             EXTENSION Active-MBMS-Bearer-Service-ListFDD
     ID id-Inter-Frequency-Cell-List
                                                         CRITICALITY ignore
                                                                             EXTENSION Inter-Frequency-Cell-List
                                                                                                                          PRESENCE optional
     ID id-ExtendedPropagationDelay
                                                         CRITICALITY ignore
                                                                             EXTENSION ExtendedPropagationDelay
                                                                                                                           PRESENCE optional
     ID id-HSDSCH-RNTI
                                                         CRITICALITY ignore
                                                                             EXTENSION HSDSCH-RNTI
                                                                                                                          PRESENCE optional
     ID id-Multiple-PLMN-List
                                                                             EXTENSION Multiple-PLMN-List
                                                                                                                          PRESENCE optional }
                                                         CRITICALITY ignore
                                                                                                                          PRESENCE optional |
     ID id-E-RNTI
                                                         CRITICALITY ignore
                                                                             EXTENSION E-RNTI
     ID id-Max-UE-DTX-Cycle
                                                         CRITICALITY ignore
                                                                             EXTENSION Max-UE-DTX-Cycle
                                                                                                                          PRESENCE
conditional }
    -- This IE shall be present if the Continuous Packet Connectivity DTX-DRX Support Indicator IE in Cell Capability Container FDD IE is set to 1.
                                                          CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-FDD PRESENCE optional }
     ID id-CellCapabilityContainerExtension-FDD
                                                         CRITICALITY ignore EXTENSION Secondary-Serving-Cell-List
     ID id-Secondary-Serving-Cell-List
                                                                                                                            PRESENCE optional }
     ID id-Dual-Band-Secondary-Serving-Cell-List
                                                         CRITICALITY ignore EXTENSION Secondary-Serving-Cell-List
                                                                                                                            PRESENCE optional }
     ID id-Extended-S-RNTI
                                                         CRITICALITY ignore
                                                                             EXTENSION Extended-RNTI
                                                                                                                            PRESENCE optional },
```

```
*************
-- UPLINK SIGNALLING TRANSFER INDICATION TDD
  UplinkSignallingTransferIndicationTDD ::= SEQUENCE
                                                              {{UplinkSignallingTransferIndicationTDD-IEs}},
   protocolIEs
                                   ProtocolIE-Container
   protocolExtensions
                                   ProtocolExtensionContainer {{UplinkSignallingTransferIndicationTDD-Extensions}}
                                                                                                                                   OPTIONAL,
UplinkSignallingTransferIndicationTDD-IES RNSAP-PROTOCOL-IES ::= {
                                                                                                                            PRESENCE mandatory }
    { ID id-UC-ID
                                               CRITICALITY ignore
                                                                     TYPE UC-ID
                                                                                                                            PRESENCE mandatory }
    { ID id-SAI
                                               CRITICALITY ignore
                                                                     TYPE SAI
    { ID id-GA-Cell
                                               CRITICALITY ignore
                                                                     TYPE GA-Cell
                                                                                                                            PRESENCE optional }
    { ID id-C-RNTI
                                               CRITICALITY ignore
                                                                     TYPE C-RNTI
                                                                                                                            PRESENCE mandatory }
    { ID id-S-RNTI
                                               CRITICALITY ignore
                                                                     TYPE S-RNTI
                                                                                                                            PRESENCE mandatory }
                                                                                                                            PRESENCE optional }
    { ID id-D-RNTI
                                               CRITICALITY ignore
                                                                     TYPE D-RNTI
                                                                                                                            PRESENCE mandatory }
    { ID id-RxTimingDeviationForTA
                                               CRITICALITY ignore
                                                                     TYPE RxTimingDeviationForTA
                                                                                                                            PRESENCE mandatory }
    { ID id-L3-Information
                                               CRITICALITY ignore
                                                                     TYPE L3-Information
    { ID id-CN-PS-DomainIdentifier
                                               CRITICALITY ignore
                                                                     TYPE CN-PS-DomainIdentifier
                                                                                                                            PRESENCE optional }
    { ID id-CN-CS-DomainIdentifier
                                               CRITICALITY ignore
                                                                     TYPE CN-CS-DomainIdentifier
                                                                                                                            PRESENCE optional }
    { ID id-URA-Information
                                               CRITICALITY ignore
                                                                     TYPE URA-Information
                                                                                                                            PRESENCE optional },
    . . .
UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                               CRITICALITY ignore
                                                                     EXTENSION GA-CellAdditionalShapes
                                                                                                                            PRESENCE optional }
     ID id-CommonTransportChannelResourcesInitialisationNotRequired
                                                                     CRITICALITY ignore
    EXTENSION CommonTransportChannelResourcesInitialisationNotRequired
                                                                                                                            PRESENCE optional }
    { ID id-CellCapabilityContainer-TDD
                                               CRITICALITY ignore
                                                                     EXTENSION CellCapabilityContainer-TDD
                                                                                                                            PRESENCE optional }
    -- Applicable to 3.84Mcps TDD only
    { ID id-CellCapabilityContainer-TDD-LCR
                                               CRITICALITY ignore
                                                                     EXTENSION CellCapabilityContainer-TDD-LCR
                                                                                                                            PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only
     ID id-SNA-Information
                                               CRITICALITY ignore
                                                                     EXTENSION SNA-Information
                                                                                                                            PRESENCE optional }
     ID id-Active-MBMS-Bearer-ServiceTDD
                                               CRITICALITY ignore
                                                                                                                            PRESENCE optional } |
                                                                     EXTENSION Active-MBMS-Bearer-Service-ListTDD
    { ID id-CellCapabilityContainer-TDD768
                                               CRITICALITY ignore
                                                                     EXTENSION CellCapabilityContainer-TDD768
                                                                                                                            PRESENCE optional }
    -- Applicable to 7.68Mcps TDD only
     ID id-RxTimingDeviationForTA768
                                                                     EXTENSION RxTimingDeviationForTA768
                                                                                                                            PRESENCE optional }
                                               CRITICALITY ignore
                                                                                                                            PRESENCE optional }
    { ID id-RxTimingDeviationForTAext
                                               CRITICALITY ignore
                                                                     EXTENSION RxTimingDeviationForTAext
```

```
ID id-Multiple-PLMN-List
                                             CRITICALITY ignore
                                                                  EXTENSION Multiple-PLMN-List
                                                                                                                        PRESENCE optional }
     ID id-HSDSCH-RNTI
                                             CRITICALITY ignore
                                                                  EXTENSION HSDSCH-RNTI
                                                                                                                        PRESENCE optional
     ID id-E-RNTI
                                             CRITICALITY ignore
                                                                  EXTENSION E-RNTI
                                                                                                                        PRESENCE optional
     ID id-CellPortionLCRID
                                             CRITICALITY ignore
                                                                  EXTENSION CellPortionLCRID
                                                                                                                        PRESENCE optional }
     ID id-CellCapabilityContainerExtension-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainerExtension-TDD-LCR
                                                                                                                        PRESENCE optional }
     ID id-Extended-S-RNTI
                                             CRITICALITY ignore
                                                                  EXTENSION Extended-RNTI
                                                                                                                        PRESENCE optional },
        ************
-- DOWNLINK SIGNALLING TRANSFER REQUEST
  ****************
DownlinkSignallingTransferRequest ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                            {{DownlinkSignallingTransferRequest-IEs}},
                                 ProtocolExtensionContainer {{DownlinkSignallingTransferRequest-Extensions}}
   protocolExtensions
                                                                                                                          OPTIONAL.
DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
                                                                                          PRESENCE mandatory }
   { ID id-C-ID
                                     CRITICALITY ignore TYPE C-ID
   -- May be a GERAN cell identifier
    { ID id-D-RNTI
                                     CRITICALITY ignore TYPE D-RNTI
                                                                                          PRESENCE mandatory
     ID id-L3-Information
                                     CRITICALITY ignore TYPE L3-Information
                                                                                          PRESENCE mandatory }
    { ID id-D-RNTI-ReleaseIndication
                                     CRITICALITY ignore TYPE D-RNTI-ReleaseIndication
                                                                                            PRESENCE mandatory }
DownlinkSignallingTransferRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     TD id-URA-TD
                                     CRITICALITY ignore
                                                            EXTENSION URA-ID
                                                                                                                 PRESENCE optional }
     ID id-MBMS-Bearer-Service-List
                                     CRITICALITY ignore
                                                                                                                 PRESENCE optional}
                                                            EXTENSION MBMS-Bearer-Service-List
                                                                                                                 PRESENCE optional }
     ID id-Old-URA-ID
                                     CRITICALITY ignore
                                                            EXTENSION URA-ID
                                                                                                                 PRESENCE conditional }
    { ID id-SRNC-ID
                                     CRITICALITY ignore
                                                            EXTENSION RNC-ID
   -- This IE shall be present if the URA-ID IE or Old URA-ID IE is present.
     ID id-Extended-SRNC-ID
                                     CRITICALITY reject
                                                                                                                 PRESENCE optional }
                                                            EXTENSION Extended-RNC-ID
   { ID id-Enhanced-PCH-Capability
                                     CRITICALITY ignore
                                                            EXTENSION Enhanced-PCH-Capability
                                                                                                                 PRESENCE optional },
   -- FDD and 1.28Mcps TDD only
-- RELOCATION COMMIT
  *****************
RelocationCommit ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                           {{RelocationCommit-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RelocationCommit-Extensions}}
                                                                                                          OPTIONAL,
   . . .
```

```
RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI CRITICALITY ignore TYPE D-RNTI
                                                                              PRESENCE optional
   PRESENCE optional
RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- PAGING REQUEST
PagingRequest ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{PagingRequest-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{PagingRequest-Extensions}}
                                                                                                      OPTIONAL,
   . . .
PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PagingArea-PagingRqst
                                         CRITICALITY ignore TYPE PagingArea-PagingRqst
                                                                                                  PRESENCE mandatory
                                                                                                                           -- May be a BSC-
     ID id-SRNC-ID
                                         CRITICALITY ignore TYPE RNC-ID
                                                                                                  PRESENCE mandatory
Id.
     ID id-S-RNTI
                                         CRITICALITY ignore TYPE S-RNTI
                                                                                                  PRESENCE mandatory
     ID id-IMSI
                                                                                                  PRESENCE mandatory
                                         CRITICALITY ignore TYPE IMSI
     ID id-DRXCycleLengthCoefficient
                                         CRITICALITY ignore TYPE DRXCycleLengthCoefficient
                                                                                                  PRESENCE mandatory
    { ID id-CNOriginatedPage-PagingRgst
                                         CRITICALITY ignore TYPE CNOriginatedPage-PagingRqst
                                                                                                  PRESENCE optional
   . . .
PagingArea-PagingRqst ::= CHOICE {
                         URA-PagingRqst, -- May be a GRA-ID.
   cell
                         Cell-PagingRgst, -- UTRAN only
   . . .
URA-PagingRqst ::= SEQUENCE {
   uRA-ID
   iE-Extensions
                             ProtocolExtensionContainer { { URAItem-PagingRqst-ExtIEs} } OPTIONAL,
   . . .
URAItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Cell-PagingRqst ::= SEQUENCE {
   c-ID
   iE-Extensions
                             ProtocolExtensionContainer { { CellItem-PagingRqst-ExtIEs} } OPTIONAL,
```

```
CellItem-PagingRgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CNOriginatedPage-PagingRgst::= SEOUENCE {
   pagingCause
                               PagingCause,
   cNDomainType
                               CNDomainType,
                               PagingRecordType,
   pagingRecordType
                               ProtocolExtensionContainer { { CNOriginatedPage-PagingRqst-ExtIEs} } OPTIONAL,
   iE-Extensions
CNOriginatedPage-PagingRgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PagingRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Extended-SRNC-ID
                                       CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                               PRESENCE optional }
    { ID id-Enhanced-PCH-Capability
                                                                                               PRESENCE optional }
                                       CRITICALITY ignore EXTENSION Enhanced-PCH-Capability
   -- FDD and 1.28Mcps TDD only
   { ID id-Extended-S-RNTI
                                       CRITICALITY ignore EXTENSION Extended-RNTI
                                                                                               PRESENCE optional },
-- DEDICATED MEASUREMENT INITIATION REQUEST
  *****************
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                              {{DedicatedMeasurementInitiationRequest-IEs}},
                                  ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                                                   OPTIONAL,
DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                      CRITICALITY reject TYPE MeasurementID
                                                                                         PRESENCE mandatory } |
     ID id-DedicatedMeasurementObjectType-DM-Rqst CRITICALITY reject TYPE DedicatedMeasurementObjectType-DM-Rqst
                                                                                                                     PRESENCE mandatory }
     ID id-DedicatedMeasurementType
                                           CRITICALITY reject TYPE DedicatedMeasurementType
                                                                                                      PRESENCE mandatory }
     ID id-MeasurementFilterCoefficient
                                           CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                      PRESENCE optional }
     ID id-ReportCharacteristics
                                           CRITICALITY reject TYPE ReportCharacteristics
                                                                                                      PRESENCE mandatory }
     ID id-CFNReportingIndicator
                                           CRITICALITY reject TYPE FNReportingIndicator
                                                                                                      PRESENCE mandatory } |
     ID id-CFN
                                           CRITICALITY reject TYPE CFN
                                                                                                      PRESENCE optional },
    . . .
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
   rL
                           RL-DM-Rqst,
   rLS
                           RL-Set-DM-Rast,
```

```
allRL
                           All-RL-DM-Rqst,
    allRLS
                           All-RL-Set-DM-Rgst,
    . . .
RL-DM-Rgst ::= SEOUENCE {
    rL-InformationList-DM-Rgst
                                    RL-InformationList-DM-Rgst,
   iE-Extensions
                                    ProtocolExtensionContainer { { RLItem-DM-Rgst-ExtIEs} } OPTIONAL,
RLItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rgst
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rgst-IEs} }
RL-Information-DM-Rgst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rgst
                                            CRITICALITY reject TYPE RL-InformationItem-DM-Rqst
                                                                                                         PRESENCE mandatory
RL-InformationItem-DM-Rqst ::= SEQUENCE {
   rL-ID
                             RL-ID,
    dPCH-ID
                               DPCH-ID
                                    ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-InformationItem-DM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSSICH-Info-DM-Rgst
                                                CRITICALITY reject
                                                                                EXTENSION HSSICH-Info-DM-Rgst
    PRESENCE optional } |
    -- TDD only
    { ID id-DPCH-ID768-DM-Rqst
                                                CRITICALITY reject
                                                                                EXTENSION DPCH-ID768
                PRESENCE optional |
    { ID id-HSSICH-Info-DM-Rgst-Extension
                                                CRITICALITY reject
                                                                                EXTENSION HSSICH-Info-DM-Rgst-Extension
                                                                                                                                        PRESENCE
optional }.
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
HSSICH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
HSSICH-Info-DM-Rqst-Extension ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID-Extension
RL-Set-DM-Rgst ::= SEQUENCE {
   rL-Set-InformationList-DM-Rqst RL-Set-InformationList-DM-Rqst,
   iE-Extensions
                                    ProtocolExtensionContainer { RL-SetItem-DM-Rgst-ExtIEs} } OPTIONAL.
RL-SetItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-
RL-Set-InformationList-DM-Rqst
Rgst-IEs} }
RL-Set-Information-DM-Rgst-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-InformationItem-DM-Rgst
                                           CRITICALITY reject TYPE RL-Set-InformationItem-DM-Rgst
                                                                                                             PRESENCE mandatory
RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
   rL-Set-ID
                                RL-Set-ID,
                                ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-InformationItem-DM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
All-RL-DM-Rgst ::= NULL
All-RL-Set-DM-Rgst ::= NULL
DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-PartialReportingIndicator
                                               CRITICALITY ignore EXTENSION
                                                                            PartialReportingIndicator
   PRESENCE optional }
   { ID id-MeasurementRecoveryBehavior
                                               CRITICALITY ignore EXTENSION
                                                                            MeasurementRecoveryBehavior
                                                                                                                           PRESENCE
optional }|
   { ID id-AlternativeFormatReportingIndicator
                                                                            AlternativeFormatReportingIndicator PRESENCE optional },
                                               CRITICALITY ignore EXTENSION
-- DEDICATED MEASUREMENT INITIATION RESPONSE
  DedicatedMeasurementInitiationResponse ::= SEQUENCE {
                                                         {{DedicatedMeasurementInitiationResponse-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                                           OPTIONAL,
   . . .
DedicatedMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID
                                               CRITICALITY ignore TYPE MeasurementID
   PRESENCE mandatory } |
   PRESENCE optional }
   { ID id-CriticalityDiagnostics
                                               CRITICALITY ignore TYPE CriticalityDiagnostics
   PRESENCE optional },
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
   rLs
                         RL-DM-Rsp,
```

```
rLS
                            RL-Set-DM-Rsp,
    allRL
                            RL-DM-Rsp,
    allRLS
                            RL-Set-DM-Rsp.
RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp
                                                    RL-InformationList-DM-Rsp,
   iE-Extensions
                                    ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs} } OPTIONAL,
RLItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rsp ::= SEOUENCE {
    rL-Set-InformationList-DM-Rsp RL-Set-InformationList-DM-Rsp,
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-SetItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rsp-IEs} }
RL-InformationList-DM-Rsp
RL-Information-DM-Rsp-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp
                                            CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory
RL-InformationItem-DM-Rsp ::= SEQUENCE {
   rL-ID
                                RL-ID,
    dPCH-ID
                                DPCH-ID
                                                    OPTIONAL,
    dedicatedMeasurementValue DedicatedMeasurementValue,
                                                    OPTIONAL,
                               ProtocolExtensionContainer { {RL-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-InformationItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM
                               CRITICALITY reject
                                                                                            PRESENCE optional } |
                                                                EXTENSION HS-SICH-ID
    -- TDD only
    { ID id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp
    PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD only. This list of dedicated measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp
                                                                        CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-LCR-
TDD-DM-Rsp PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only. This list of dedicated measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp
                                                                        CRITICALITY ignore EXTENSION Multiple-HSSICHMeasurementValueList-TDD-DM-
Rsp PRESENCE optional } |
```

```
-- TDD only. This list of HS-SICH measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple HS-SICH measurement
values need to be reported.
    { ID id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp
                                                                      CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-
TDD768-DM-Rsp PRESENCE optional
    -- Applicable to 7.68Mcps TDD only. This list of dedicated measurement values is used for the 2<sup>nd</sup> and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
                                                                      CRITICALITY ignore EXTENSION DPCH-ID768
    { ID id-DPCH-ID768-DM-Rsp
                       PRESENCE optional |
    { ID id-HS-SICH-ID-Extension
                                                                      CRITICALITY ignore EXTENSION HS-SICH-ID-Extension
                   PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-Rsp-IEs} }
RL-Set-Information-DM-Rsp-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp
                                              CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rsp
                                                                                                              PRESENCE mandatory
RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
   rL-Set-ID
                                   RL-Set-ID,
                                   DedicatedMeasurementValue,
   dedicatedMeasurementValue
                                              OPTIONAL,
                                   iE-Extensions
                                                                                                             OPTIONAL,
RL-Set-InformationItem-DM-Rspns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
           id-MeasurementRecoverySupportIndicator
                                                      CRITICALITY ignore
                                                                              EXTENSION MeasurementRecoverySupportIndicator
                                                                                                                                    PRESENCE
optional
   },
    . . .
Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHsPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-TDD-DM-
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE {
    dPCH-ID
                                       DPCH-ID,
   dedicatedMeasurementValue
                                       DedicatedMeasurementValue,
   iE-Extensions
                                       ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
   OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp ::= SEOUENCE (SIZE (1.. maxNrOfDPCHsLCRPerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
LCR-TDD-DM-Rsp
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp ::= SEQUENCE {
                                      DPCH-ID,
   dedicatedMeasurementValue
                                      DedicatedMeasurementValue,
                                      ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-LCR-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multiple-HSSICHMeasurementValueList-TDD-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfHSSICHs-1)) OF Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp ::= SEQUENCE {
   hsSICH-ID
                                      HS-SICH-ID,
   dedicatedMeasurementValue
                                      DedicatedMeasurementValue,
                                      ProtocolExtensionContainer { { Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SICH-ID-Extension
                                         CRITICALITY ignore
                                                                EXTENSION HS-SICH-ID-Extension
                                                                                                           PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
Multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp ::= SEQUENCE (SIZE (1.. maxNrOfDPCHs768PerRL-1)) OF Multiple-DedicatedMeasurementValueItem-
TDD768-DM-Rsp
Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp ::= SEQUENCE {
   dPCH-ID768
                                      DPCH-ID768,
   dedicatedMeasurementValue
                                      DedicatedMeasurementValue,
                                      ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs} }
   iE-Extensions
   OPTIONAL,
    . . .
Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  -- DEDICATED MEASUREMENT INITIATION FAILURE
  *****************
```

```
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
                                                                                                                                 OPTIONAL.
DedicatedMeasurementInitiationFailure-IES RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                      CRITICALITY ignore TYPE MeasurementID
                                                                                        PRESENCE mandatory }
     TD id-Cause
                                  CRITICALITY ignore TYPE Cause
                                                                                PRESENCE mandatory }
     ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional
DedicatedMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DedicatedMeasurementObjectType-DM-Fail CRITICALITY ignore EXTENSION DedicatedMeasurementObjectType-DM-Fail
                                                                                                                          PRESENCE optional
DedicatedMeasurementObjectType-DM-Fail ::= CHOICE {
   rT.
                          RL-DM-Fail,
   rLS
                          RL-Set-DM-Fail,
   allRT.
                          RL-DM-Fail,
   allRLS
                          RL-Set-DM-Fail,
RL-DM-Fail ::= SEQUENCE {
                                                  RL-Unsuccessful-InformationRespList-DM-Fail,
   rL-unsuccessful-InformationRespList-DM-Fail
   rL-successful-InformationRespList-DM-Fail
                                                  RL-Successful-InformationRespList-DM-Fail
                                                                                                     OPTIONAL,
                                  iE-Extensions
RLItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Fail ::= SEOUENCE {
   rL-Set-unsuccessful-InformationRespList-DM-Fail RL-Set-Unsuccessful-InformationRespList-DM-Fail,
   rL-Set-successful-InformationRespList-DM-Fail RL-Set-Successful-InformationRespList-DM-Fail
                                                                                                            OPTIONAL,
                                  ProtocolExtensionContainer { { RL-SetItem-DM-Fail-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-SetItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Unsuccessful-InformationRespList-DM-Fail
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Unsuccessful-
InformationResp-DM-Fail-IEs} }
RL-Unsuccessful-InformationResp-DM-Fail-IES RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-RL-Unsuccessful-InformationItem-DM-Fail
                                                       CRITICALITY ignore TYPE RL-Unsuccessful-InformationItem-DM-Fail
                                                                                                                                        PRESENCE
mandatory }
RL-Unsuccessful-InformationItem-DM-Fail ::= SEOUENCE {
                                RL-ID,
    individualcause
                                Cause OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL,
RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Successful-InformationRespList-DM-Fail
                                                    ::= SEOUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Successful-
InformationResp-DM-Fail-IEs} }
RL-Successful-InformationResp-DM-Fail-IES RNSAP-PROTOCOL-IES ::= {
     ID id-RL-Successful-InformationItem-DM-Fail
                                                        CRITICALITY ignore TYPE RL-Successful-InformationItem-DM-Fail
                                                                                                                                PRESENCE mandatory
RL-Successful-InformationItem-DM-Fail ::= SEOUENCE {
   rL-ID
                                RL-ID,
    dPCH-ID
                                DPCH-ID
                                                    OPTIONAL.
    dedicatedMeasurementValue
                                DedicatedMeasurementValue,
                                                    OPTIONAL,
                                ProtocolExtensionContainer { {RL-Successful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-Successful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM
                                            CRITICALITY reject
                                                                                                                 PRESENCE optional |
                                                                            EXTENSION HS-SICH-ID
    -- TDD only
   { ID id-HS-SICH-ID-Extension
                                            CRITICALITY ignore
                                                                            EXTENSION HS-SICH-ID-Extension
                                                                                                                                PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
    . . .
RL-Set-Unsuccessful-InformationRespList-DM-Fail
                                                            ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { RL-Set-
Unsuccessful-InformationResp-DM-Fail-IEs} }
RL-Set-Unsuccessful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail
    PRESENCE mandatory }
RL-Set-Unsuccessful-InformationItem-DM-Fail ::= SEQUENCE {
    rL-Set-ID
                                    RL-Set-ID,
    individualcause
                                    Cause
                                                OPTIONAL,
   iE-Extensions
                                    ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs} } OPTIONAL,
```

```
RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-Successful-InformationRespList-DM-Fail
                                                     ::= SEQUENCE (SIZE (1..maxNrOfRLSets-1)) OF ProtocolIE-Single-Container { {RL-Set-
Successful-InformationResp-DM-Fail-IEs} }
RL-Set-Successful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-Successful-InformationItem-DM-Fail CRITICALITY ignore TYPE RL-Set-Successful-InformationItem-DM-Fail
                                                                                                                       PRESENCE
mandatory }
RL-Set-Successful-InformationItem-DM-Fail ::= SEQUENCE {
   rL-Set-ID
                               RL-Set-ID.
   dedicatedMeasurementValue
                               DedicatedMeasurementValue,
   iE-Extensions
                               ProtocolExtensionContainer { {RL-Set-Successful-InformationItem-DM-Failns-ExtIEs} } OPTIONAL,
RL-Set-Successful-InformationItem-DM-Failns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ****************
-- DEDICATED MEASUREMENT REPORT
        ****************
DedicatedMeasurementReport ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{DedicatedMeasurementReport-IEs}},
                               ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
DedicatedMeasurementReport-IES RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                   CRITICALITY ignore TYPE MeasurementID
                                                                                 PRESENCE mandatory }
   PRESENCE mandatory
   . . .
DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
   rLs
                        RL-DM-Rprt,
   rLS
                        RL-Set-DM-Rprt,
   allRL
                        RL-DM-Rprt,
   allRLS
                        RL-Set-DM-Rprt,
RL-DM-Rprt ::= SEQUENCE {
   rL-InformationList-DM-Rprt
                               RL-InformationList-DM-Rprt,
   iE-Extensions
                                ProtocolExtensionContainer { RLItem-DM-Rprt-ExtIEs} } OPTIONAL,
```

```
RLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rprt ::= SEQUENCE {
   rL-Set-InformationList-DM-Rprt RL-Set-InformationList-DM-Rprt,
                                  iE-Extensions
RL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-DM-Rprt
                                          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rprt-IEs} }
RL-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt
                                          CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt
                                                                                                     PRESENCE mandatory
RL-InformationItem-DM-Rprt ::= SEOUENCE {
   rL-ID
                              RL-ID,
   dPCH-ID
                              DPCH-ID
                                                  OPTIONAL.
   dedicatedMeasurementValueInformation
                                          DedicatedMeasurementValueInformation,
                                  ProtocolExtensionContainer { {RL-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM-Rprt
                                  CRITICALITY ignore
                                                                                            PRESENCE optional } |
                                                                 EXTENSION HS-SICH-ID
   -- TDD only
     ID id-DPCH-ID768-DM-Rprt
                                      CRITICALITY ignore
                                                                     EXTENSION DPCH-ID768
                                                                                                               PRESENCE optional } |
    { ID id-HS-SICH-ID-Extension
                                      CRITICALITY ignore
                                                                     EXTENSION HS-SICH-ID-Extension
                                                                                                                                  PRESENCE
optional},
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
RL-Set-InformationList-DM-Rprt
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-
Rprt-IEs} }
RL-Set-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rprt
                                              CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt
                                                                                                                   PRESENCE mandatory
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
                                  RL-Set-ID,
   dedicatedMeasurementValueInformation
                                          DedicatedMeasurementValueInformation,
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
```

```
RL-Set-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
       id-MeasurementRecoveryReportingIndicator
                                                CRITICALITY ignore
                                                                   EXTENSION MeasurementRecoveryReportingIndicator
   PRESENCE optional },
  *****************
-- DEDICATED MEASUREMENT TERMINATION REQUEST
       *****************
DedicatedMeasurementTerminationRequest ::= SEQUENCE
   protocolIEs
                            ProtocolIE-Container
                                                   {{DedicatedMeasurementTerminationRequest-IEs}},
                            ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
DedicatedMeasurementTerminationRequest-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-MeasurementID
                       CRITICALITY ignore TYPE MeasurementID
                                                                          PRESENCE mandatory },
   . . .
DedicatedMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- DEDICATED MEASUREMENT FAILURE INDICATION
  DedicatedMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                            ProtocolIE-Container
                                                   {{DedicatedMeasurementFailureIndication-IEs}},
                            ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
DedicatedMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                      CRITICALITY ignore TYPE MeasurementID
                                                                   PRESENCE mandatory }
   { ID id-Cause
                          CRITICALITY ignore TYPE Cause
                                                                   PRESENCE mandatory },
DedicatedMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE
optional
        },
   . . .
```

```
DedicatedMeasurementObjectType-DM-Fail-Ind ::= CHOICE {
                           RL-DM-Fail-Ind.
   rLS
                           RL-Set-DM-Fail-Ind.
    allRL
                           RL-DM-Fail-Ind,
    allRLS
                           RL-Set-DM-Fail-Ind,
RL-DM-Fail-Ind ::= SEQUENCE
                                                        RL-Unsuccessful-InformationRespList-DM-Fail-Ind,
    rL-unsuccessful-InformationRespList-DM-Fail-Ind
                                                        ProtocolExtensionContainer { { RLItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RLItem-DM-Fail-Ind-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Fail-Ind ::= SEQUENCE {
   rL-Set-unsuccessful-InformationRespList-DM-Fail-Ind
                                                            RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind,
                                                            ProtocolExtensionContainer { { RL-SetItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-SetItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                       ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Unsuccessful-
RL-Unsuccessful-InformationRespList-DM-Fail-Ind
InformationResp-DM-Fail-Ind-IEs} }
RL-Unsuccessful-InformationResp-DM-Fail-Ind-IES RNSAP-PROTOCOL-IES ::= {
                                                         CRITICALITY ignore TYPE RL-Unsuccessful-InformationItem-DM-Fail-Ind
    { ID id-RL-Unsuccessful-InformationItem-DM-Fail-Ind
    PRESENCE mandatory }
RL-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
    rL-ID
                                RL-ID,
    individualcause
                                            OPTIONAL,
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind
                                                                ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-
Unsuccessful-InformationResp-DM-Fail-Ind-IEs} }
RL-Set-Unsuccessful-InformationResp-DM-Fail-Ind-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind
                                                           CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind
   PRESENCE mandatory }
RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
                                 RL-Set-ID,
   individualcause
                                 Cause
                                            OPTIONAL.
   iE-Extensions
                                 ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs} } OPTIONAL,
RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
       *****************
  COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST
  ******************
CommonTransportChannelResourcesReleaseRequest ::= SEQUENCE {
                                                           {{CommonTransportChannelResourcesReleaseRequest-IEs}},
   protocolIEs
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{CommonTransportChannelResourcesReleaseRequest-Extensions}}
OPTIONAL,
CommonTransportChannelResourcesReleaseRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-D-RNTI
                                 CRITICALITY ignore TYPE D-RNTI
                                                                              PRESENCE mandatory
   . . .
CommonTransportChannelResourcesReleaseRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  COMMON TRANSPORT CHANNEL RESOURCES REQUEST
       CommonTransportChannelResourcesRequest ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{CommonTransportChannelResourcesRequest-IEs}},
                                 ProtocolExtensionContainer {{CommonTransportChannelResourcesRequest-Extensions}}
   protocolExtensions
                                                                                                                             OPTIONAL,
   . . .
CommonTransportChannelResourcesRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                            CRITICALITY reject TYPE D-RNTI
                                                                                                            PRESENCE mandatory }
     ID id-C-ID
                                            CRITICALITY reject TYPE C-ID
                                                                                                            PRESENCE optional }
     ID id-TransportBearerRequestIndicator
                                            CRITICALITY reject TYPE TransportBearerRequestIndicator
                                                                                                           PRESENCE mandatory }
     ID id-TransportBearerID
                                                                                                           PRESENCE mandatory },
                                            CRITICALITY reject TYPE TransportBearerID
```

```
CommonTransportChannelResourcesRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                             CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                              PRESENCE optional }|
    ID id-BindingID
                                             CRITICALITY ignore EXTENSION BindingID
                                                                                                              PRESENCE optional }
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                                                                                              PRESENCE optional } |
                                             CRITICALITY ignore EXTENSION TransportLayerAddress
    -- Shall be ignored if bearer establishment with ALCAP.
     ID id-MBMS-Bearer-Service-List
                                             CRITICALITY notify EXTENSION MBMS-Bearer-Service-List
                                                                                                              PRESENCE optional }
     ID id-TnlOos
                                             CRITICALITY ignore EXTENSION TnlQos
                                                                                                              PRESENCE optional }
    ID id-Enhanced-FACH-Support-Indicator
                                                                                                              PRESENCE optional }
                                             CRITICALITY ignore EXTENSION Enhanced-FACH-Support-Indicator
    -- FDD and 1.28Mcps TDD only
    { ID id-Common-EDCH-Support-Indicator
                                             CRITICALITY ignore EXTENSION Common-EDCH-Support-Indicator
                                                                                                              PRESENCE optional } |
    -- FDD only
    { ID id-HSDSCH-Physical-Layer-Category
                                             CRITICALITY ignore EXTENSION HSDSCH-Physical-Layer-Category
                                                                                                              PRESENCE optional }
     ID id-UE-with-enhanced-HS-SCCH-support-indicator CRITICALITY ignore EXTENSION NULL
                                                                                                              PRESENCE optional },
   COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
  CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                            {{CommonTransportChannelResourcesResponseFDD-IEs}},
                                  ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseFDD-Extensions}}
   protocolExtensions
   OPTIONAL,
    . . .
CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-S-RNTI
                                 CRITICALITY ignore TYPE S-RNTI
                                                                               PRESENCE mandatory
                                  CRITICALITY ignore TYPE C-RNTI
     ID id-C-RNTI
                                                                               PRESENCE optional
    ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD
    PRESENCE mandatory } |
     ID id-TransportLayerAddress
                                         CRITICALITY ignore TYPE TransportLayerAddress
                                                                                            PRESENCE optional
     ID id-BindingID
                                  CRITICALITY ignore TYPE BindingID
                                                                                   PRESENCE optional
    ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                            PRESENCE optional
    . . .
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
                                  FACH-FlowControlInformation-CTCH-ResourceRspFDD,
    fACH-FlowControlInformation
-- If the Enhanced FACH Information Response IE is included in the message, the FACH Flow Control Information IE shall be ignored.
                                  ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
```

```
FACH-FlowControlInformation-CTCH-ResourceRspFDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD }}
FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory
CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     TD id-C-TD
                                                          CRITICALITY ignore EXTENSION C-ID
                                                                                                                            PRESENCE mandatory } |
     ID id-Active-MBMS-Bearer-ServiceFDD
                                                          CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD
                                                                                                                           PRESENCE optional}
     ID id-Enhanced-FACH-Information-ResponseFDD
                                                          CRITICALITY ignore EXTENSION Enhanced-FACH-Information-ResponseFDD PRESENCE optional
     ID id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD CRITICALITY ignore EXTENSION Common-EDCH-MAC-d-Flow-Specific-InformationFDD
    PRESENCE optional } |
    { ID id-E-RNTI
                                                          CRITICALITY ignore EXTENSION E-RNTI
                                                                                                                            PRESENCE optional } |
    { ID id-Extended-S-RNTI
                                                          CRITICALITY ignore EXTENSION Extended-RNTI
                                                                                                                            PRESENCE optional },
  COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
      CommonTransportChannelResourcesResponseTDD ::= SEQUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                             {{CommonTransportChannelResourcesResponseTDD-IEs}},
   protocolExtensions
                                   ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseTDD-Extensions}}
   OPTIONAL,
    . . .
CommonTransportChannelResourcesResponseTDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-S-RNTI
                                  CRITICALITY ignore TYPE S-RNTI
                                                                                 PRESENCE mandatory
     ID id-C-RNTI
                                  CRITICALITY ignore TYPE C-RNTI
                                                                                 PRESENCE optional
     ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD
    PRESENCE mandatory } |
    { ID id-TransportLayerAddress
                                          CRITICALITY ignore TYPE TransportLayerAddress
                                                                                               PRESENCE optional
     ID id-BindingID
                                   CRITICALITY ignore TYPE BindingID
                                                                                     PRESENCE optional
     ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                               PRESENCE optional
    . . .
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
    fACH-FlowControlInformation
                                  FACH-FlowControlInformation-CTCH-ResourceRspTDD,
   iE-Extensions
                                   ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
FACH-FlowControlInformation-CTCH-ResourceRspTDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD }}
```

```
FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE
                                                              FACH-FlowControlInformation PRESENCE mandatory
CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-C-ID
                                                                                                                    PRESENCE mandatory } |
                                                       CRITICALITY ignore EXTENSION C-ID
     ID id-Active-MBMS-Bearer-ServiceTDD
                                                       CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD PRESENCE optional
     ID id-Enhanced-FACH-Information-ResponseLCR
                                                      CRITICALITY ignore EXTENSION Enhanced-FACH-Information-ResponseLCR PRESENCE optional \
    { ID id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR CRITICALITY ignore EXTENSION Common-EDCH-MAC-d-Flow-Specific-InformationLCR
   PRESENCE optional } |
   { ID id-Extended-S-RNTI
                                                                                                                    PRESENCE optional },
                                                       CRITICALITY ignore EXTENSION Extended-RNTI
    COMMON TRANSPORT CHANNEL RESOURCES FAILURE
     *****************
CommonTransportChannelResourcesFailure ::= SEQUENCE {
   protocolIEs
                                                          {{CommonTransportChannelResourcesFailure-IEs}},
                                ProtocolIE-Container
                                 ProtocolExtensionContainer {{CommonTransportChannelResourcesFailure-Extensions}}
   protocolExtensions
                                                                                                                           OPTIONAL,
   . . .
CommonTransportChannelResourcesFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-S-RNTI
                                        CRITICALITY ignore TYPE S-RNTI
                                                                                         PRESENCE mandatory
     ID id-Cause
                                        CRITICALITY ignore TYPE Cause
                                                                                         PRESENCE mandatory }
    { ID id-CriticalityDiagnostics
                                                                                         PRESENCE optional },
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
   . . .
CommonTransportChannelResourcesFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-S-RNTI
                                CRITICALITY ignore EXTENSION Extended-RNTI
                                                                             PRESENCE optional },
   . . .
     ****************
  COMPRESSED MODE COMMAND
  CompressedModeCommand ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {{CompressedModeCommand-IEs}},
                                ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL.
CompressedModeCommand-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-Active-Pattern-Sequence-Information
                                               CRITICALITY ignore TYPE Active-Pattern-Sequence-Information
                                                                                                              PRESENCE mandatory },
```

```
CompressedModeCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- ERROR INDICATION
*****************
ErrorIndication ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                      {{ErrorIndication-IEs}},
   protocolExtensions
                              ProtocolExtensionContainer {{ErrorIndication-Extensions}}
                                                                                                 OPTIONAL,
ErrorIndication-IEs RNSAP-PROTOCOL-IES ::= {
                              CRITICALITY ignore TYPE Cause
     ID id-Cause
                                                                        PRESENCE optional }
   { ID id-CriticalityDiagnostics
                              CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                   PRESENCE optional
ErrorIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-S-RNTI
                 CRITICALITY ignore EXTENSION S-RNTI
                                                                               PRESENCE optional }
     ID id-D-RNTI
                           CRITICALITY ignore EXTENSION D-RNTI
                                                                               PRESENCE optional }
                         CRITICALITY ignore EXTENSION Extended-RNTI
   { ID id-Extended-S-RNTI
                                                                               PRESENCE optional },
  -- COMMON MEASUREMENT INITIATION REQUEST
  *****************
CommonMeasurementInitiationRequest ::= SEQUENCE {
                       ProtocolIE-Container
                                            {{CommonMeasurementInitiationRequest-IEs}},
   protocolIEs
   protocolExtensions
                       ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}
                                                                                                       OPTIONAL,
   . . .
CommonMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-MeasurementID
                                     CRITICALITY reject TYPE
                                                              MeasurementID
   PRESENCE mandatory } |
   { ID id-CommonMeasurementObjectType-CM-Rqst CRITICALITY reject TYPE
                                                                 CommonMeasurementObjectType-CM-Rqst
                                                                                                       PRESENCE mandatory } |
   { ID id-CommonMeasurementType
                                     CRITICALITY reject TYPE
                                                              CommonMeasurementType
   PRESENCE mandatory } |
   { ID id-MeasurementFilterCoefficient CRITICALITY reject TYPE
                                                              MeasurementFilterCoefficient
   PRESENCE optional }
   -- UTRAN only
   { ID id-ReportCharacteristics
                                     CRITICALITY reject TYPE
                                                              ReportCharacteristics
   PRESENCE mandatory } |
```

```
{ ID id-SFNReportingIndicator
                                        CRITICALITY reject TYPE
                                                                  FNReportingIndicator
   PRESENCE mandatory }
   { ID id-SFN
                                        CRITICALITY reject TYPE
                                                                  SFN
   PRESENCE optional }
   -- UTRAN only
   { ID id-CommonMeasurementAccuracy
                                        CRITICALITY reject TYPE
                                                                  CommonMeasurementAccuracy
   PRESENCE optional },
   -- UTRAN only
CommonMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ID id-MeasurementRecoveryBehavior
                                               CRITICALITY ignore EXTENSION MeasurementRecoveryBehavior
                                                                                                              PRESENCE optional
   -- UTRAN only
     ID id-GANSS-Time-ID
                                               CRITICALITY ignore EXTENSION GANSS-Time-ID
                                                                                                              PRESENCE optional } |
     PRESENCE optional },
   . . .
CommonMeasurementObjectType-CM-Rgst ::= CHOICE {
   cell
                                 Cell-CM-Rqst,
   additional-CommonMeasurementObjectType-CM-Rqst Additional-CommonMeasurementObjectType-CM-Rqst
Cell-CM-Rast ::= SEQUENCE {
   uC-ID
                                 UC-ID,
   -- May be a GERAN cell identifier
   timeSlot
                                 TimeSlot.
                                                OPTIONAL,
                                                          --3.84Mcps TDD and 7.68Mcps TDD only
   timeSlotLCR
                                                          --1.28Mcps TDD only
                                TimeSlotLCR
                                               OPTIONAL,
   neighbouringCellMeasurementInformation
                                               NeighbouringCellMeasurementInfo
                                                                                 OPTIONAL,
   -- UTRAN only
   iE-Extensions
                                 OPTIONAL,
NeighbouringCellMeasurementInfo ::= SEOUENCE (SIZE (1..maxNrOfMeasNCell)) OF
       CHOICE {
              neighbouring FDD Cell Measurement Information
                                                          NeighbouringFDDCellMeasurementInformation,
              neighbouringTDDCellMeasurementInformation
                                                          NeighbouringTDDCellMeasurementInformation,
              {\tt extension-neighbouringCellMeasurementInformation}
                                                              Extension-neighbouringCellMeasurementInformation,
              extension-neighbouringCellMeasurementInformation768 Extension-neighbouringCellMeasurementInformation768
Extension-neighbouringCellMeasurementInformation
                                              ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}
Extension-neighbouringCellMeasurementInformationIE RNSAP-PROTOCOL-IES ::= {
   { ID id-neighbouringTDDCellMeasurementInformationLCR
                                                     CRITICALITY reject TYPE NeighbouringTDDCellMeasurementInformationLCR
                                                                                                                            PRESENCE
mandatory },
```

```
Extension-neighbouringCellMeasurementInformation768 ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformation768IE }}
Extension-neighbouringCellMeasurementInformation768IE RNSAP-PROTOCOL-IES ::= {
   PRESENCE
mandatory },
CellItem-CM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UARFCNforNt
                                   CRITICALITY ignore EXTENSION UARFON
                                                                                 PRESENCE optional }
   -- Applicable to 1.28Mcps TDD only
   { ID id-UPPCHPositionLCR
                                   CRITICALITY reject EXTENSION UPPCHPositionLCR
                                                                                 PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
Additional-CommonMeasurementObjectType-CM-Rgst ::= ProtocolIE-Single-Container {{ Additional-CommonMeasurementObjectType-CM-RgstIE }}
Additional-CommonMeasurementObjectType-CM-RqstIE RNSAP-PROTOCOL-IES ::= {
   { ID id-GSM-Cell-CM-Rqst
                         CRITICALITY ignore TYPE GSM-Cell-CM-Rqst PRESENCE mandatory },
   . . .
GSM-Cell-CM-Rqst ::= SEQUENCE {
                     ProtocolExtensionContainer { GSMCell-CM-Rqst-ExtIEs} }
   iE-Extensions
                                                                             OPTIONAL,
GSMCell-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Extension-CommonMeasurementObjectType-CM-Rqst ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RqstIE }}
Extension-CommonMeasurementObjectType-CM-RqstIE RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory },
GsmCellList-CM-Rqst ::= SEOUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rqst
GsmCellItem-CM-Rqst ::= SEQUENCE {
   measurementID
                        MeasurementID,
   qsmCell
                        GSM-Cell-CM-Rqst,
   iE-Extensions
                        ProtocolExtensionContainer { { GsmCellItem-CM-Rgst-ExtIEs} }
                                                                                    OPTIONAL.
GsmCellItem-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
__ *********************
-- COMMON MEASUREMENT INITIATION RESPONSE
  ****************
CommonMeasurementInitiationResponse ::= SEOUENCE {
                                        {{CommonMeasurementInitiationResponse-IEs}},
   protocolIEs
                     ProtocolIE-Container
   protocolExtensions
                     ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}
                                                                                             OPTIONAL,
CommonMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                             PRESENCE mandatory } |
    PRESENCE optional } |
   { ID id-SFN
                                   CRITICALITY ignore TYPE SFN
                                                                                             PRESENCE optional }
   -- UTRAN only
   { ID id-CriticalityDiagnostics
                                    CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                             PRESENCE optional }
   { ID id-CommonMeasurementAccuracy
                                                                                             PRESENCE optional },
                                     CRITICALITY reject TYPE CommonMeasurementAccuracy
   -- UTRAN only
   . . .
CommonMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- UTRAN only
   optional},
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
   cell
                        Cell-CM-Rsp,
   . . .
Cell-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                     CommonMeasurementValue,
                                     ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
   iE-Extensions
                                                                                             OPTIONAL,
   . . .
Cellitem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Extension-CommonMeasurementObjectType-CM-Rsp ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RspIE }}
Extension-CommonMeasurementObjectType-CM-RspIE RNSAP-PROTOCOL-IES ::= {
   { ID id-GsmCellList-CM-Rsp CRITICALITY ignore TYPE GsmCellList-CM-Rsp PRESENCE mandatory },
   . . .
GsmCellList-CM-Rsp ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rsp
```

```
GsmCellItem-CM-Rsp ::= SEQUENCE {
   measurement.ID
                                MeasurementID,
   commonMeasurement.Value
                                CommonMeasurementValue
                                                           OPTIONAL.
   iE-Extensions
                                ProtocolExtensionContainer { GsmCellItem-CM-Rsp-ExtIEs} }
                                                                                            OPTIONAL,
GsmCellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ******************
-- COMMON MEASUREMENT INITIATION FAILURE
  ******************
CommonMeasurementInitiationFailure ::= SEOUENCE {
                                           {{CommonMeasurementInitiationFailure-IEs}},
   protocolIEs
                      ProtocolIE-Container
   protocolExtensions
                      ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
                                                                                                   OPTIONAL,
CommonMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                                CRITICALITY ignore TYPE MeasurementID
                                                                           PRESENCE mandatory }
    ID id-Cause
                                CRITICALITY ignore TYPE Cause
                                                                           PRESENCE mandatory }
   { ID id-CriticalityDiagnostics
                                CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                           PRESENCE optional },
CommonMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
   . . .
Extension-FailureMeasurementList ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-FailureMeasurementItem
Extension-FailureMeasurementItem ::= SEQUENCE {
   measurementID
                                MeasurementID,
   cause
                                Cause,
                                ProtocolExtensionContainer { { Extension-FailureMeasurementItem-ExtIEs} }
   iE-Extensions
                                                                                                   OPTIONAL,
Extension-FailureMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  -- COMMON MEASUREMENT REPORT
  *****************
```

```
CommonMeasurementReport ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container {{CommonMeasurementReport-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
CommonMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                          CRITICALITY ignore TYPE MeasurementID
                                                                                                    PRESENCE mandatory } |
     ID id-CommonMeasurementObjectType-CM-Rprt CRITICALITY ignore TYPE CommonMeasurementObjectType-CM-Rprt
                                                                                                    PRESENCE mandatory } |
    ID id-SFN
                                          CRITICALITY ignore TYPE SFN
                                                                                                    PRESENCE optional },
   -- UTRAN only
   . . .
CommonMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-MeasurementRecoveryReportingIndicator
                                                 CRITICALITY ignore EXTENSION MeasurementRecoveryReportingIndicator
                                                                                                                 PRESENCE optional } |
   -- UTRAN only
   PRESENCE optional },
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
   cell
                               Cell-CM-Rprt,
Cell-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
                                ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
   iE-Extensions
                                                                                       OPTIONAL,
   . . .
CellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Extension-CommonMeasurementObjectType-CM-Rprt ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementObjectType-CM-RprtIE }}
Extension-CommonMeasurementObjectType-CM-RprtIE RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory },
   . . .
GsmCellList-CM-Rprt ::= SEOUENCE (SIZE (1..maxNoOfGsmCell)) OF GsmCellItem-CM-Rprt
GsmCellItem-CM-Rprt ::= SEOUENCE {
   measurementID
                                          MeasurementID,
   commonMeasurementValueInformation
                                          CommonMeasurementValueInformation,
   iE-Extensions
                                          ProtocolExtensionContainer { GsmCellItem-CM-Rprt-ExtIEs} }
                                                                                                           OPTIONAL,
GsmCellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
```

```
*****************
-- COMMON MEASUREMENT TERMINATION REQUEST
  ******************
CommonMeasurementTerminationRequest ::= SEQUENCE {
                                           {{CommonMeasurementTerminationRequest-IEs}},
   protocolIEs
                      ProtocolIE-Container
                      ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                   OPTIONAL,
CommonMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
   { ID
         id-MeasurementID
                                CRITICALITY
                                                                     MeasurementID
                                                                                             PRESENCE
                                                                                                         mandatory },
CommonMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   Extension-TerminationMeasurementList ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-TerminationMeasurementItem
Extension-TerminationMeasurementItem ::= SEQUENCE {
   measurementID
                                 ProtocolExtensionContainer { { Extension-TerminationMeasurementItem-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
Extension-TerminationMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    *********************
  COMMON MEASUREMENT FAILURE INDICATION
     ******************
CommonMeasurementFailureIndication ::= SEQUENCE {
                      ProtocolIE-Container
                                           {{CommonMeasurementFailureIndication-IEs}},
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
                                                                                                                OPTIONAL,
   . . .
CommonMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    ID
         id-MeasurementID
                                CRITICALITY ignore
                                                        TYPE
                                                              MeasurementID
                                                                                 PRESENCE
                                                                                             mandatory
    ID
         id-Cause
                                CRITICALITY ignore
                                                        TYPE
                                                              Cause
                                                                                 PRESENCE
                                                                                             mandatory
```

```
CommonMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extension-FailureIndicationMeasurementList CRITICALITY ignore EXTENSION Extension-FailureIndicationMeasurementList
                                                                                                                               PRESENCE
optional },
   . . .
Extension-FailureIndicationMeasurementList ::= SEQUENCE (SIZE (1..maxNoOfGsmCell)) OF Extension-FailureIndicationMeasurementItem
Extension-FailureIndicationMeasurementItem ::= SEQUENCE {
   measurementID
                                 MeasurementID,
   cause
                                 Cause,
                                  ProtocolExtensionContainer { { Extension-FailureIndicationMeasurementItem-ExtIEs} }
   iE-Extensions
                                                                                                                               OPTIONAL,
Extension-FailureIndicationMeasurementItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  -- INFORMATION EXCHANGE INITIATION REQUEST
  ******************
InformationExchangeInitiationRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{InformationExchangeInitiationRequest-IEs}},
                          ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
InformationExchangeInitiationRequest-IES RNSAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
                                                        CRITICALITY reject
                                                                               TYPE
                                                                                      InformationExchangeID
              mandatory } |
   PRESENCE
          id-InformationExchangeObjectType-InfEx-Rqst
                                                        CRITICALITY reject
                                                                               TYPE
                                                                                       InformationExchangeObjectType-InfEx-Rqst
   PRESENCE
              mandatory }|
   { ID id-InformationType
                                                        CRITICALITY reject
                                                                               TYPE
                                                                                       InformationType
       PRESENCE
                  mandatory }|
          id-InformationReportCharacteristics
   { ID
                                                        CRITICALITY reject
                                                                               TYPE
                                                                                       InformationReportCharacteristics
                                                                                                                               PRESENCE
   mandatory },
   . . .
InformationExchangeInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rgst ::= CHOICE {
   cell
                                                        Cell-InfEx-Rgst,
   . . . ,
   extension-InformationExchangeObjectType-InfEx-Rqst
                                                        Extension-InformationExchangeObjectType-InfEx-Rqst
```

```
Cell-InfEx-Rgst ::= SEQUENCE {
    C-ID
                                   C-ID, --May be a GERAN cell identifier
    iE-Extensions
                                   ProtocolExtensionContainer { { CellItem-InfEx-Rqst-ExtIEs} }
                                                                                                        OPTIONAL.
CellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Extension-InformationExchangeObjectType-InfEx-Rgst ::= ProtocolIE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RgstIE }}
Extension-InformationExchangeObjectType-InfEx-RqstIE RNSAP-PROTOCOL-IES ::= {
     ID id-GSM-Cell-InfEx-Rgst
                                                            CRITICALITY reject TYPE GSM-Cell-InfEx-Rgst
                                                                                                                               PRESENCE mandatory } |
     ID id-MBMS-Bearer-Service-List
                                                            CRITICALITY reject TYPE MBMS-Bearer-Service-List
                                                                                                                               PRESENCE mandatory |
     ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                           CRITICALITY reject TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                                                                                                       PRESENCE
mandatory}
     ID id-MBMS-Cell-InfEx-Rqst
                                                            CRITICALITY reject TYPE MBMS-Cell-InfEx-Rqst
                                                                                                                               PRESENCE mandatory |
     ID id-ANR-Cell-InfEx-Rgst
                                                            CRITICALITY reject TYPE ANR-Cell-InfEx-Rqst
                                                                                                                               PRESENCE mandatory}
    { ID id-Common-E-RGCH-Cell-InfEx-Rgst
                                                                                                                               PRESENCE mandatory }
                                                           CRITICALITY reject TYPE Common-E-RGCH-Cell-InfEx-Rqst
GSM-Cell-InfEx-Rgst ::= SEOUENCE {
    iE-Extensions
                                    ProtocolExtensionContainer { GSMCellItem-InfEx-Rqst-ExtIEs} }
                                                                                                                OPTIONAL,
GSMCellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rgst
                                                   ::= SEOUENCE
                                   C-ID,
    mBMS-Bearer-Service-List-InfEx-Rgst
                                                               MBMS-Bearer-Service-List-InfEx-Rqst,
    iE-Extensions
                                   ProtocolExtensionContainer { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs} }
                                                                                                                                       OPTIONAL.
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-List-Infex-Rqst ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Cell-InfEx-Rgst
                      ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF C-ID
ANR-Cell-InfEx-Rost
                      ::= SEQUENCE (SIZE (1..maxNrOfANRCells)) OF C-ID
```

```
Common-E-RGCH-Cell-InfEx-Rgst ::= SEQUENCE (SIZE (1..maxNoOfCommonRGCells)) OF C-ID
__ **********************
-- INFORMATION EXCHANGE INITIATION RESPONSE
        InformationExchangeInitiationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{InformationExchangeInitiationResponse-IEs}},
                          ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
InformationExchangeInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
          id-InformationExchangeID
                                                    CRITICALITY ignore TYPE
                                                                               InformationExchangeID
    PRESENCE
              mandatory }|
    { ID id-InformationExchangeObjectType-InfEx-Rsp CRITICALITY ignore TYPE
                                                                               InformationExchangeObjectType-InfEx-Rsp
                                                                                                                                PRESENCE
    optional }|
          id-CriticalityDiagnostics
                                                    CRITICALITY ignore TYPE
                                                                               CriticalityDiagnostics
    { ID
    PRESENCE
              optional },
    . . .
InformationExchangeInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
                              Cell-InfEx-Rsp,
   cell
    . . . ,
    extension-InformationExchangeObjectType-InfEx-Rsp
                                                        Extension-InformationExchangeObjectType-InfEx-Rsp
Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue
                                  RequestedDataValue,
   iE-Extensions
                                  ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} }
                                                                                                   OPTIONAL,
    . . .
Cellitem-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Extension-InformationExchangeObjectType-InfEx-Rsp ::= ProtocolIE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RspIE }}
Extension-InformationExchangeObjectType-InfEx-RspIE RNSAP-PROTOCOL-IES ::= {
     ID id-MBMS-Bearer-Service-List-InfEx-Rsp
                                                        CRITICALITY ignore TYPE MBMS-Bearer-Service-List-InfEx-Rsp
                                                                                                                        PRESENCE mandatory }
     ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp
                                                        CRITICALITY ignore TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp PRESENCE mandatory
     ID id-MBMS-Cell-InfEx-Rsp
                                                        CRITICALITY ignore TYPE MBMS-Cell-InfEx-Rsp
                                                                                                                        PRESENCE mandatory}
     ID id-ANR-Cell-InfEx-Rsp
                                                        CRITICALITY ignore TYPE ANR-Cell-InfEx-Rsp
                                                                                                                        PRESENCE mandatory |
```

```
{ ID id-Common-E-RGCH-Cell-InfEx-Rsp
                                                         CRITICALITY ignore TYPE Common-E-RGCH-Cell-InfEx-Rsp
                                                                                                                          PRESENCE mandatory }
MBMS-Bearer-Service-List-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
                                      ::=SEOUENCE{
          TMGI,
   requestedDataValue
                          RequestedDataValue,
                                  ProtocolExtensionContainer { { MBMS-Bearer-ServiceItem-InfEx-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
MBMS-Bearer-ServiceItem-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp ::= SEQUENCE {
    C-TD
                                  C-ID,
    mBMS-Bearer-Service-List-InfEx-Rsp
                                                             MBMS-Bearer-Service-List-InfEx-Rsp.
                                  ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rsp
MBMS-Cell-Item-InfEx-Rsp
                         ::= SEOUENCE {
    c-ID
                                  C-ID,
   requestedDataValue
                                  RequestedDataValue,
                                  iE-Extensions
                                                                                                           OPTIONAL,
MBMS-Cell-Item-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-Cell-InfEx-Rsp ::= SEQUENCE (SIZE (1..maxNrOfANRCells)) OF ANR-Cell-ItemIEs-InfEx-Rsp
ANR-Cell-ItemIEs-InfEx-Rsp ::=SEQUENCE{
   requestedDataValue
                                  RequestedDataValue,
                                  ProtocolExtensionContainer { { ANR-Cell-ItemIEs-InfEx-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
```

```
ANR-Cell-ItemIEs-InfEx-Rsp-ExtIEs
                               RNSAP-PROTOCOL-EXTENSION ::= {
                            ::= SEQUENCE (SIZE (1.. maxNoOfCommonRGCells)) OF Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp
Common-E-RGCH-Cell-InfEx-Rsp
Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp
                                   ::=SEOUENCE{
   c-ID
                                   C-ID,
   requestedDataValue
                                   RequestedDataValue,
                                   ProtocolExtensionContainer { { Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
Common-E-RGCH-Cell-ItemIEs-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ***************
-- INFORMATION EXCHANGE INITIATION FAILURE
__ *********************
InformationExchangeInitiationFailure ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                              {{InformationExchangeInitiationFailure-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}
                                                                                                           OPTIONAL,
InformationExchangeInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
   { ID
         id-InformationExchangeID
                                              CRITICALITY
                                                            ignore
                                                                          TYPE
                                                                                 InformationExchangeID
             mandatory } |
   PRESENCE
   { ID
          id-Cause
                                              CRITICALITY
                                                                          TYPE
                                                            ignore
                                                                                 Cause
          PRESENCE
                    mandatory } |
   { ID
        id-CriticalityDiagnostics
                                              CRITICALITY
                                                            ignore
                                                                          TYPE
                                                                                 CriticalityDiagnostics
   PRESENCE optional },
InformationExchangeInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ****************
-- INFORMATION REPORT
__ **********************
InformationReport ::= SEQUENCE {
                        ProtocolIE-Container {{InformationReport-IEs}},
   protocolIEs
   protocolExtensions
                        ProtocolExtensionContainer {{InformationReport-Extensions}}
                                                                                     OPTIONAL,
```

```
InformationReport-IEs RNSAP-PROTOCOL-IES ::= {
           id-InformationExchangeID
                                                            CRITICALITY ignore
                                                                                        TYPE
                                                                                                InformationExchangeID
                           mandatory }|
                PRESENCE
           id-InformationExchangeObjectType-InfEx-Rprt
                                                            CRITICALITY ignore
                                                                                                InformationExchangeObjectType-InfEx-Rprt
                                                                                        TYPE
    PRESENCE
                mandatory },
InformationReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
    cell
                                   Cell-InfEx-Rprt,
    . . . ,
    extension-InformationExchangeObjectType-InfEx-Rprt
                                                            Extension-InformationExchangeObjectType-InfEx-Rprt
Extension-InformationExchangeObjectType-InfEx-Rprt ::= ProtocolIE-Single-Container {{ Extension-InformationExchangeObjectType-InfEx-RprtIE }}
Extension-InformationExchangeObjectType-InfEx-RprtIE RNSAP-PROTOCOL-IES ::= {
     ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt CRITICALITY ignore TYPE MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt
                                                                                                                                PRESENCE mandatory}
     ID id-MBMS-Cell-InfEx-Rprt
                                                       CRITICALITY ignore TYPE MBMS-Cell-InfEx-Rprt
                                                                                                                                PRESENCE mandatory } |
     ID id-Common-E-RGCH-Cell-InfEx-Rprt
                                                       CRITICALITY ignore TYPE Common-E-RGCH-Cell-InfEx-Rprt
                                                                                                                                PRESENCE mandatory }
Cell-InfEx-Rprt ::= SEOUENCE {
    requestedDataValueInformation
                                   RequestedDataValueInformation,
    iE-Extensions
                                    ProtocolExtensionContainer {{ CellItem-InfEx-Rprt-ExtIEs }}
                                                                                                         OPTIONAL,
CellItem-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
                                                    ::= SEOUENCE
    c-ID
    mBMS-Bearer-Service-List-InfEx-Rprt
                                                                MBMS-Bearer-Service-List-InfEx-Rprt,
    iE-Extensions
                                    ProtocolExtensionContainer { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs} }
                                                                                                                                       OPTIONAL,
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
MBMS-Bearer-Service-List-InfEx-Rprt ::= SEOUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-Service-List-Item-InfEx-Rprt
MBMS-Bearer-Service-List-Item-InfEx-Rprt
                                        ::= SEOUENCE {
                                 RequestedDataValueInformation,
   requestedDataValueInformation
   iE-Extensions
                                 ProtocolExtensionContainer { MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs} }
                                                                                                                      OPTIONAL,
MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                    ::= SEOUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rprt
MBMS-Cell-InfEx-Rprt
MBMS-Cell-Item-InfEx-Rprt ::= SEQUENCE {
                                 C-ID,
   requestedDataValueInformation RequestedDataValueInformation,
   iE-Extensions
                                 OPTIONAL,
   . . .
MBMS-Cell-Item-Infex-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Common-E-RGCH-Cell-InfEx-Rprt ::= SEOUENCE (SIZE (1.. maxNoOfCommonRGCells)) OF Common-E-RGCH-Cell-Item-InfEx-Rprt
Common-E-RGCH-Cell-Item-InfEx-Rprt ::= SEQUENCE {
   requestedDataValueInformation
                                     RequestedDataValueInformation,
   iE-Extensions
                                     ProtocolExtensionContainer { { Common-E-RGCH-Cell-Item-InfEx-Rprt-ExtIEs} }
                                                                                                               OPTIONAL,
Common-E-RGCH-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION EXCHANGE TERMINATION REQUEST
__ **********************
InformationExchangeTerminationRequest ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                                {{InformationExchangeTerminationRequest-IEs}},
                       ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                               OPTIONAL,
InformationExchangeTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID
         id-InformationExchangeID
                                         CRITICALITY
                                                                         TYPE
                                                                                InformationExchangeID
                                                                                                                      PRESENCE
                                                       ignore
   mandatory},
   . . .
InformationExchangeTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
        -- INFORMATION EXCHANGE FAILURE INDICATION
  *****************
InformationExchangeFailureIndication ::= SEOUENCE {
                       ProtocolIE-Container
                                             {{InformationExchangeFailureIndication-IEs}},
   protocolIEs
                           ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                      OPTIONAL,
InformationExchangeFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-InformationExchangeID
                                         CRITICALITY ignore
                                                                  TYPE
                                                                         InformationExchangeID
                                                                                                               PRESENCE
   mandatory } |
   { ID id-Cause
                                         CRITICALITY ignore
                                                                                                                      PRESENCE
                                                                  TYPE
                                                                         Cause
   mandatory },
InformationExchangeFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- RESET REOUEST
__ ********************************
ResetRequest ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{ResetRequest-IEs}},
                        ProtocolExtensionContainer {{ResetRequest-Extensions}}
   protocolExtensions
                                                                            OPTIONAL,
ResetRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-RNC-ID
                           CRITICALITY reject TYPE RNC-ID
                                                           PRESENCE mandatory }
    ID id-ResetIndicator
                           CRITICALITY reject
                                                TYPE ResetIndicator
                                                                                   mandatory},
                                                                         PRESENCE
ResetRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-RNC-ID
                                  CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                PRESENCE optional },
```

```
ResetIndicator ::= CHOICE {
                   ContextList-Reset,
   cont.ext.
                       NULL,
   all-contexts
   contextGroup
                   ContextGroupList-Reset
ContextList-Reset ::= SEQUENCE
   contextInfoList-Reset
                              ContextInfoList-Reset,
                                          ProtocolExtensionContainer { {ContextItem-Reset-ExtIEs} }
   iE-Extensions
                                                                                                            OPTIONAL,
   . . .
ContextItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContext)) OF ProtocolIE-Single-Container {{ ContextInfoItemIE-Reset }}
ContextInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
                                      CRITICALITY reject
    {ID id-ContextInfoItem-Reset
                                                             TYPE ContextInfoItem-Reset
                                                                                            PRESENCE mandatory}
ContextInfoItem-Reset ::= SEOUENCE {
   contextType-Reset
                              ContextType-Reset,
                              ProtocolExtensionContainer { { ContextInfoItem-Reset-ExtIEs} } OPTIONAL,
   iE-Extensions
ContextInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContextType-Reset ::= CHOICE {
   sRNTI
                   S-RNTI,
   dRNTI
                   D-RNTI,
    extension-ContextType-Reset Extension-ContextType-Reset
Extension-ContextType-Reset ::= ProtocolIE-Single-Container {{ Extension-ContextType-ResetIE }}
Extension-ContextType-ResetIE RNSAP-PROTOCOL-IES ::= {
   { ID id-Extended-S-RNTI
                              CRITICALITY reject TYPE Extended-RNTI
                                                                        PRESENCE mandatory },
    . . .
ContextGroupList-Reset ::= SEQUENCE {
    contextGroupInfoList-Reset
                                  ContextGroupInfoList-Reset,
   iE-Extensions
                                  OPTIONAL,
    . . .
```

```
ContextGroupItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContextGroupInfoList-Reset ::= SEOUENCE (SIZE (1.. maxResetContextGroup)) OF ProtocolIE-Single-Container {{ ContextGroupInfoItemIE-Reset }}
ContextGroupInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
   {ID id-ContextGroupInfoItem-Reset
                                CRITICALITY reject
                                                        TYPE ContextGroupInfoItem-Reset
                                                                                             PRESENCE mandatory }
ContextGroupInfoItem-Reset ::= SEQUENCE {
   s-RNTI-Group
                          S-RNTI-Group,
   iE-Extensions
                        ProtocolExtensionContainer { { ContextGroupInfoItem-Reset-ExtIEs} }
                                                                                             OPTIONAL,
ContextGroupInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional },
  ******************
-- RESET RESPONSE
     **********************
ResetResponse ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                           {{ResetResponse-IEs}},
                    ProtocolExtensionContainer {{ResetResponse-Extensions}}
   protocolExtensions
                                                                               OPTIONAL,
   . . .
ResetResponse-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-RNC-ID
                 CRITICALITY ignore TYPE RNC-ID
                                                        PRESENCE mandatory} |
    ID id-CriticalityDiagnostics CRITICALITY ignore
                                                        TYPE CriticalityDiagnostics
                                                                                             PRESENCE
                                                                                                         optional},
ResetResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-RNC-ID
                                                                            PRESENCE optional },
                                CRITICALITY reject EXTENSION Extended-RNC-ID
  ******************
-- RADIO LINK ACTIVATION COMMAND FDD
  ******************
RadioLinkActivationCommandFDD ::= SEQUENCE {
                                           {{RadioLinkActivationCommandFDD-IEs}},
   protocolIEs
                     ProtocolIE-Container
```

```
ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}
                                                                                                                OPTIONAL,
   protocolExtensions
RadioLinkActivationCommandFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-DelayedActivationList-RL-ActivationCmdFDD
                                                        CRITICALITY ignore TYPE
                                                                                DelayedActivationInformationList-RL-ActivationCmdFDD
       PRESENCE mandatory },
RadioLinkActivationCommandFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
     DelayedActivationInformation-RL-ActivationCmdFDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdFDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdFDD
   PRESENCE optional
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
                             RL-ID,
   delayed-activation-update DelayedActivationUpdate,
                             ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  -- RADIO LINK ACTIVATION COMMAND TDD
  **************************
RadioLinkActivationCommandTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{RadioLinkActivationCommandTDD-IEs}},
                          ProtocolExtensionContainer {{RadioLinkActivationCommandTDD-Extensions}}
   protocolExtensions
                                                                                                                OPTIONAL,
RadioLinkActivationCommandTDD-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-DelayedActivationList-RL-ActivationCmdTDD
                                                        CRITICALITY ignore TYPE
                                                                                 DelayedActivationInformationList-RL-ActivationCmdTDD
       PRESENCE mandatory },
RadioLinkActivationCommandTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdTDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdTDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-DelayedActivationInformation-RL-ActivationCmdTDD CRITICALITY ignore TYPE DelayedActivationInformation-RL-ActivationCmdTDD
    PRESENCE optional }
DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
                              RL-ID,
    delayed-activation-update DelayedActivationUpdate,
                              ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  GERAN UPLINK SIGNALLING TRANSFER INDICATION
  GERANUplinkSignallingTransferIndication ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                              {GERANUplinkSignallingTransferIndication-IEs}},
                                  ProtocolExtensionContainer {{GERANUplinkSignallingTransferIndication-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
GERANUplinkSignallingTransferIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID
                                      CRITICALITY ignore TYPE UC-ID
                                                                                             PRESENCE mandatory
    -- UC-Id may be GERAN cell identifier.
    { ID id-SAI
                                      CRITICALITY ignore TYPE SAI
                                                                                             PRESENCE mandatory
     ID id-S-RNTI
                                      CRITICALITY ignore TYPE S-RNTI
                                                                                             PRESENCE mandatory
     ID id-D-RNTI
                                      CRITICALITY ignore TYPE D-RNTI
                                                                                             PRESENCE optional
     ID id-L3-Information
                                      CRITICALITY ignore TYPE L3-Information
                                                                                             PRESENCE mandatory
     ID id-CN-PS-DomainIdentifier
                                      CRITICALITY ignore TYPE CN-PS-DomainIdentifier
                                                                                             PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                      CRITICALITY ignore TYPE CN-CS-DomainIdentifier
                                                                                             PRESENCE optional
     ID id-URA-Information
                                      CRITICALITY ignore TYPE URA-Information
                                                                                             PRESENCE optional
    -- URA information may be GRA information
GERANUplinkSignallingTransferIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::=
    {ID id-Extended-S-RNTI
                              CRITICALITY ignore EXTENSION Extended-RNTI
                                                                             PRESENCE optional },
-- RADIO LINK PARAMETER UPDATE INDICATION FDD
```

```
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE {
                         ProtocolIE-Container
                                                {{RadioLinkParameterUpdateIndicationFDD-IEs}},
   protocolIEs
                         ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
RadioLinkParameterUpdateIndicationFDD-IEs RNSAP-PROTOCOL-IES ::= {
          id-HSDSCH-FDD-Update-Information
                                                              CRITICALITY ignore TYPE
                                                                                        HSDSCH-FDD-Update-Information
   PRESENCE
              optional}|
   RL-ParameterUpdateIndicationFDD-RL-InformationList
       PRESENCE optional },
RL-ParameterUpdateIndicationFDD-RL-InformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { RL-
ParameterUpdateIndicationFDD-RL-InformationList-IEs} }
RL-ParameterUpdateIndicationFDD-RL-InformationList-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-ParameterUpdateIndicationFDD-RL-Information-Item
                                                              CRITICALITY ignore TYPE RL-ParameterUpdateIndicationFDD-RL-Information-Item
       PRESENCE mandatory }
RL-ParameterUpdateIndicationFDD-RL-Information-Item::= SEQUENCE {
                                    RL-ID,
   phase-Reference-Update-Indicator
                                    Phase-Reference-Update-Indicator
                                                                     OPTIONAL,
                                    iE-Extensions
RL-ParameterUpdateIndicationFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkParameterUpdateIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-FDD-Update-Information
                                                   CRITICALITY ignore EXTENSION E-DCH-FDD-Update-Information
                                                                                                                     PRESENCE optional |
    { ID id-Additional-HS-Cell-Information-RL-Param-Upd CRITICALITY ignore EXTENSION Additional-HS-Cell-Information-RL-Param-Upd
                                                                                                                            PRESENCE
optional}|
    { ID id-Additional-EDCH-Cell-Information-RL-Param-Upd CRITICALITY ignore EXTENSION Additional-EDCH-Cell-Information-RL-Param-Upd
   PRESENCE optional }
     ID id-CPC-RecoveryReport
                                                   CRITICALITY ignore EXTENSION CPC-RecoveryReport
                                                                                                                     PRESENCE optional |
   { ID id-UL-CLTD-State-Update-Information
                                                                                                                     PRESENCE optional },
                                                   CRITICALITY ignore EXTENSION UL-CLTD-State-Update-Information
   . . .
Additional-HS-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs
Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                                   RL-ID,
   hS-DSCH-FDD-Secondary-Serving-Update-Information
                                                   HS-DSCH-FDD-Secondary-Serving-Update-Information,
```

```
ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Setup-ExtIEs} } OPTIONAL,
   iE-Extensions
Additional-HS-Cell-Information-RL-Setup-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-RL-Param-Upd-ItemIEs
Additional-EDCH-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
   additional-EDCH-FDD-Update-Information
                                                                        Additional-EDCH-FDD-Update-Information,
                                ProtocolExtensionContainer { { Additional-EDCH-FDD-Update-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
Additional-EDCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   -- RADIO LINK PARAMETER UPDATE INDICATION TDD
  RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE {
   protocolIEs
                         ProtocolIE-Container
                                               {{RadioLinkParameterUpdateIndicationTDD-IEs}},
                         ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                                                                                                            OPTIONAL,
RadioLinkParameterUpdateIndicationTDD-IES RNSAP-PROTOCOL-IES ::= {
          id-HSDSCH-TDD-Update-Information
                                                                               HSDSCH-TDD-Update-Information
                                                                                                                          PRESENCE
                                              CRITICALITY
                                                             ignore
                                                                        TYPE
   optional},
   . . .
RadioLinkParameterUpdateIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- UE MEASUREMENT INITIATION REQUEST
  ******************
UEMeasurementInitiationRequest ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{UEMeasurementInitiationRequest-IEs}},
                                ProtocolExtensionContainer {{UEMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
```

```
UEMeasurementInitiationRequest-IES RNSAP-PROTOCOL-IES ::= {
    ID id-AllowedQueuingTime
                                        CRITICALITY reject TYPE AllowedOueuingTime
                                                                                                          PRESENCE optional
    ID id-MeasurementID
                                        CRITICALITY reject TYPE MeasurementID
                                                                                                          PRESENCE mandatory
    ID id-UEMeasurementType
                                        CRITICALITY reject TYPE UEMeasurementType
                                                                                                          PRESENCE mandatory
    ID id-UEMeasurementTimeslotInfoHCR
                                        CRITICALITY reject TYPE UEMeasurementTimeslotInfoHCR
                                                                                                    PRESENCE optional
    ID id-UEMeasurementTimeslotInfoLCR
                                        CRITICALITY reject TYPE UEMeasurementTimeslotInfoLCR
                                                                                                    PRESENCE optional
    ID id-MeasurementFilterCoefficient
                                        CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                    PRESENCE optional
    PRESENCE mandatory
    ID id-UEMeasurementParameterModAllow
                                        CRITICALITY reject TYPE UEMeasurementParameterModAllow
                                                                                                    PRESENCE mandatory
UEMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UEMeasurementTimeslotInfo768
                                              CRITICALITY reject EXTENSION UEMeasurementTimeslotInfo768
                                                                                                    PRESENCE optional },
    *****************
  UE MEASUREMENT INITIATION RESPONSE
       *****************
UEMeasurementInitiationResponse ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{UEMeasurementInitiationResponse-IEs}},
                              ProtocolExtensionContainer {{UEMeasurementInitiationResponse-Extensions}}
   protocolExtensions
                                                                                                           OPTIONAL,
   . . .
UEMeasurementInitiationResponse-IES RNSAP-PROTOCOL-IES ::= {
                                        CRITICALITY ignore TYPE MeasurementID
    ID id-MeasurementID
                                                                                                          PRESENCE mandatory
    ID id-MeasurementFilterCoefficient
                                        CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                    PRESENCE optional
    PRESENCE optional
    ID id-CriticalityDiagnostics
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                          PRESENCE optional
UEMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     -- UE MEASUREMENT INITIATION FAILURE
```

```
__ *********************
UEMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{UEMeasurementInitiationFailure-IEs}},
   protocolExtensions
                              ProtocolExtensionContainer {{UEMeasurementInitiationFailure-Extensions}}
                                                                                                           OPTIONAL.
UEMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                        PRESENCE mandatory
    ID id-Cause
                                    CRITICALITY ignore TYPE Cause
                                                                                        PRESENCE mandatory
   { ID id-CriticalityDiagnostics
                              CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                        PRESENCE optional
UEMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ******************
-- UE MEASUREMENT REPORT
__ *********************
UEMeasurementReport ::= SEQUENCE {
                                                     {{UEMeasurementReport-IEs}},
   protocolIEs
                              ProtocolIE-Container
   protocolExtensions
                              ProtocolExtensionContainer {{UEMeasurementReport-Extensions}}
                                                                                                 OPTIONAL,
UEMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                              PRESENCE mandatory
   PRESENCE mandatory
UEMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- UE MEASUREMENT TERMINATION REQUEST
__ *********************
UEMeasurementTerminationRequest ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                     {{UEMeasurementTerminationRequest-IEs}},
   protocolExtensions
                             ProtocolExtensionContainer {{UEMeasurementTerminationRequest-Extensions}}
                                                                                                           OPTIONAL,
UEMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                    PRESENCE mandatory },
UEMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
        -- UE MEASUREMENT FAILURE INDICATION
__ *********************
UEMeasurementFailureIndication ::= SEOUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {{UEMeasurementFailureIndication-IEs}},
                                ProtocolExtensionContainer {{UEMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                    OPTIONAL,
UEMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                    PRESENCE mandatory
                                    CRITICALITY ignore TYPE Cause
                                                                                    PRESENCE mandatory
    { ID id-Cause
   . . .
UEMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- IUR INVOKE TRACE
  *****************
IurInvokeTrace ::= SEQUENCE {
                                                                      {{IurInvokeTrace-IEs}},
   protocolIEs
                                            ProtocolIE-Container
                                           ProtocolExtensionContainer {{IurInvokeTrace-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
   . . .
IurInvokeTrace-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI
                                            CRITICALITY ignore TYPE D-RNTI
                                                                                                                     PRESENCE optional
       } |
     ID id-TraceReference
                                            CRITICALITY ignore TYPE TraceReference
                                                                                                                     PRESENCE mandatory
     ID id-UEIdentity
                                            CRITICALITY ignore TYPE UEIdentity
                                                                                                                     PRESENCE mandatory
     ID id-TraceRecordingSessionReference
                                            CRITICALITY ignore TYPE TraceRecordingSessionReference
                                                                                                              PRESENCE mandatory
                                                                                                                     PRESENCE optional
    { ID id-ListOfInterfacesToTrace
                                            CRITICALITY ignore TYPE ListOfInterfacesToTrace
     ID id-TraceDepth
                                            CRITICALITY ignore TYPE TraceDepth
                                                                                                                     PRESENCE mandatory
```

```
ListOfInterfacesToTrace ::= SEQUENCE (SIZE (1..maxNrOfInterfaces)) OF ProtocolIE-Single-Container {{ InterfacesToBeTracedItemIE }}
InterfacesToBeTracedItemIE RNSAP-PROTOCOL-IES ::= {
     ID id-InterfacesToTraceItem
                                         CRITICALITY ignore TYPE InterfacesToTraceItem
                                                                                                             PRESENCE mandatory
InterfacesToTraceItem ::= SEQUENCE {
                       ENUMERATED {iub,iur,...},
                       ProtocolExtensionContainer { {InterfacesToTraceItem-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
InterfacesToTraceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IurInvokeTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 10 to support MDT
   {ID id-MDT-Configuration
                                         CRITICALITY ignore EXTENSION MDT-Configuration
                                                                                          PRESENCE optional |
-- Extension for Release 10 to support MDT
   PRESENCE optional },
    ******************
-- IUR DEACTIVATE TRACE
__ **********************
IurDeactivateTrace ::= SEQUENCE {
   protocolIEs
                                         ProtocolIE-Container
                                                                 {{IurDeactivateTrace-IEs}},
                                         ProtocolExtensionContainer {{IurDeactivateTrace-Extensions}}
   protocolExtensions
                                                                                                OPTIONAL,
IurDeactivateTrace-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-D-RNTI
                                                                                                             PRESENCE optional
                                         CRITICALITY ignore TYPE D-RNTI
      } |
    ID id-TraceReference
                                         CRITICALITY ignore TYPE TraceReference
                                                                                                             PRESENCE mandatory
IurDeactivateTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
__ **********************
```

```
-- MBMS ATTACH COMMAND
__ **********************
MBMSAttachCommand ::= SEOUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{MBMSAttachCommand-IEs}},
                        ProtocolExtensionContainer {{MBMSAttachCommand-Extensions}}
   protocolExtensions
                                                                                    OPTIONAL,
MBMSAttachCommand-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-MBMS-Bearer-Service-List
                                      CRITICALITY
                                                    ignore
                                                               TYPE MBMS-Bearer-Service-List PRESENCE mandatory}
   { ID id-UE-State
                                      CRITICALITY
                                                    ignore
                                                                     UE-State
                                                                                            PRESENCE
                                                                                                         optional }.
   . . .
MBMSAttachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- MBMS DETACH COMMAND
  ****************
MBMSDetachCommand ::= SEQUENCE {
                                             {{MBMSDetachCommand-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{MBMSDetachCommand-Extensions}}
   protocolExtensions
                                                                                    OPTIONAL,
MBMSDetachCommand-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MBMS-Bearer-Service-List CRITICALITY
                                                 ignore
                                                           TYPE MBMS-Bearer-Service-List PRESENCE
                                                                                                  mandatory}
   { ID id-UE-State
                                  CRITICALITY
                                                ignore
                                                           TYPE UE-State
                                                                                     PRESENCE
                                                                                                  optional},
MBMSDetachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- DIRECT INFORMATION TRANSFER
__ *****************
DirectInformationTransfer ::= SEQUENCE {
                                                 {{DirectInformationTransfer-IEs}},
   protocolIEs
                      ProtocolIE-Container
   protocolExtensions
                     ProtocolExtensionContainer {{DirectInformationTransfer-Extensions}}
                                                                                                         OPTIONAL,
```

```
DirectInformationTransfer-IEs RNSAP-PROTOCOL-IES ::= {
   ID id-RNC-ID
                                CRITICALITY ignore TYPE RNC-ID
                                                                                  PRESENCE mandatory}
   ID id-ProvidedInformation
                                CRITICALITY ignore TYPE ProvidedInformation
                                                                                  PRESENCE mandatory } ,
DirectInformationTransfer-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Extended-RNC-ID
                    CRITICALITY reject EXTENSION Extended-RNC-ID PRESENCE optional },
  ******************
-- ENHANCED RELOCATION REQUEST
 ******************
EnhancedRelocationRequest ::= SEQUENCE {
  protocolIEs
                        ProtocolIE-Container
                                           {{EnhancedRelocationRequest-IEs}},
                    {\tt ProtocolExtensionContainer}~ \{\{{\tt EnhancedRelocationRequest-Extensions}\}\}
  protocolExtensions
                                                                                   OPTIONAL,
EnhancedRelocationRequest-IEs RNSAP-PROTOCOL-IES ::= {
                     CRITICALITY reject TYPE Cause
                                                      PRESENCE mandatory
   -- This IE shall be present if the Relocation type IE is set to "UE involved in relocation of SRNS" --
  PRESENCE optional }
    ID id-S-RNTI
               CRITICALITY reject TYPE S-RNTI PRESENCE mandatory } |
   PRESENCE
mandatory },
EnhancedRelocationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  PRESENCE optional },
  ******************
-- ENHANCED RELOCATION RESPONSE
__ **********************
EnhancedRelocationResponse ::= SEQUENCE {
  protocolIEs
                        ProtocolIE-Container
                                           {{EnhancedRelocationResponse-IEs}},
  protocolExtensions
                      ProtocolExtensionContainer {{EnhancedRelocationResponse-Extensions}}
                                                                                    OPTIONAL,
EnhancedRelocationResponse-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-RANAP-EnhancedRelocationInformationResponse
                                              CRITICALITY ignore TYPE RANAP-EnhancedRelocationInformationResponse
   PRESENCE mandatory },
EnhancedRelocationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  -- ENHANCED RELOCATION FAILURE
  EnhancedRelocationFailure ::= SEQUENCE {
                                                 {{EnhancedRelocationFailure-IEs}},
   protocolIEs
                           ProtocolIE-Container
                           ProtocolExtensionContainer {{EnhancedRelocationFailure-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
   . . .
EnhancedRelocationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-Cause CRITICALITY ignore TYPE Cause
                                                       PRESENCE mandatory } |
    ID id-CriticalityDiagnostics
                                 CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                           PRESENCE optional
EnhancedRelocationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- ENHANCED RELOCATION CANCEL
  *****************
EnhancedRelocationCancel ::= SEQUENCE {
                           ProtocolIE-Container
                                                 {{EnhancedRelocationCancel-IEs}},
   protocolIEs
   protocolExtensions
                           ProtocolExtensionContainer {{EnhancedRelocationCancel-Extensions}}
                                                                                              OPTIONAL,
EnhancedRelocationCancel-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory },
EnhancedRelocationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
```

```
-- ENHANCED RELOCATION SIGNALLING TRANSFER
  *****************
EnhancedRelocationSignallingTransfer ::= SEQUENCE {
                                ProtocolIE-Container
                                                          {{EnhancedRelocationSignallingTransfer-IEs}},
   protocolIEs
   protocolExtensions
                                ProtocolExtensionContainer {{EnhancedRelocationSignallingTransfer-Extensions}}
                                                                                                                         OPTIONAL,
EnhancedRelocationSignallingTransfer-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-L3-Information
                            CRITICALITY ignore TYPE L3-Information
                                                                                PRESENCE mandatory
   . . .
EnhancedRelocationSignallingTransfer-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    *****************
-- ENHANCED RELOCATION RELEASE
__ *********************
EnhancedRelocationRelease ::= SEQUENCE {
                                                          {{EnhancedRelocationRelease-IEs}},
   protocolIEs
                                ProtocolIE-Container
   protocolExtensions
                                ProtocolExtensionContainer {{EnhancedRelocationRelease-Extensions}}
                                                                                                               OPTIONAL,
EnhancedRelocationRelease-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-Released-CN-Domain
                                CRITICALITY ignore TYPE Released-CN-Domain
                                                                                       PRESENCE mandatory
   . . .
EnhancedRelocationRelease-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- MBSFN MCCH INFORMATION
MBSFNMCCHInformation ::= SEQUENCE {
                 ProtocolIE-Container
                                               {{MBSFNMCCHInformation-IEs}},
   protocolIEs
   protocolExtensions
                      ProtocolExtensionContainer {{MBSFNMCCHInformation-Extensions}}
                                                                                       OPTIONAL.
MBSFNMCCHInformation-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-MBSFN-Cluster-Identity CRITICALITY
                                               ignore
                                                          TYPE MBSFN-Cluster-Identity PRESENCE
                                                                                                mandatory}
```

```
ID id-MCCH-Message-List
                           CRITICALITY
                                                    TYPE MCCH-Message-List PRESENCE mandatory}
                                          reject
     ID id-CFN CRITICALITY
                               reject
                                          TYPE CFN PRESENCE
                                                           mandatory} |
   { ID id-MCCH-Configuration-Info
                                      CRITICALITY
                                                    ignore
                                                               TYPE
                                                                      MCCH-Configuration-Info
                                                                                                                PRESENCE
   optional}|
   { ID id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List
                                                                                    TYPE MBSFN-Scheduling-Transmission-Time-Interval-
                                                           CRITICALITY
                                                                          ignore
Info-List PRESENCE optional },
MBSFNMCCHInformation-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   -- SECONDARY UL FREQUENCY REPORT
  ****************
SecondaryULFrequencyReport ::= SEQUENCE {
                                             {{SecondaryULFrequencyReport-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{SecondaryULFrequencyReport-Extensions}}
   protocolExtensions
                                                                                                  OPTIONAL,
SecondaryULFrequencyReport-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-ActivationInformation CRITICALITY
                                             ignore
                                                        TYPE ActivationInformation
                                                                                    PRESENCE mandatory },
SecondaryULFrequencyReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    -- SECONDARY UL FREOUENCY UPDATE INDICATION
  *****************
SecondaryULFrequencyUpdateIndication ::= SEQUENCE {
                                             {{SecondaryULFrequencyUpdateIndication-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{SecondaryULFrequencyUpdateIndication-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
SecondaryULFrequencyUpdateIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-ActivationInformation CRITICALITY
                                                                                    PRESENCE mandatory },
                                             ignore
                                                        TYPE ActivationInformation
SecondaryULFrequencyUpdateIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
-- ENHANCED RELOCATION RESOURCE REQUEST
EnhancedRelocationResourceRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                      {{ EnhancedRelocationResourceRequest-IEs}},
                          ProtocolExtensionContainer {{ EnhancedRelocationResourceRequest-Extensions}}
   protocolExtensions
                                                                                                             OPTIONAL,
   . . .
EnhancedRelocationResourceRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-IMSI
                                      CRITICALITY reject TYPE IMSI
                                                                                         PRESENCE optional }
     ID id-SourceID
                                      CRITICALITY ignore TYPE SourceID
                                                                                         PRESENCE mandatory
     ID id-TargetID
                                      CRITICALITY reject TYPE TargetID
                                                                                         PRESENCE mandatory }
     ID id-ClassmarkInformation2
                                      CRITICALITY reject TYPE ClassmarkInformation2
                                                                                         PRESENCE mandatory}
     ID id-ClassmarkInformation3
                                      CRITICALITY ignore TYPE ClassmarkInformation3
                                                                                         PRESENCE mandatory }
     ID id-SpeechVersion
                                      CRITICALITY ignore TYPE SpeechVersion
                                                                                         PRESENCE mandatory },
EnhancedRelocationResourceRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- ENHANCED RELOCATION RESOURCE RESPONSE
  *****************
EnhancedRelocationResourceResponse ::= SEQUENCE {
   protocolIEs
                 ProtocolIE-Container
                                                      {{EnhancedRelocationResourceResponse-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{EnhancedRelocationResourceResponse-Extensions}}
                                                                                                             OPTIONAL,
EnhancedRelocationResourceResponse-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                          CRITICALITY ignore TYPE D-RNTI
                                                                                              PRESENCE mandatory }
     ID id-L3-Information
                                          CRITICALITY ignore TYPE L3-Information
                                                                                              PRESENCE mandatory }
     ID id-Cell-Capacity-Class-Value
                                          CRITICALITY ignore TYPE Cell-Capacity-Class-Value
                                                                                              PRESENCE optional } |
                                          CRITICALITY ignore TYPE LoadValue
                                                                                              PRESENCE optional },
    { ID id-LoadValue
    . . .
EnhancedRelocationResourceResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- ENHANCED RELOCATION RESOURCE FAILURE
```

```
EnhancedRelocationResourceFailure ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                  {{EnhancedRelocationResourceFailure-IEs}},
                                                 {{EnhancedRelocationResourceFailure-Extensions}}
   protocolExtensions
                      ProtocolExtensionContainer
                                                                                                     OPTIONAL,
EnhancedRelocationResourceFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-Cause
                                   CRITICALITY ignore TYPE Cause
                                                                                      PRESENCE mandatory } |
     ID id-Cell-Capacity-Class-Value CRITICALITY ignore TYPE Cell-Capacity-Class-Value
                                                                                      PRESENCE optional } |
                                   CRITICALITY ignore TYPE LoadValue
                                                                                      PRESENCE optional },
   { ID id-LoadValue
   . . .
EnhancedRelocationResourceFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  -- ENHANCED RELOCATION RESOURCE RELEASE COMMAND
  *****************
EnhancedRelocationResourceReleaseCommand ::= SEOUENCE {
   protocolIEs
                       ProtocolIE-Container
                                                   {{EnhancedRelocationResourceReleaseCommand-IEs}},
                      ProtocolExtensionContainer {{EnhancedRelocationResourceReleaseCommand-Extensions}} OPTIONAL,
   protocolExtensions
EnhancedRelocationResourceReleaseCommand-IEs RNSAP-PROTOCOL-IES ::= {
                                                     PRESENCE mandatory },
   { ID id-Cause
                    CRITICALITY ignore TYPE Cause
   . . .
EnhancedRelocationResourceReleaseCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- ENHANCED RELOCATION RESOURCE RELEASE COMPLETE
  ******************
EnhancedRelocationResourceReleaseComplete ::= SEQUENCE {
                                              {{EnhancedRelocationResourceReleaseComplete-IEs}},
   protocolIEs
                ProtocolIE-Container
   protocolExtensions ProtocolExtensionContainer {{EnhancedRelocationResourceReleaseComplete-Extensions}}
                                                                                                            OPTIONAL,
EnhancedRelocationResourceReleaseComplete-IEs RNSAP-PROTOCOL-IES ::= {
```

```
EnhancedRelocationResourceReleaseComplete-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  -- PRIVATE MESSAGE
__ *******************
PrivateMessage ::= SEQUENCE {
   privateIEs
               PrivateIE-Container {{PrivateMessage-IEs}},
PrivateMessage-IEs RNSAP-PRIVATE-IES ::= {
    ****************
-- INFORMATION TRANSFER CONTROL REQUEST
__ ********************************
InformationTransferControlRequest ::= SEQUENCE {
                   ProtocolIE-Container
                                           {{ InformationTransferControlRequest-IEs}},
   protocolIEs
                   ProtocolExtensionContainer
                                           {{ InformationTransferControlRequest-Extensions}}
   protocolExtensions
                                                                                       OPTIONAL,
InformationTransferControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory
},
   . . .
InformationTransferControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
Control-Type-InformationTransferControlReq ::= CHOICE {
   suspension
                  Suspension-Control-Type,
   resume
                  Resume-Control-Type,
Suspension-Control-Type ::= SEQUENCE {
   controlled-Object-Scope Controlled-Object-Scope,
   iE-Extensions
                     ProtocolExtensionContainer {{ Suspension-Control-Type-ExtIEs}},
   . . .
```

## 9.3.4 Information Element Definitions

```
*****************
-- Information Element Definitions
RNSAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
    maxCellSIB11OrSIB12,
   maxNrOfFACHs,
   maxIBSEG,
   maxCellsMeas,
   maxNoOfDSCHs,
   maxNoOfUSCHs,
   maxNrOfDCHs,
   maxNrOfDL-Codes,
   maxNrOfDLTs,
   maxNrOfDLTsLCR,
   maxNrOfDPCHs,
    maxNrOfDPCHs768,
    maxNrOfDPCHsLCR,
    maxNrOfEDCH-HARQ-PO-QUANTSTEPs,
    maxNrOfEDCHHARQProcesses2msEDCH,
    maxNrOfBits-MACe-PDU-non-scheduled,
    maxNrOfEDPCCH-PO-QUANTSTEPs,
    maxNrOfRefETFCI-PO-QUANTSTEPs,
```

```
maxNrOfRefETFCIs,
maxNrOfErrors.
maxNrOfFDDNeighboursPerRNC,
maxNrOfMACcshSDU-Length,
maxNrOfNeighbouringRNCs,
maxNrOfTDDNeighboursPerRNC,
maxNrOfLCRTDDNeighboursPerRNC,
maxNrOfTS,
maxNrOfTsLCR,
maxNrOfULTs,
maxNrOfULTsLCR,
maxNrOfGSMNeighboursPerRNC,
maxRateMatching,
maxNrOfPoints,
maxNoOfRB,
maxNrOfRLs,
maxNrOfTFCs,
maxNrOfTFs,
maxCTFC,
maxRNCinURA-1,
maxNrOfSCCPCHs,
maxNrOfSCCPCHs768,
maxTGPS,
maxTTI-Count,
maxNoGPSTypes,
maxNoSat,
maxNrOfActiveMBMSServices,
maxNrOfCells,
maxNrOfSNAs,
maxNrOfHARQProc,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUSize,
maxNrOfMBMSL3,
maxNrOfMCCHMessages,
maxNrOfEDCHMACdFlows,
maxNrOfEDCHMACdFlows-1,
maxNrOfEDCHMACdFlowsLCR,
maxNrOfEDCHMACdFlowsLCR-1,
maxNrOfMBMSServices,
maxNrOfPDUIndexes,
maxNrOfPDUIndexes-1,
maxNrOfPrioQueues,
maxNrOfPrioOueues-1,
maxNrOfSatAlmanac-maxNoSat,
maxNrOfGERANSI,
maxNrofSigSegERGHICH-1,
maxNrOfUEs,
maxNrOfAddFreq,
maxNrOfCellsPerFreq,
maxNoOfLogicalChannels,
maxNrOfRefBetas,
maxNrOfEAGCHCodes,
```

```
maxNrOfHS-DSCHTBSs,
maxNrOfHS-DSCHTBSs-HS-SCCHless.
maxHS-PDSCHCodeNrComp-1.
maxNrOfEHICHCodes,
maxGANSSSat.
maxNoGANSS,
maxSqnType,
maxNrOfBroadcastPLMNs,
maxHSDPAFrequency,
maxHSDPAFrequency-1,
maxFrequencyinCell,
maxFrequencyinCell-1,
maxGANSSSatAlmanac,
maxGANSSClockMod,
maxNrOfEDCHRLs,
maxNrOfEUTRANeighboursPerRNC,
maxEARFCN,
maxEARFCN-Extended,
maxNrOfPreconfiguredNeighbours,
maxNrOfHSDSCH-1,
maxNrOfHSDSCH,
maxGANSS-1,
maxlengthMBMSconcatservlists,
maxNoOfTBSs-Mapping-HS-DSCH-SPS.
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1,
maxNoOfHS-DSCH-TBSsLCR,
maxNoOfRepetition-Period-LCR,
maxNoOfRepetitionPeriod-SPS-LCR-1,
maxNoOf-HS-SICH-SPS,
maxNoOf-HS-SICH-SPS-1,
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH,
maxNrOfEDCH-1,
maxNrOfDCHMeasurementOccasionPatternSequence,
maxNrOfULCarriersLCR-1,
maxNrOfCellIds,
maxNrOfRAIs,
maxNrOfLAIs,
maxNrOfExtendedNeighbouringRNCs,
maxFreqBandsTDD,
maxSCPICHCell,
maxSCPICHCell-1,
id-Allowed-Rate-Information,
id-AntennaColocationIndicator.
id-BindingID,
id-Cell-Capacity-Class-Value,
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response,
id-Counting-Information,
id-CoverageIndicator,
id-DPC-Mode-Change-SupportIndicator,
```

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id-E-DCH-Minimum-Set-E-TFCIValidityIndicator,
id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator,
id-Extended-Round-Trip-Time-Value.
id-ExtendedPropagationDelay,
id-Extended-SRNC-ID.
id-Extended-RNC-ID,
id-ExtendedAffectedUEInformationForMBMS.
id-Additional-Associated-Secondary-CPICH,
id-MIMO-withfourtransmitantennas-ActivationIndicator,
id-MIMO-withfourtransmitantennas-ModeIndicator,
id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator,
id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator,
id-GERAN-Cell-Capability,
id-GERAN-Classmark,
id-Guaranteed-Rate-Information,
id-HARO-Preamble-Mode-Activation-Indicator,
id-HCS-Prio,
id-Inter-Frequency-Cell-Information,
id-Load-Value,
id-Load-Value-IncrDecrThres,
id-Neighbouring-GSM-CellInformation,
id-Neighbouring-UMTS-CellInformationItem,
id-neighbouring-LCR-TDD-CellInformation,
id-NRT-Load-Information-Value,
id-NRT-Load-Information-Value-IncrDecrThres,
id-OnModification.
id-PrecoderWeightSetRestriction,
id-Received-Total-Wideband-Power-Value,
id-Received-Total-Wideband-Power-Value-IncrDecrThres,
id-RT-Load-Value.
id-RT-Load-Value-IncrDecrThres,
id-SFNSFNMeasurementThresholdInformation.
id-SNA-Information,
id-TrafficClass.
id-Transmitted-Carrier-Power-Value,
id-Transmitted-Carrier-Power-Value-IncrDecrThres,
id-TUTRANGPSMeasurementThresholdInformation,
id-UL-Timeslot-ISCP-Value,
id-UL-Timeslot-ISCP-Value-IncrDecrThres,
maxNrOfLevels,
maxNrOfMeasNCell,
maxNrOfMeasNCell-1,
id-MessageStructure,
id-RestrictionStateIndicator,
id-Rx-Timing-Deviation-Value-LCR,
id-TransportLayerAddress,
id-Transmission-Mode-Information,
id-TypeOfError,
id-Angle-Of-Arrival-Value-LCR,
id-IPDL-TDD-ParametersLCR,
id-DSCH-InitialWindowSize,
id-Maximum-DL-Power-TimeslotLCR-InformationItem,
id-MBMS-Bearer-Service-Full-Address,
id-MBMS-Neighbouring-Cell-Information,
```

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id-MBMS-RLC-Sequence-Number-Information,
id-MBSFN-Cluster-Identity,
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List,
id-MCCH-Configuration-Info,
id-MCCH-Message-List.
id-Minimum-DL-Power-TimeslotLCR-InformationItem,
id-HS-SICH-Reception-Quality,
id-HS-SICH-Reception-Quality-Measurement-Value,
id-HS-PDSCH-Code-Change-Grant,
id-HS-PDSCH-Code-Change-Indicator,
id-ExtendedGSMCellIndividualOffset,
id-Unidirectional-DCH-Indicator,
id-RTLoadValue,
id-RLC-Sequence-Number,
id-NRTLoadInformationValue.
id-Satellite-Almanac-Information-ExtItem.
id-TnlOos,
id-UpPTSInterferenceValue,
id-NACC-Related-Data,
id-HARO-Preamble-Mode,
id-User-Plane-Congestion-Fields-Inclusion,
id-FrequencyBandIndicator,
id-PLCCH-Information-UL-TimeslotLCR-Info,
id-CellCapabilityContainer-TDD768.
id-hSSCCH-TDD-Specific-InfoList-Response768,
id-hSPDSCH-TDD-Specific-InfoList-Response768,
id-Rx-Timing-Deviation-Value-768,
id-UEMeasurementValueTransmittedPowerList768,
id-UEMeasurementValueTimeslotISCPList768,
id-E-DCH-PowerOffset-for-SchedulingInfo,
id-Rx-Timing-Deviation-Value-ext,
id-TrCH-SrcStatisticsDescr.
id-eDCH-MACdFlow-Retransmission-Timer-LCR,
id-MIMO-ActivationIndicator,
id-MIMO-InformationResponse,
id-MIMO-Mode-Indicator,
id-MIMO-N-M-Ratio,
id-SixteenOAM-UL-Operation-Indicator,
id-E-AGCH-Table-Choice,
id-E-TFCI-Boost-Information,
id-E-DPDCH-PowerInterpolation,
id-HSDSCH-MACdPDUSizeFormat,
id-MaximumMACdPDU-SizeExtended,
id-GANSS-Common-Data.
id-GANSS-Information,
id-GANSS-Generic-Data,
id-TUTRANGANSSMeasurementThresholdInformation,
id-TUTRANGANSSMeasurementValueInformation,
id-HARO-MemoryPartitioningInfoExtForMIMO,
id-Ext-Reference-E-TFCI-PO,
id-Ext-Max-Bits-MACe-PDU-non-scheduled,
id-Multiple-PLMN-List,
id-TransportBearerNotSetupIndicator,
id-TransportBearerNotRequestedIndicator,
```

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id-UARFCNforNt,
id-LCRTDD-uplink-Physical-Channel-Capability,
id-number-Of-Supported-Carriers.
id-HSSICH-SIRTarget,
id-HSSICH-TPC-StepSize,
id-tSN-Length,
id-HS-SICH-ID-Extension,
id-multipleFreg-HSPDSCH-InformationList-ResponseTDDLCR,
id-multicarrier-number,
id-UpPCH-InformationList-LCRTDD,
id-UpPCH-InformationItem-LCRTDD,
id-Max-UE-DTX-Cycle,
id-Default-Serving-Grant-in-DTX-Cycle2,
id-SixtyfourOAM-UsageAllowedIndicator,
id-SixtyfourOAM-DL-UsageIndicator,
id-UE-Capabilities-Info,
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator,
id-E-DCH-MACdPDUSizeFormat,
id-E-PUCH-PowerControlGAP,
id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD,
id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD,
id-HSDSCH-TBSizeTableIndicator,
id-E-DCH-DL-Control-Channel-Change-Information,
id-E-DCH-DL-Control-Channel-Grant-Information,
id-DGANSS-Corrections-Reg,
id-UE-with-enhanced-HS-SCCH-support-indicator,
id-EnhancedHSServingCC-Abort,
id-GANSS-Time-ID,
id-GANSS-AddIonoModelReg,
id-GANSS-EarthOrientParaReg,
id-GANSS-AddNavigationModelsReg,
id-GANSS-AddUTCModelsReg,
id-GANSS-AuxInfoReg,
id-GANSS-SBAS-ID,
id-GANSS-ID,
id-GANSS-Additional-Ionospheric-Model,
id-GANSS-Earth-Orientation-Parameters,
id-GANSS-Additional-Time-Models,
id-GANSS-Additional-Navigation-Models,
id-GANSS-Additional-UTC-Models,
id-GANSS-Auxiliary-Information,
id-GANSS-alm-keplerianNAVAlmanac,
id-GANSS-alm-keplerianReducedAlmanac,
id-GANSS-alm-keplerianMidiAlmanac,
id-GANSS-alm-keplerianGLONASS,
id-GANSS-alm-ecefSBASAlmanac,
id-Secondary-Serving-Cell-List,
id-MinimumReducedE-DPDCH-GainFactor,
id-E-AGCH-UE-Inactivity-Monitor-Threshold,
id-MACes-Maximum-Bitrate-LCR,
id-MultiCarrier-HSDSCH-Physical-Layer-Category,
id-MIMO-SFMode-For-HSPDSCHDualStream,
```

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id-MIMO-SFMode-Supported-For-HSPDSCHDualStream,
id-MIMO-ReferenceSignal-InformationListLCR.
id-DL-RLC-PDU-Size-Format.
id-UE-SupportIndicatorExtension,
id-power-offset-for-S-CPICH-for-MIMO,
id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator,
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas,
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator,
id-Dual-Band-Secondary-Serving-Cell-List,
id-Single-Stream-MIMO-ActivationIndicator,
id-Single-Stream-MIMO-Mode-Indicator,
id-Additional-EDCH-Preconfiguration-Information,
id-MulticellEDCH-Information,
id-EDCH-Indicator,
id-DiversityMode,
id-TransmitDiversityIndicator,
id-NonCellSpecificTxDiversity,
id-CellCapabilityContainerExtension-FDD,
id-HSDSCH-Physical-Layer-Category,
id-TS0-HS-PDSCH-Indication-LCR,
id-UE-TS0-CapabilityLCR,
id-DGNSS-ValidityPeriod,
id-UE-AggregateMaximumBitRate-Enforcement-Indicator,
id-Out-of-Sychronization-Window,
id-MulticellEDCH-RL-SpecificInformation,
id-Continuous-Packet-Connectivity-DTX-DRX-Information,
id-Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup,
id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList,
id-OrdinalNumberOfFrequency,
id-Multicell-EDCH-Restriction,
id-CellListValidityIndicator,
id-completeAlmanacProvided,
id-ganss-Delta-T,
id-CellCapabilityContainerExtension-TDD-LCR,
id-SNPL-Carrier-Group-Indicator,
id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext,
id-Measurement-Power-Offset,
id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory,
id-Neighbouring-UMTS-CellInformationExtensionItem,
id-EventH,
id-UMTS-Cells-Info,
id-ANRReportIndication,
id-ANR-Cell-Information,
id-Affected-HSDSCH-Serving-Cell-List,
id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order,
id-UE-RF-Band-CapabilityLCR,
id-UE-transmission-power-headroom,
id-Multiflow-Information,
id-Multiflow-Reconfiguration,
id-Multiflow-OrdinalNumberOfFrequency,
id-UL-MIMO-Information,
id-UL-MIMO-Reconfiguration,
id-UL-MIMO-DL-Control-Channel-Information,
id-SixtyfourOAM-UL-Operation-Indicator,
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id-Common-E-RGCH-Cell-Information,
    id-PCI.
    id-TAC,
    id-PLMN-List,
    id-FTPICH-Information,
    id-FTPICH-Information-Response,
    id-UL-CLTD-Information,
    id-EARFCN-FDD-Extended,
    id-EARFCN-TDD-Extended
FROM RNSAP-Constants
    Criticality,
    ProcedureID,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes
    ProtocolIE-Single-Container{},
    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-IES,
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;
-- A
AccessPointName
                    ::= OCTET STRING (SIZE (1..255))
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,..., 9..10)
-- According to mapping in TS 25.213 [21] subclause 4.2.1
ActivationInformation ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF ActivationInformationItem
ActivationInformationItem ::= SEQUENCE {
    uU-ActivationState Uu-ActivationState,
                                                    ProtocolExtensionContainer { { ActivationInformationItem-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
ActivationInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Active-MBMS-Bearer-Service-ListFDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemFDD
Active-MBMS-Bearer-Service-ListFDD-PFL ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemFDD-PFL
Active-MBMS-Bearer-Service-ListTDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemTDD
```

```
Active-MBMS-Bearer-Service-ListTDD-PFL ::= SEOUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItemTDD-PFL
Active-Pattern-Sequence-Information ::= SEOUENCE {
    cMConfigurationChangeCFN
                                    CFN.
    transmission-Gap-Pattern-Sequence-Status
                                                Transmission-Gap-Pattern-Sequence-Status-List
                                                                                                  OPTIONAL,
                        ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
Active-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-Response-RLAddList ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-Response-RLAddList
ItemIEs
Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs ::=SEQUENCE{
    additional-EDCH-FDD-Information-Response
                                                                    Additional-EDCH-FDD-Information-Response-ItemIEs
                                                                                                                         OPTIONAL,
    additional-EDCH-Serving-Cell-Change-Information-Response-RLAdd
                                                                        E-DCH-Serving-cell-change-informationResponse
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-EDCH-Cell-Information-Response-RLAdd-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Setup-Info ::=SEQUENCE{
    multicell-EDCH-Transport-Bearer-Mode
                                                                            Multicell-EDCH-Transport-Bearer-Mode,
    additional-EDCH-Cell-Information-Setup
                                                                            Additional-EDCH-Cell-Information-Setup
                                    ProtocolExtensionContainer { { Additional-EDCH-Setup-Info-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-Setup-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANRReportIndication ::= SEQUENCE
    pLMN-Identity
                        PLMN-Identity,
    13-Information
                        L3-Information,
                        ProtocolExtensionContainer { {ANRReportIndication-ExtIEs} } OPTIONAL,
    iE-Extensions
ANRReportIndication-ExtIEs RNSAP-PROTOCOL-EXTENSION ::={
Multicell-EDCH-Transport-Bearer-Mode ::= ENUMERATED {
    separate-Iur-Transport-Bearer-Mode,
    uL-Flow-Multiplexing-Mode
```

```
Additional-EDCH-Cell-Information-Setup ::= SEOUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Setup-Cell-Information
Additional-EDCH-FDD-Setup-Cell-Information ::=SEQUENCE{
    additional-EDCH-UL-DPCH-Information-Setup
                                                                            Additional-EDCH-UL-DPCH-Information-Setup,
    additional-EDCH-RL-Specific-Information-To-Setup
                                                                            Additional-EDCH-RL-Specific-Information-To-Setup-List,
    additional-EDCH-FDD-Information
                                                                            Additional-EDCH-FDD-Information
    additional-EDCH-F-DPCH-Information-Setup
                                                                            Additional-EDCH-F-DPCH-Information,
    multicellEDCH-Information
                                                                            MulticellEDCH-Information
                                                                                                         OPTIONAL.
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Setup-Cell-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-EDCH-FDD-Setup-Cell-Information-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-UL-DPCH-Information-Setup
                                           ::=SEOUENCE{
    ul-ScramblingCode
                                            UL-ScramblingCode,
    ul-SIR-Target
                                            UL-SIR
                                                        OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { Additional-EDCH-UL-DPCH-Information-Setup-ExtIEs} } OPTIONAL,
                                                   RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-UL-DPCH-Information-Setup-ExtIEs
Additional-EDCH-F-DPCH-Information ::=SEQUENCE{
    fdd-TPC-DownlinkStepSize
                                        FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                        LimitedPowerIncrease,
    innerLoopDLPCStatus
                                        InnerLoopDLPCStatus,
    f-DPCH-SlotFormatSupportRequest
                                        F-DPCH-SlotFormatSupportRequest
                                                                                OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-F-DPCH-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-F-DPCH-Information-ExtIEs
                                            RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-RL-Specific-Information-To-Setup-List ::= SEQUENCE (SIZE (1.. maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-
Setup-ItemIEs
Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs
                                                            ::=SEOUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    c-ID
                                        C-ID
                                                            OPTIONAL,
    firstRLS-indicator
                                        FirstRLS-Indicator,
    propagationDelay
                                        PropagationDelay
                                                                        OPTIONAL,
    initialDL-transmissionPower
                                        DL-Power
                                                                OPTIONAL,
    primaryCPICH-EcNo
                                        PrimaryCPICH-EcNo
                                                                    OPTIONAL,
    e-AGCH-PowerOffset
                                        E-AGCH-PowerOffset
                                                                                     OPTIONAL,
    e-RGCH-PowerOffset
                                        E-RGCH-PowerOffset
                                                                                     OPTIONAL,
    e-HICH-PowerOffset
                                        E-HICH-PowerOffset
                                                                                     OPTIONAL,
```

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additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                       Additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                                                                                 OPTIONAL,
    multicellEDCH-RL-SpecificInformation
                                                MulticellEDCH-RL-SpecificInformation
                                        ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-EDCH-RL-Specific-Information-To-Setup-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-To-Add-List
                                              ::= SEQUENCE (SIZE (1.. maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-To-Add-ItemIEs
Additional-EDCH-Cell-Information-To-Add-ItemIEs::=SEOUENCE{
    additional-EDCH-UL-DPCH-Information-Setup
                                                            Additional-EDCH-UL-DPCH-Information-Addition,
    additional-EDCH-RL-Specific-Information-To-Add-List
                                                            Additional-EDCH-RL-Specific-Information-To-Add-List,
    additional-EDCH-FDD-Information
                                                    Additional-EDCH-FDD-Information
                                                                                        OPTIONAL,
                                                    MulticellEDCH-Information
    multicellEDCH-Information
                                                                                    OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { Additional-EDCH-Cell-Information-To-Add-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-EDCH-Cell-Information-To-Add-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-UL-DPCH-Information-Addition
                                               ::=SEOUENCE{
    ul-SIR-Target
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-UL-DPCH-Information-Addition-ExtIEs} } OPTIONAL,
Additional-EDCH-UL-DPCH-Information-Addition-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-RL-Specific-Information-To-Add-List
                                                     ::= SEQUENCE (SIZE (1.. maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-Add-
Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs ::=SEQUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    c-ID
                                        C-ID,
    primaryCPICH-EcNo
                                        PrimaryCPICH-EcNo
                                                                    OPTIONAL.
    e-AGCH-PowerOffset
                                        E-AGCH-PowerOffset
                                                                                    OPTIONAL,
    e-RGCH-PowerOffset
                                        E-RGCH-PowerOffset
                                                                                    OPTIONAL,
    e-HICH-PowerOffset
                                        E-HICH-PowerOffset
                                                                                    OPTIONAL,
    additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                       Additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                                                                                 OPTIONAL,
    multicellEDCH-RL-SpecificInformation
                                                MulticellEDCH-RL-SpecificInformation
    iE-Extensions
                                        ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-EDCH-RL-Specific-Information-To-Add-ItemIEs-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
```

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Additional-EDCH-RL-Specific-Information-To-Modify-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF Additional-EDCH-RL-Specific-Information-To-
Modify-ItemIEs
Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs ::=SEQUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    e-AGCH-PowerOffset
                                        E-AGCH-PowerOffset
                                                                                     OPTIONAL.
    e-RGCH-PowerOffset
                                        E-RGCH-PowerOffset
                                                                                     OPTIONAL,
    e-HICH-PowerOffset
                                        E-HICH-PowerOffset
                                                                                     OPTIONAL,
    additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                        Additional-EDCH-MAC-d-Flows-Specific-Info-List
                                                                                                                  OPTIONAL,
   multicellEDCH-RL-SpecificInformation
                                                MulticellEDCH-RL-SpecificInformation
                                                                                            OPTIONAL,
                                        ProtocolExtensionContainer { { Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs-ExtIEs} }
    iE-Extensions
OPTIONAL,
    . . .
Additional-EDCH-RL-Specific-Information-To-Modify-ItemIEs-ExtIEs
                                                                    RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-FDD-Information ::=SEQUENCE{
   hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARQ-Process-Allocation-2ms-EDCH
    OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                    E-DCH-Maximum-Bitrate
   OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                    E-DCH-Processing-Overload-Level
    OPTIONAL,
    e-DCH-Min-Set-E-TFCI
                                                    E-TFCI
    OPTIONAL,
                                        ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-FDD-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-MAC-d-Flows-Specific-Info-List ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Additional-EDCH-MAC-d-Flows-Specific-Info
Additional-EDCH-MAC-d-Flows-Specific-Info ::= SEOUENCE {
    e-DCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
   bindingID
                                                    BindingID
    OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
    OPTIONAL,
                                                    ProtocolExtensionContainer { { Additional-EDCH-MAC-d-Flows-Specific-Info-ExtIEs} }
    iE-Extensions
       OPTIONAL,
    . . .
Additional-EDCH-MAC-d-Flows-Specific-Info-ExtIEs
                                                    RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Additional-EDCH-MAC-d-Flows-Specific-
Info-Response
Additional-EDCH-MAC-d-Flows-Specific-Info-Response ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                            EDCH-MACdFlow-ID.
    bindingID
                                            BindingID
                                                                                                                                         OPTIONAL.
    transportLayerAddress
                                            TransportLayerAddress
                                                                                                                                         OPTIONAL.
                                            ProtocolExtensionContainer { Additional-EDCH-MAC-d-Flows-Specific-Info-Response-ExtIEs}
    iE-Extensions
    OPTIONAL.
    . . .
Additional-EDCH-MAC-d-Flows-Specific-Info-Response-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Additional-EDCH-Cell-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Information-Response-ItemIEs
Additional-EDCH-FDD-Information-Response-ItemIEs
                                                     ::=SEOUENCE{
                                                                             EDCH-Additional-RL-Specific-Information-Response-List,
    eDCH-Additional-RL-Specific-Information-Response
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
Additional-EDCH-FDD-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-Additional-RL-Specific-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF EDCH-Additional-RL-Specific-Information-
Response-ItemIEs
EDCH-Additional-RL-Specific-Information-Response-ItemIEs
                                                             ::=SEQUENCE{
    eDCH-Additional-RL-ID
                                        RL-ID,
    received-total-wide-band-power
                                                     Received-total-wide-band-power,
    dL-PowerBalancing-ActivationIndicator
                                                     DL-PowerBalancing-ActivationIndicator
                                                                                             OPTIONAL,
    rL-Set-ID
                                                    RL-Set-ID,
    e-DCH-RL-Set-ID
                                                    RL-Set-ID,
                                                     EDCH-FDD-DL-ControlChannelInformation,
    eDCH-FDD-DL-ControlChannelInformation
    dl-CodeInformation
                                                     FDD-DL-CodeInformation,
    additional-EDCH-MAC-d-Flow-Specific-Information-Response-List
    Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List OPTIONAL,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                     HARO-Process-Allocation-2ms-EDCH
                                                                                             OPTIONAL.
    maxUL-SIR
                                                    UL-SIR,
    minUL-SIR
                                                     UL-SIR,
    maximumAllowedULTxPower
                                                    MaximumAllowedULTxPower,
    maximumDL-power
                                                     DL-Power,
    minimumDL-power
                                                     DL-Power,
    primaryScramblingCode
                                                    PrimaryScramblingCode
                                                                                             OPTIONAL,
    uL-UARFCN
                                                    UARFCN
                                                                                             OPTIONAL,
    dL-UARFCN
                                                    UARFCN
                                                                                             OPTIONAL,
                                                    PrimaryCPICH-Power,
    primaryCPICH-Power
    pC-Preamble
                                                     PC-Preamble,
    primary-CPICH-Usage-For-Channel-Estimation
                                                    Primary-CPICH-Usage-For-Channel-Estimation
                                                                                                  OPTIONAL,
    secondary-CPICH-Information
                                                     Secondary-CPICH-Information
                                                                                             OPTIONAL,
```

```
f-DPCH-SlotFormat
                                                    F-DPCH-SlotFormat
                                                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { EDCH-Additional-RL-Specific-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
EDCH-Additional-RL-Specific-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-Response-RLReconf-List::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-FDD-Information-Response-RLReconf-
Additional-EDCH-FDD-Information-Response-RLReconf-Items::=SEQUENCE{
    eDCH-Additional-RL-Specific-Information-Response
                                                                            EDCH-Additional-RL-Specific-Information-Response-List
    eDCH-Additional-RL-Specific-Modified-Information-Response
                                                                    EDCH-Additional-RL-Specific-Modified-Information-Response-List
    OPTIONAL,
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Information-Response-RLReconf-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-FDD-Information-Response-RLReconf-Items-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-Additional-RL-Specific-Modified-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF EDCH-Additional-RL-Specific-Modified-
Information-Response-ItemIEs
EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs
    eDCH-Additional-RL-ID
                                        RL-ID,
    dL-PowerBalancing-UpdatedIndicator
                                                    DL-PowerBalancing-UpdatedIndicator
                                                                                            OPTIONAL,
    eDCH-FDD-DL-ControlChannelInformation
                                                    EDCH-FDD-DL-ControlChannelInformation
                                                                                                OPTIONAL,
    additional-EDCH-MAC-d-Flow-Specific-Information-Response-List
                                                                           Additional-EDCH-MAC-d-Flow-Specific-Information-Response-List
    OPTIONAL,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                                                                                            OPTIONAL,
    maxUL-SIR
                                    UL-SIR
                                                OPTIONAL,
    minUL-SIR
                                    UL-SIR
                                                OPTIONAL,
    maximumDL-power
                                        DL-Power
                                                        OPTIONAL,
    minimumDL-power
                                        DL-Power
                                                        OPTIONAL,
    primary-CPICH-Usage-For-Channel-Estimation
                                                                Primary-CPICH-Usage-For-Channel-Estimation
                                                                                                                                        OPTIONAL,
    secondary-CPICH-Information-Change
                                            Secondary-CPICH-Information-Change
                                                                                        OPTIONAL,
    f-DPCH-SlotFormat
                                        F-DPCH-SlotFormat
                                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs-ExtIEs} }
OPTIONAL,
    . . .
EDCH-Additional-RL-Specific-Modified-Information-Response-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-ConfigurationChange-List ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-ConfigurationChange-Info-
Additional-EDCH-ConfigurationChange-Info-ItemIEs
                                                   ::=SEOUENCE{
```

```
additional-EDCH-UL-DPCH-Information-Modify
                                                                         Additional-EDCH-UL-DPCH-Information-Modify
                                                                                                                                 OPTIONAL,
    additional-EDCH-RL-Specific-Information-To-Add
                                                                         Additional-EDCH-RL-Specific-Information-To-Add-List
                                                                                                                                        OPTIONAL.
    additional-EDCH-RL-Specific-Information-To-Modify
                                                                         Additional-EDCH-RL-Specific-Information-To-Modify-List OPTIONAL,
    additional-EDCH-FDD-Information-To-Modify
                                                                         Additional-EDCH-FDD-Information
                                                                                                                 OPTIONAL.
    additional-EDCH-F-DPCH-Information-Modify
                                                                         Additional-EDCH-F-DPCH-Information
                                                                                                                         OPTIONAL.
    multicellEDCH-Information
                                                                         MulticellEDCH-Information
                                                                                                          OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { Additional-EDCH-ConfigurationChange-Info-ItemIEs-ExtIEs} } OPTIONAL,
Additional-EDCH-ConfigurationChange-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-UL-DPCH-Information-Modify
                                                ::=SEOUENCE{
    ul-ScramblingCode
                                            UL-ScramblingCode
                                                                OPTIONAL,
    ul-SIR-Target
                                                                OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Additional-EDCH-UL-DPCH-Information-Modify-ExtIEs} } OPTIONAL,
    . . .
Additional-EDCH-UL-DPCH-Information-Modify-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
Additional-EDCH-Cell-Information-Removal-List ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Cell-Information-Removal-Info-ItemIEs
Additional-EDCH-Cell-Information-Removal-Info-ItemIEs
                                                       ::=SEOUENCE{
    rL-on-Secondary-UL-Frequency
                                                            RL-on-Secondary-UL-Frequency,
                                    ProtocolExtensionContainer { { Additional-EDCH-Cell-Information-Removal-Info-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Additional-EDCH-Cell-Information-Removal-Info-ItemIEs-ExtIEs
                                                                RNSAP-PROTOCOL-EXTENSION ::= {
RL-on-Secondary-UL-Frequency ::= ENUMERATED {
    remove,
    . . .
Additional-EDCH-FDD-Update-Information ::=SEQUENCE{
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                                    HARO-Process-Allocation-2ms-EDCH
                                                                                                                                        OPTIONAL,
    additional-EDCH-DL-Control-Channel-Change-Information
                                                                    Additional-EDCH-DL-Control-Channel-Change-Information-List
    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-FDD-Update-Information-ExtIEs} } OPTIONAL.
Additional-EDCH-FDD-Update-Information-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Additional-EDCH-DL-Control-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Channel-Cha
Info-ItemIEs
Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs ::=SEQUENCE{
         eDCH-Additional-RL-ID
                                                                                       RL-ID,
        iE-Extensions
                                                                                        ProtocolExtensionContainer { { Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs-ExtIEs} } OPTIONAL,
Additional-EDCH-DL-Control-Channel-Change-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
AdditionalPreferredFrequency ::= SEOUENCE (SIZE (1..maxNrOfAddFreq)) OF AdditionalPreferredFrequencyItem
AdditionalPreferredFrequencyItem ::= SEQUENCE {
         dL-UARFCN
                                                                               UARFCN,
                                                                               CorrespondingCells,
         correspondingCells
         iE-Extensions
                                                                               ProtocolExtensionContainer { { AdditionalPreferredFrequencyItem-ExtIEs} } OPTIONAL,
AdditionalPreferredFrequencyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
AdjustmentPeriod
                                                            ::= INTEGER(1..256)
-- Unit Frame
AffectedUEInformationForMBMS
                                                                      ::= SEQUENCE (SIZE (1..maxNrOfUEs)) OF S-RNTI
AllocationRetentionPriority ::= SEQUENCE {
        priorityLevel
                                                                      PriorityLevel,
        pre-emptionCapability
                                                                      Pre-emptionCapability,
         pre-emptionVulnerability
                                                                     Pre-emptionVulnerability,
                                                  ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
         iE-Extensions
         . . .
AllocationRetentionPriority-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Allowed-Rate-Information ::= SEOUENCE
        allowed-UL-Rate
                                                            Allowed-Rate OPTIONAL,
         allowed-DL-Rate
                                                            Allowed-Rate OPTIONAL,
        iE-Extensions
                                                            ProtocolExtensionContainer { {Allowed-Rate-Information-ExtIEs} } OPTIONAL,
Allowed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Allowed-Rate
                    ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...
AllowedQueuingTime
                           ::= INTEGER (1..60)
-- seconds
AlphaValue
                            ::= INTEGER (0..8)
-- Actual value = Alpha / 8
AlternativeFormatReportingIndicator ::= ENUMERATED {
   alternativeFormatAllowed....
Angle-Of-Arrival-Value-LCR ::= SEQUENCE {
    aOA-LCR
                            AOA-LCR,
    aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
                            ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
    iE-Extensions
Angle-Of-Arrival-Value-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-Cell-Information
                        ::= SEQUENCE
    rNC-ID
                                    RNC-ID,
    lac
                                    LAC
                                                                OPTIONAL,
                                    RAC
    rAC
                                                                OPTIONAL,
    aNR-FDD-CellInformation
                                    ANR-FDD-CellInformation
                                                                OPTIONAL,
    aNR-TDD-CellInformation
                                    ANR-TDD-CellInformation
                                                                OPTIONAL,
    aNR-LCR-TDD-CellInformation
                                    ANR-LCR-TDD-CellInformation OPTIONAL,
                                    Extended-RNC-ID
    extended-RNC-ID
                                                                OPTIONAL,
                                    ProtocolExtensionContainer { { ANR-Cell-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
ANR-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-FDD-CellInformation ::= SEQUENCE {
    primaryCPICH-Power
                                        PrimaryCPICH-Power
                                                                             OPTIONAL,
    txDiversityIndicator
                                        TxDiversityIndicator,
    sTTD-SupportIndicator
                                        STTD-SupportIndicator
                                                                             OPTIONAL,
    closedLoopModel-SupportIndicator
                                        ClosedLoopModel-SupportIndicator
                                                                             OPTIONAL,
    restrictionStateIndicator
                                        RestrictionStateIndicator
                                                                             OPTIONAL,
    dpc-ModeChangeSupportIndicator
                                        DPC-Mode-Change-SupportIndicator
                                                                            OPTIONAL,
    cellCapabilityContainerFDD
                                        CellCapabilityContainer-FDD
                                                                             OPTIONAL,
    sNA-Information
                                        SNA-Information
                                                                             OPTIONAL,
    frequencyBandIndicator
                                        FrequencyBandIndicator
                                                                             OPTIONAL,
```

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```
max-UE-DTX-Cycle
                                        Max-UE-DTX-Cycle
                                                                             OPTIONAL,
    aNR-Multiple-PLMN-List
                                        ANR-Multiple-PLMN-List
                                                                             OPTIONAL,
    secondaryServingCellList
                                        Secondary-Serving-Cell-List
                                                                             OPTIONAL.
    dualBandSecondaryServingCellList
                                        Secondary-Serving-Cell-List
                                                                             OPTIONAL,
    cellCapabilityContainerExtensionFDD CellCapabilityContainerExtension-FDD
                                                                                 OPTIONAL.
                                        ProtocolExtensionContainer { { ANR-FDD-CellInformation-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
ANR-FDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-TDD-CellInformation ::= SEOUENCE
    syncCase
                                     SyncCase,
    timeSlot
                                    TimeSlot
                                                                 OPTIONAL
    -- This IE shall be present if Sync Case = Case1 -- ,
    sCH-TimeSlot
                                    SCH-TimeSlot
                                                                 OPTIONAL
    -- This IE shall be present if Sync Case = Case2 -- ,
                                    SCTD-Indicator,
    sCTD-Indicator
    dPCHConstantValue
                                    DPCHConstantValue
                                                                 OPTIONAL,
    pCCPCH-Power
                                    PCCPCH-Power
                                                                 OPTIONAL,
    restrictionStateIndicator
                                    RestrictionStateIndicator
                                                                 OPTIONAL,
    cellCapabilityContainerTDD
                                    CellCapabilityContainer-TDD OPTIONAL,
    -- Applicable to 3.84Mcps TDD only
    cellCapabilityContainerTDD768
                                    CellCapabilityContainer-TDD768 OPTIONAL,
    -- Applicable to 7.68Mcps TDD only
    sNA-Information
                                     SNA-Information
                                                                 OPTIONAL,
    aNR-Multiple-PLMN-List
                                    ANR-Multiple-PLMN-List
                                                                 OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { { ANR-TDD-CellInformation-ExtIEs} } OPTIONAL,
    . . .
ANR-TDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ANR-LCR-TDD-CellInformation ::= SEQUENCE {
    sCTD-Indicator
                                                SCTD-Indicator,
                                                DPCHConstantValue
    dPCHConstantValue
                                                                                             OPTIONAL,
    pCCPCH-Power
                                                PCCPCH-Power
                                                                                             OPTIONAL,
                                                RestrictionStateIndicator
    restrictionStateIndicator
                                                                                             OPTIONAL,
    cellCapabilityContainerTDD-LCR
                                                CellCapabilityContainer-TDD-LCR
                                                                                             OPTIONAL,
    -- Applicable to 1.28Mcps TDD only
    sNA-Information
                                                SNA-Information
                                                                                             OPTIONAL,
    aNR-Multiple-PLMN-List
                                                ANR-Multiple-PLMN-List
                                                                                             OPTIONAL,
    cellCapabilityContainerExternsionTDD-LCR
                                                CellCapabilityContainerExtension-TDD-LCR
                                                                                             OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { ANR-LCR-TDD-CellInformation-ExtIEs} } OPTIONAL,
ANR-LCR-TDD-CellInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
ANR-Multiple-PLMN-List ::= SEOUENCE {
   list-Of-PLMNs
                    List-Of-PLMNs
                                                                                    OPTIONAL,
   iE-Extensions
                       ProtocolExtensionContainer { { ANR-Multiple-PLMN-List-ExtIEs} } OPTIONAL,
ANR-Multiple-PLMN-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD
AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}
AntennaColocationIndicator ::= ENUMERATED {
    co-located,
BadSatellites ::= SEQUENCE {
    badSatelliteInformation `
                               SEQUENCE (SIZE (1..maxNoSat)) OF
       SEQUENCE {
           badSAT-ID
                                        SAT-ID,
           iE-Extensions
                                        ProtocolExtensionContainer { { BadSatelliteInformation-ExtIEs} }
                                                                                                                OPTIONAL,
                               ProtocolExtensionContainer { { BadSatellites-ExtIEs} }
    iE-Extensions
                                                                                            OPTIONAL,
BadSatelliteInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
BadSatellites-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Band-Indicator ::= ENUMERATED {
    dcs1800Band,
   pcs1900Band,
BCC ::= BIT STRING (SIZE (3))
```

```
BCCH-ARFCN ::= INTEGER (0..1023)
BetaCD ::= INTEGER (0..15)
                        ::= OCTET STRING (SIZE (1..4,...))
-- If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2.
                        ::= INTEGER (-63..0)
BLER
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER
SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
BSIC ::= SEQUENCE {
    nCC
                NCC,
    bCC
                BCC
BundlingModeIndicator ::= ENUMERATED {
    bundling,
    no-bundling
BurstModeParameters ::= SEQUENCE {
    burstStart
                    INTEGER (0..15),
    burstLength
                    INTEGER (10..25),
    burstFreq
                    INTEGER (1..16),
                                ProtocolExtensionContainer { { BurstModeParameters-ExtIEs} }
    iE-Extensions
                                                                                                   OPTIONAL,
    . . .
BurstModeParameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- C
Cause ::= CHOICE {
    radioNetwork
                        CauseRadioNetwork,
    transport
                        CauseTransport,
    protocol
                        CauseProtocol,
    misc
                        CauseMisc,
    . . .
CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    . . .
```

```
CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified.
    abstract-syntax-error-falsely-constructed-message,
CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID.
    cell-not-available.
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    combining-not-supported,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    requested-tx-diversity-mode-not-supported,
    measurement-temporaily-not-available,
    unspecified,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    dedicated-transport-channel-type-not-supported,
    dl-shared-channel-type-not-supported,
    ul-shared-channel-type-not-supported,
    common-transport-channel-type-not-supported,
    ul-spreading-factor-not-supported,
    dl-spreading-factor-not-supported,
    cm-not-supported,
    transaction-not-supported-by-destination-node-b,
    rl-already-activated-or-alocated,
    . . . ,
    number-of-UL-codes-not-supported,
    cell-reserved-for-operator-use,
    dpc-mode-change-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    power-balancing-status-not-compatible,
    delayed-activation-not-supported,
    rl-timing-adjustment-not-supported,
    unknown-RNTI,
    measurement-repetition-rate-not-compatible,
    ue-not-capable-of-support,
    f-dpch-not-supported,
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e-dch-not-supported,
continuous-packet-connectivity-dtx-drx-operation-not-supported,
continuous-packet-connectivity-hs-scch-less-operation-not-supported.
mimo-not-supported,
e-dch-tti2ms-not-supported,
continuous-packet-connectivity-DTX-DRX-operation-not-available,
continuous-packet-connectivity-UE-DTX-Cycle-not-available,
mimo-not-available,
sixteenQAM-UL-not-Supported,
hSDSCH-MACdPDU-SizeFormatNotSupported,
f-dpch-slot-format-operation-not-supported,
e-DCH-MACdPDU-SizeFormat-not-available,
e-DPCCH-Power-Boosting-not-supported,
trelocprep-expiry,
directed-retry,
no-Iu-CS-UP-relocation,
reduce-load-in-serving-cell,
relocation-cancelled,
relocation-desirable-for-radio-reasons,
resource-optimisation-relocation,
time-critical-relocation,
traffic-load-in-the-target-cell-higher-than-in-the-source-cell,
sixtyfourQAM-DL-and-MIMO-Combined-not-available,
multi-Cell-operation-not-available,
multi-Cell-operation-not-supported,
semi-Persistent-scheduling-not-supported,
continuous-Packet-Connectivity-DRX-not-supported,
continuous-Packet-Connectivity-DRX-not-available,
enhanced-relocation-not-supported,
relocation-not-supported-due-to-PUESBINE-feature,
relocation-failure-in-target-RNC,
relocation-target-not-allowed,
requested-ciphering-and-or-integrity-protection-algorithms-not-supported,
sixtyfourQAM-DL-and-MIMO-Combined-not-supported,
tx-diversity-for-mimo-on-DL-control-channels-not-available,
single-Stream-MIMO-not-supported,
single-Stream-MIMO-not-available,
multi-Cell-operation-with-MIMO-not-supported,
multi-Cell-operation-with-MIMO-not-available,
multi-Cell-EDCH-operation-not-supported,
multi-Cell-EDCH-operation-not-available,
multi-Cell-operation-with-Single-Stream-MIMO-not-supported,
multi-Cell-operation-with-Single-Stream-MIMO-not-available,
cellSpecificTxDiversityHandlingForMultiCellOperationNotAvailable,
cellSpecificTxDiversityHandlingForMultiCellOperationNotSupported,
frequencySpecificCompressedModeNotAvailable,
uL-CLTD-Operation-not-available,
uL-CLTD-Operation-not-supported,
mimo-withfourtransmitantennas-not-supported,
mimo-withfourtransmitantennas-not-available,
dualstream-mimo-withfourtransmitantennas-not-supported,
dualstream-mimo-withfourtransmitantennas-not-available,
multiflow-operation-not-supported,
multiflow-operation-not-available,
```

```
ul-SixtyfourQAM-not-available,
    ul-SixtyfourOAM-not-supported,
    ul-MIMO-Operation-not-available,
    uL-MIMO-Operation-not-supported,
    ul-MIMO-SixteenOAM-Operation-not-available,
    uL-MIMO-SixteenOAM-Operation-not-supported,
    ul-MIMO-SixtyfourOAM-Operation-not-available,
    uL-MIMO-SixtyfourOAM-Operation-not-supported
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified.
    . . .
CellBased::= SEQUENCE {
    cellIdList
                        ProtocolExtensionContainer { {CellBased-ExtIEs} } OPTIONAL,
    iE-Extensions
CellBased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CellIdList ::= SEQUENCE (SIZE (1..maxNrOfCellIds)) OF
    Cell-Id
Cell-Id
            ::= INTEGER (0..268435455)
CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Third bit: HS-DSCH Support Indicator
-- Fourth bit: DSCH Support Indicator
-- Fifth bit: F-DPCH Support Indicator
-- sixth bit: E-DCH Support Indicator
-- Seventh bit: E-DCH TTI2ms Support Indicator
-- Eighth bit: E-DCH 2sf2and2sf4 and all inferior SFs Support Indicator
-- Ninth bit: E-DCH 2sf2 and all inferior SFs Support Indicator
-- Tenth bit: E-DCH 2sf4 and all inferior SFs Support Indicator
-- Eleventh bit: E-DCH sf4 and all inferior SFs Support Indicator
-- Twelveth bit: E-DCH sf8 and all inferior SFs Support Indicator
-- Thirteenth bit: E-DCH HARQ IR Combining Support Indicator
-- Fourteenth bit: E-DCH HARQ Chase Combining Support Indicator
-- Fifteenth bit: Continuous Packet Connectivity DTX-DRX Support Indicator
-- Sixteenth bit: Continuous Packet Connectivity HS-SCCH less Support Indicator
-- Seventeenth bit: MIMO Support Indicator
-- Eighteenth bit: SixteenQAM UL Support Indicator
-- Nineteenth bit: Flexible MAC-d PDU Size Support Indicator
-- Twentieth bit: F-DPCH Slot Format Support Indicator
```

-- Fourty-first bit: Common E-RGCH Capability

- -- Twentyfirst bit: SixtyfourQAM DL Support Indicator -- Twentysecond bit: Flexible E-DCH MAC-d PDU Size Support Indicator -- Twentythird bit: E-DPCCH Power Boosting Support Indicator -- Twentyfourth bit: SixtyfourOAM DL and MIMO Combined Support Indicator -- Twentyfifth bit: Multi Cell Support Indicator Support Indicator -- Twentysixth bit: MBMS Support Indicator -- Twentyseventh bit: DRNS Support STTD on DL ctrl ch when the RL is in MIMO P-CPICH + S-CPICH cell -- Twentyeighth bit: Dual Band Support Indicator -- Twentyninth bit: Single Stream MIMO Support Indicator -- Thirtieth bit: Preferred Precoding Weight Set Restriction Support Indicator -- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver. CellCapabilityContainerExtension-FDD ::= BIT STRING (SIZE (128)) -- First bit: Cell Specific Tx Diversity Handling For Multi Cell Operation Support Indicator -- Second bit: Multi Cell and MIMO Support Indicator -- Third bit: Multi Cell and Single Stream MIMO Support Indicator -- Fourth bit: Multi Cell E-DCH Support Indicator -- Fifth bit: Separate Iub Transport Bearer Support Indicator -- Sixth bit: E-DCH UL Flow Multiplexing Support Indicator -- Seventh to eleventh bit: Maximum No of HSDPA Frequencies Support Indicator -- Twelfth bit: Dual Band and MIMO Support Indicator -- Thirteenth bit: 3 or more carrier HSDPA and MIMO Single Band Support Indicator -- Fourteenth bit: 3 or more carrier HSDPA and MIMO Dual Band Support Indicator -- Fifteenth bit : Dual Band and Single Stream MIMO Support Indicator -- Sixteenth bit : 3 or more carrier HSDPA and Single Stream MIMO Single Band Support Indicator -- Seventeenth bit : 3 or more carrier HSDPA and Single Stream MIMO Dual Band Support Indicator -- Eighteenth bit: Frequency specific Compressed Mode Support Indicator -- Nineteenth bit: UL CLTD Capability -- Twentieth to twenty-second bit: Supported MIMO transmit antennas (N). -- Twenty-third bit: MIMO with N transmit antennas Capability Adjacent-carrier. -- Twenty-fourth bit: MIMO with N transmit antennas Capability Dual Band/Dual Band. -- Twenty-fifth bit: Multi Cell and MIMO with N transmit antennas Capability Adjacent-carrier. -- Twenty-sixth bit: Multi Cell and MIMO with N transmit antennas Capability Dual Band/Dual Band. -- Twenty-seventh bit: HSPA 3 or more Carrier and MIMO with N transmit antennas Capability Adjacent-carrier. -- Twenty-eighth bit: HSPA 3 or more Carrier and MIMO with N transmit antennas Capability Dual Band/Dual Band. -- Twenty-ninth bit: Intra-site Multiflow -- Thirtieth bit: Inter-site Multiflow -- The thirty-first to thirty-third bits: Supported Multiflow configuration, where: -- value 0 indicates support for one frequency two cells value 1 indicates support for two frequencies three cells -- value 2 indicates support for two frequencies four cells -- values 3-7 are reserved for future use. -- Thirty-fourth bit: Multiflow and MIMO -- Thirty-fifth bit: Cell Specific Tx Diversity Handling For Multiflow Cell Operation -- Thirty-sixth bit: Multiflow and single stream MIMO -- Thirty-seventh bit: UL 640AM Capability -- Thirty-eighth bit: UL MIMO Capability -- Thirty-ninth bit: UL MIMO and 16QAM Capability -- Fourtieth bit: UL MIMO and 64QAM Capability
- -- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

```
CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- The fourth bit: Flexible MAC-d PDU Size Support Indicator
-- Fifth bit: MBMS Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- The fourth bit: Flexible MAC-d PDU Size Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
CellCapabilityContainerExtension-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Multi-Carrier E-DCH Operation Support Indicator
-- Second bit: Separate Iur Transport Bearer Support Indicator
-- Third bit: E-DCH UL flow Multiplexing Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
CellCapabilityContainer-TDD768 ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- The fourth bit: Flexible MAC-d PDU Size Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
                       ::= INTEGER (0..65535)
C-ID
CCTrCH-ID
                       ::= INTEGER (0..15)
Cell-Capacity-Class-Value ::= SEQUENCE {
       uplinkCellCapacityClassValue
                                           INTEGER(1..100,...),
       downlinkCellCapacityClassValue
                                           INTEGER(1..100,...)
CellIndividualOffset
                      ::= INTEGER (-20..20)
CellListValidityIndicator ::= ENUMERATED {
    ignoreSecondaryServingCellList,
    ignoreDualBandSecondaryServingCellList,
    ignoreBoth
CellParameterID
                           ::= INTEGER (0..127,...)
CellPortionID ::= INTEGER (0..63,...)
CellPortionLCRID ::= INTEGER (0..255,...)
CFN
                    ::= INTEGER (0..255)
```

```
CGI ::= SEQUENCE {
   lai
                    LAI,
    iE-Extensions ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL
LAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ChannelCodingType ::= ENUMERATED {
   no-codingTDD,
    convolutional-coding,
    turbo-coding,
    . . .
ChipOffset
                       ::= INTEGER (0..38399)
CI
                    ::= OCTET STRING (SIZE (2))
ClassmarkInformation2
                               ::= OCTET STRING
ClassmarkInformation3
                                ::= OCTET STRING
ClosedLoopModel-SupportIndicator
                                    ::= ENUMERATED {
    closedLoop-Model-Supported,
    closedLoop-Model-not-Supported
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
CodingRate ::= ENUMERATED {
    half,
    third,
    . . .
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                            TUTRANGPSAccuracyClass,
    tUTRANGANSSMeasurementAccuracyClass
                                            TUTRANGANSSAccuracyClass
CommonMeasurementType ::= ENUMERATED {
```

```
uTRAN-GPS-timing-of-cell-frames-for-UE-Positioning,
    sFN-SFN-observerd-time-difference.
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    . . . ,
    rT-load,
    nRT-load-Information,
    upPTSInterference,
    uTRAN-GANSS-timing-of-cell-frames-for-UE-Positioning
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.
CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation
                                            TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation
                                            SFNSFNMeasurementValueInformation,
    loadValue
                                            LoadValue,
    transmittedCarrierPowerValue
                                            INTEGER(0..100),
    receivedTotalWideBandPowerValue
                                            INTEGER(0..621),
    uplinkTimeslotISCPValue
                                            UL-TimeslotISCP,
    extension-CommonMeasurementValue
                                            Extension-CommonMeasurementValue
Extension-CommonMeasurementValue
                                    ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
Extension-CommonMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
    { ID id-RTLoadValue
                                                         CRITICALITY ignore TYPE RTLoadValue
       PRESENCE mandatory } |
     ID id-NRTLoadInformationValue
                                                         CRITICALITY ignore TYPE NRTLoadInformationValue
    PRESENCE mandatory } |
    { ID id-UpPTSInterferenceValue
                                                         CRITICALITY reject TYPE UppTSInterferenceValue
    PRESENCE mandatory } |
    { ID id-TUTRANGANSSMeasurementValueInformation
                                                         CRITICALITY reject TYPE TUTRANGANSSMeasurementValueInformation PRESENCE mandatory }
-- For measurements on the Iur-q interface, only load, RT Load and NRT Load values are reported.
CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                CommonMeasurementAvailable,
    measurementnotAvailable
                                NULL
CommonMeasurementAvailable::= SEOUENCE {
    commonMeasurementValue
                                CommonMeasurementValue,
   iE-Extensions
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
                                                                                                                          OPTIONAL,
CommonMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
CongestionCause ::= ENUMERATED {
    uTRAN-dynamic-resources,
    uTRAN-semistatic-resources.
CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED
    not-Required
Common-EDCH-MAC-d-Flow-Specific-InformationFDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem ::= SEQUENCE {
    common-EDCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-FDD
                                                    E-DCH-HARO-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                                         OPTIONAL,
                                                    Common-E-DCH-LogicalChannelInformation,
    common-E-DCHLogicalChannelInformation
                                                    ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-ExtIEs} }
    iE-Extensions
                OPTIONAL,
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Common-EDCH-MAC-d-Flow-Specific-InformationLCR ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlowsLCR)) OF Common-EDCH-MAC-d-Flow-Specific-
InformationItemLCR
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR ::= SEQUENCE {
    common-EDCH-MACdFlow-ID-LCR
                                                    EDCH-MACdFlow-ID-LCR,
   maximum-Number-of-Retransmissions-For-E-DCH
                                                    MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-TDD
                                                    E-DCH-HARQ-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                                         OPTIONAL,
                                                    Common-E-DCH-LogicalChannelInformation,
    common-E-DCHLogicalChannelInformation
                                                    ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs} }
    iE-Extensions
                OPTIONAL,
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Common-E-DCH-LogicalChannelInformation ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF Common-E-DCH-LogicalChannelInformationItem
Common-E-DCH-LogicalChannelInformationItem ::= SEQUENCE {
                                    LogicalChannelID,
    logicalChannelId
    maximumMACdPDU-SizeExtended
                                    MAC-PDU-SizeExtended
    iE-Extensions
                                    ProtocolExtensionContainer { { Common-E-DCH-LogicalChannelInformationItem-ExtIEs } }
    OPTIONAL,
```

```
Common-E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Common-EDCH-Support-Indicator ::= NULL
Common-E-RGCH-Cell-Information ::= CHOICE {
    deActivation
                                            Common-E-RGCH-De-Activation,
    common-E-RGCH-Cell-Info
                                            Common-E-RGCH-Cell-Info,
Common-E-RGCH-Cell-Info ::= SEOUENCE {
    eRGCH-ChannelisationCode
                                            FDD-DL-ChannelisationCodeNumber,
    eRGCH-SignatureSequence
                                            ERGCH-SignatureSequence,
                                            E-Serving-Grant-Value
    serving-Grant-Value
                                                                                 OPTIONAL,
Common-E-RGCH-De-Activation ::= NULL
CompleteAlmanacProvided ::= BOOLEAN
Continuous-Packet-Connectivity-DTX-DRX-Information ::= SEQUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset,
   enabling-Delay
                                                Enabling-Delay,
    dTX-Information
                                                DTX-Information,
    dRX-Information
                                                DRX-Information
                                                                                         OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-ExtIEs } }
        OPTIONAL,
Continuous-Packet-Connectivity-DTX-DRX-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify ::= SEQUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset
                                                                                         OPTIONAL,
    enabling-Delay
                                                Enabling-Delay
                                                                                         OPTIONAL,
    dTX-Information-to-Modify
                                                DTX-Information-to-Modify
                                                                                         OPTIONAL,
    dRX-Information-to-Modify
                                                DRX-Information-to-Modify
                                                                                         OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs
           OPTIONAL,
    . . .
Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Continuous-Packet-Connectivity-HS-SCCH-Less-Information ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCHTBSs-HS-SCCHless)) OF Continuous-Packet-Connectivity-
HS-SCCH-Less-InformationItem
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem ::= SEQUENCE {
    transport-Block-Size-Index
                                          Transport-Block-Size-Index,
   hSPDSCH-Second-Code-Support
                                          HSPDSCH-Second-Code-Support,
   iE-Extensions
                                          ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs } }
           OPTIONAL,
    . . .
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response ::= SEQUENCE {
   hSPDSCH-First-Code-Index
                                          HSPDSCH-First-Code-Index,
   hSPDSCH-Second-Code-Index
                                          HSPDSCH-Second-Code-Index
    iE-Extensions
                                          ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs
           OPTIONAL,
    . . .
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CorrespondingCells ::= SEQUENCE (SIZE (1..maxNrOfCellsPerFreq)) OF C-ID
CoverageIndicator ::= ENUMERATED {
   overlap,
   covers,
   containedIn,
CPC-Information ::= SEQUENCE {
    continuous-Packet-Connectivity-DTX-DRX-Information
                                                                          Continuous-Packet-Connectivity-DTX-DRX-Information
           OPTIONAL,
    continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
                                                                          Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
       OPTIONAL,
    continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                          Continuous-Packet-Connectivity-HS-SCCH-Less-Information
       OPTIONAL,
                                                                          iE-Extensions
       OPTIONAL,
CPC-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

EXTENSION

```
{ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator
                                                                                      CRITICALITY reject
Continuous-Packet-Connectivity-HS-SCCH-less-Deactivate-Indicator
                                                                             PRESENCE optional },
    . . .
CPC-RecoveryReport ::= ENUMERATED {
    initiated,
Continuous-Packet-Connectivity-HS-SCCH-less-Deactivate-Indicator ::= NULL
Counting-Information ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Counting-Information-List
Counting-Information-List ::= SEQUENCE {
    c-ID
                                        C-ID,
    counting-Result
                                        Counting-Result,
                                        ProtocolExtensionContainer { { Counting-Information-List-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Counting-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Counting-Result ::= INTEGER (0..63)
CRC-Size
                        ::= ENUMERATED {
    ν0,
    v8,
   v12,
    v16,
    v24,
    . . .
CriticalityDiagnostics ::= SEQUENCE
    procedureID
                                    ProcedureID
                                                             OPTIONAL,
    triggeringMessage
                                    TriggeringMessage
                                                             OPTIONAL,
    procedureCriticality
                                    Criticality
                                                             OPTIONAL,
    transactionID
                                    TransactionID
                                                             OPTIONAL,
    iEsCriticalityDiagnostics
                                    CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    . . .
CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        iECriticality
                                Criticality,
```

```
iE-ID
                                ProtocolIE-ID,
       repetitionNumber
                                RepetitionNumber0
                                                        OPTIONAL.
                                ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
       iE-Extensions
CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ID id-MessageStructure
                                CRITICALITY ignore
                                                        EXTENSION MessageStructure
                                                                                         PRESENCE optional
   ID id-TypeOfError
                                CRITICALITY ignore
                                                        EXTENSION TypeOfError
                                                                                         PRESENCE mandatory
    . . .
MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
    SEOUENCE {
       iE-ID
                                ProtocolIE-ID,
       repetitionNumber
                                RepetitionNumber1
                                                        OPTIONAL.
                                ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
       iE-Extensions
MessageStructure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
   1AC
                        LAC,
                        ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
    iE-Extensions
CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CN-PS-DomainIdentifier ::= SEQUENCE {
   pLMN-Identity
                       PLMN-Identity,
   lAC
                        LAC,
    rAC
                        RAC,
    iE-Extensions
                        ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CNDomainType
                ::= ENUMERATED
    cs-domain,
   ps-domain,
   i-care,
-- See in TS 25.331 [16]
```

```
CQI-DTX-Timer ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
ControlGAP ::= INTEGER (1..255)
COI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,..., v16, v32, v64}
COI-Power-Offset ::= INTEGER (0..8,..., 9..10)
-- According to mapping in TS 25.213 [21] subclause 4.2.1
CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
C-RNTI
                        ::= INTEGER (0..65535)
CodeRate ::= INTEGER (0..63)
CodeRate-short ::= INTEGER (0..10)
CPC-InformationLCR ::= SEQUENCE {
    continuousPacketConnectivity-DRX-InformationLCR
                                                                     ContinuousPacketConnectivity-DRX-InformationLCR
    continuousPacketConnectivity-DRX-Information-to-Modify-LCR
                                                                     ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR
                                                                                                                                         OPTIONAL,
    hS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                     HS-DSCH-Semi-PersistentScheduling-Information-LCR
    OPTIONAL,
    hS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                                     HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                                                                                                         OPTIONAL,
    hS-DSCH-SPS-Deactivate-Indicator-LCR
                                                                                 OPTIONAL,
    e-DCH-Semi-PersistentScheduling-Information-LCR
                                                                     E-DCH-Semi-PersistentScheduling-Information-LCR
                                                                     E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR
    e-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                                                                                                         OPTIONAL,
    e-DCH-SPS-Deactivate-Indicator-LCR
                                                                                 OPTIONAL,
                                                                     ProtocolExtensionContainer { { CPC-InformationLCR-ExtIEs} }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
CPC-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivity-DRX-InformationLCR ::= SEQUENCE {
    enabling-Delay
                                    Enabling-Delay,
    hS-SCCH-DRX-Information-LCR
                                    HS-SCCH-DRX-Information-LCR,
    e-AGCH-DRX-Information-LCR
                                    E-AGCH-DRX-Information-LCR
                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-InformationLCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
ContinuousPacketConnectivity-DRX-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-DRX-Information-LCR ::= SEQUENCE {
   hS-SCCH-UE-DRX-Cycle-LCR
                                                                UE-DRX-Cycle-LCR,
```

```
hS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                 Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                                                                                 OPTIONAL,
   hS-SCCH-UE-DRX-Offset-LCR
                                                                UE-DRX-Offset-LCR.
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-SCCH-DRX-Information-LCR-ExtIEs} } OPTIONAL,
HS-SCCH-DRX-Information-LCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
                                                                    CRITICALITY ignore EXTENSION Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext
    PRESENCE optional },
    . . .
E-AGCH-DRX-Information-LCR ::= CHOICE {
    sameAsHS-SCCH
                                NULL,
    e-AGCH-DRX-Parameters
                                E-AGCH-DRX-Parameters,
E-AGCH-DRX-Parameters ::= SEQUENCE {
    e-AGCH-UE-DRX-Cycle-LCR
                                                         UE-DRX-Cycle-LCR,
    e-AGCH-UE-Inactivity-Monitor-Threshold
                                                         E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                                                          OPTIONAL,
    e-AGCH-UE-DRX-Offset-LCR
                                                        UE-DRX-Offset-LCR,
                                                         ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
E-AGCH-DRX-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UE-DRX-Cycle-LCR ::= ENUMERATED \{v1, v2, v4, v8, v16, v32, v64, ...\}
    -- Unit subframe
UE-DRX-Offset-LCR ::= INTEGER (0..63)
    -- Unit subframe
Inactivity-Threshold-for-UE-DRX-Cycle-LCR ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64,...}
    -- Unit subframe
Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext ::= ENUMERATED {v128, v256, v512,...}
    -- Unit subframe
E-AGCH-UE-Inactivity-Monitor-Threshold ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity,...}
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR ::= SEQUENCE
    enabling-Delay
                                                Enabling-Delay
                                                                                         OPTIONAL,
    dRX-Information-to-Modify-LCR
                                                DRX-Information-to-Modify-LCR
                                                                                         OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs }
                OPTIONAL,
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DRX-Information-to-Modify-LCR ::= CHOICE {
   modify
                  DRX-Information-to-Modify-Items-LCR,
   deactivate
                  NULL,
   . . .
DRX-Information-to-Modify-Items-LCR ::= SEQUENCE
   hS-SCCH-DRX-Information-LCR
                                            HS-SCCH-DRX-Information-LCR
                                                                              OPTIONAL,
   e-AGCH-DRX-Information-LCR
                                            E-AGCH-DRX-Information-LCR
                                                                              OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-LCR-ExtIEs} } OPTIONAL,
   . . .
DRX-Information-to-Modify-Items-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContinuousPacketConnectivity-DRX-Information-ResponseLCR ::= SEQUENCE {
   enabling-Delay
                                         Enabling-Delay
                                                                              OPTIONAL,
                                         HS-SCCH-DRX-Information-ResponseLCR
   hS-SCCH-DRX-Information-ResponseLCR
                                                                              OPTIONAL,
   e-AGCH-DRX-Information-ResponseLCR
                                         E-AGCH-DRX-Information-ResponseLCR
                                                                              OPTIONAL,
   iE-Extensions
                                         ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs } }
       OPTIONAL,
   . . .
ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
HS-SCCH-DRX-Information-ResponseLCR ::= SEQUENCE {
   hS-SCCH-UE-DRX-Cvcle-LCR
                                                           UE-DRX-Cvcle-LCR
                                                                                  OPTIONAL,
   hS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                           Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                                                                OPTIONAL,
   hS-SCCH-UE-DRX-Offset-LCR
                                                           UE-DRX-Offset-LCR
                                                                                  OPTIONAL,
                                 ProtocolExtensionContainer { { HS-SCCH-DRX-Information-ResponseLCR-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-SCCH-DRX-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
   PRESENCE optional },
   . . .
E-AGCH-DRX-Information-ResponseLCR ::= CHOICE {
   sameAsHS-SCCH
                                     NULL,
   e-AGCH-DRX-Parameters-Response
                                     E-AGCH-DRX-Parameters-Response,
E-AGCH-DRX-Parameters-Response ::= SEQUENCE
```

```
e-AGCH-UE-DRX-Cycle-LCR
                                                    UE-DRX-Cycle-LCR
                                                                                             OPTIONAL,
    e-AGCH-UE-Inactivity-Monitor-Threshold
                                                    E-AGCH-UE-Inactivity-Monitor-Threshold OPTIONAL,
    e-AGCH-UE-DRX-Offset-LCR
                                                     UE-DRX-Offset-LCR
                                                                                             OPTIONAL.
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-Response-ExtIEs} } OPTIONAL,
    . . .
E-AGCH-DRX-Parameters-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Controlled-Object-Scope ::= SEQUENCE{
    rNC-ID
                                            RNC-ID,
    extended-RNC-ID
                                            Extended-RNC-ID OPTIONAL,
   multiple-PLMN-List
                                            Multiple-PLMN-List OPTIONAL,
    umts-cell-Info
                                            UMTS-Cells-Info-List OPTIONAL,
                                            ProtocolExtensionContainer { {Controlled-Object-Scope-ExtIEs} } OPTIONAL,
    iE-Extensions
Controlled-Object-Scope-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- D
DATA-ID ::= INTEGER (0..3)
DCH-FDD-Information
                        ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem
DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator
                                        PayloadCRC-PresenceIndicator,
                                        UL-FP-Mode,
    ul-FP-Mode
    toAWS
                                        ToAWS,
    toAWE
                                        TOAWE,
    dCH-SpecificInformationList
                                        DCH-Specific-FDD-InformationList,
                                        ProtocolExtensionContainer { {DCH-FDD-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-FDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos
                            CRITICALITY
                                            ignore
                                                        EXTENSION TnlOos
                                                                                 PRESENCE
                                                                                             optional
DCH-MeasurementOccasion-Information ::= SEQUENCE (SIZE (1.. maxNrOfDCHMeasurementOccasionPatternSequence)) OF DchMeasurementOccasionInformation-
Item
DchMeasurementOccasionInformation-Item ::= SEQUENCE {
    pattern-Sequence-Identifier
                                                Pattern-Sequence-Identifier,
    status-Flag
                                                Status-Flag,
    measurement-Occasion-Pattern-Sequence-parameters
                                                                Measurement-Occasion-Pattern-Sequence-parameters
                                                                                                                                         OPTIONAL,
```

```
ProtocolExtensionContainer { { DCH-MeasurementOccasion-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
DCH-MeasurementOccasion-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Measurement-Occasion-Pattern-Sequence-parameters ::= SEQUENCE {
   measurement-Occasion-Pattern-Sequence-parameters-k
                                                                        INTEGER(1..9),
   measurement-Occasion-Pattern-Sequence-parameters-offset
                                                                        INTEGER (0..511),
   measurement-Occasion-Pattern-Sequence-parameters-M-Length
                                                                        INTEGER(1..512),
    measurement-Occasion-Pattern-Sequence-parameters-Timeslot-Bitmap
                                                                        BIT STRING (SIZE (7)),
    iE-Extensions
                                ProtocolExtensionContainer { { Measurement-Occasion-Pattern-Sequence-parameters-ExtIEs } } OPTIONAL,
Measurement-Occasion-Pattern-Sequence-parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-MeasurementType-Indicator ::= BIT STRING (SIZE (5))
DCH-Specific-FDD-InformationList ::= SEOUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item
DCH-Specific-FDD-Item ::= SEQUENCE {
    dCH-ID
                                        DCH-ID,
    trCH-SrcStatisticsDescr
                                        TrCH-SrcStatisticsDescr,
    ul-transportFormatSet
                                        TransportFormatSet,
    dl-transportFormatSet
                                        TransportFormatSet,
    ul-BLER
                                        BLER,
   dl-BLER
                                        BLER,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    frameHandlingPriority
                                        FrameHandlingPriority,
    qE-Selector
                                        QE-Selector,
    dRACControl
                                        DRACControl,
                                        ProtocolExtensionContainer { { DCH-FDD-SpecificItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DCH-FDD-SpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Guaranteed-Rate-Information
                                            CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                                 PRESENCE optional
     ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory |
     ID id-Unidirectional-DCH-Indicator
                                            CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator
                                                                                                                 PRESENCE optional
DCH-Indicator-For-E-DCH-HSDPA-Operation ::= ENUMERATED {
    dch-not-present
DCH-ID
                        ::= INTEGER (0..255)
```

```
DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem
DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID
                                DCH-ID.
    bindingID
                                BindingID
                                                         OPTIONAL.
    transportLayerAddress
                                TransportLayerAddress
                                                        OPTIONAL,
                                ProtocolExtensionContainer { {DCH-InformationResponseItem-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Allowed-Rate-Information
                                                                                                                                         PRESENCE
                                                CRITICALITY ignore EXTENSION Allowed-Rate-Information
optional
    { ID id-TransportBearerNotSetupIndicator
                                                                                                                          PRESENCE optional
                                                CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator
FDD only
    . . .
DCH-TDD-Information
                        ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem
DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator
                                        PayloadCRC-PresenceIndicator,
    ul-FP-Mode
                                        UL-FP-Mode,
    toAWS
                                        ToAWS,
                                        TOAWE,
    dCH-SpecificInformationList
                                        DCH-Specific-TDD-InformationList,
    iE-Extensions
                                        ProtocolExtensionContainer { {DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
DCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos
                                        CRITICALITY
                                                         ignore
                                                                     EXTENSION
                                                                                 Tnl0os
                                                                                             PRESENCE
                                                                                                          optional
                                                                                                                          },
    . . .
DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
DCH-Specific-TDD-Item ::=
                            SEOUENCE {
    dCH-ID
                                        DCH-ID,
    ul-cCTrCH-ID
                                        CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
    dl-cCTrCH-ID
                                        CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
    trCH-SrcStatisticsDescr
                                        TrCH-SrcStatisticsDescr,
    ul-transportFormatSet
                                        TransportFormatSet,
    dl-transportFormatSet
                                        TransportFormatSet,
    ul-BLER
                                        BLER,
    dl-BLER
                                        BLER,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    frameHandlingPriority
                                        FrameHandlingPriority,
    qE-Selector
                                        QE-Selector
                                                            OPTIONAL,
    -- This IE shall be present if DCH is part of set of Co-ordinated DCHs
    iE-Extensions
                                        ProtocolExtensionContainer { {DCH-Specific-TDD-Item-ExtIEs} } OPTIONAL,
```

```
DCH-Specific-TDD-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Guaranteed-Rate-Information
                                            CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                                 PRESENCE optional
     ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory |
     ID id-Unidirectional-DCH-Indicator
                                            CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator
                                                                                                                 PRESENCE optional
DedicatedMeasurementType ::= ENUMERATED {
    sir.
    sir-error,
    transmitted-code-power,
    rx-timing-deviation,
    round-trip-time,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
    hs-sich-quality,
    rx-timing-deviation-768,
    rx-timing-deviation-ext,
    ue-transmission-power-headroom
DedicatedMeasurementValue ::= CHOICE {
    sIR-Value
                        SIR-Value.
    sIR-ErrorValue
                            SIR-Error-Value,
    transmittedCodePowerValue Transmitted-Code-Power-Value,
                        RSCP-Value, -- TDD only
    rxTimingDeviationValue Rx-Timing-Deviation-Value, -- 3.84Mcps TDD only
    roundTripTime
                        Round-Trip-Time-Value, -- FDD only
    extension-DedicatedMeasurementValue
                                            Extension-DedicatedMeasurementValue
Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}
Extension-DedicatedMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
     ID id-Rx-Timing-Deviation-Value-LCR
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                                 PRESENCE mandatory
     ID id-Angle-Of-Arrival-Value-LCR
                                                CRITICALITY reject TYPE Angle-Of-Arrival-Value-LCR
                                                                                                                 PRESENCE mandatory
     ID id-HS-SICH-Reception-Quality
                                                CRITICALITY reject TYPE HS-SICH-Reception-Quality-Value
                                                                                                                PRESENCE mandatory
     ID id-Rx-Timing-Deviation-Value-768
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                                PRESENCE mandatory
     ID id-Rx-Timing-Deviation-Value-ext
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-ext
                                                                                                                PRESENCE mandatory
     ID id-Extended-Round-Trip-Time-Value
                                                CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                                PRESENCE mandatory
     ID id-UE-transmission-power-headroom
                                                CRITICALITY reject TYPE UE-transmission-power-headroom-Value
                                                                                                                PRESENCE mandatory },
DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                DedicatedMeasurementAvailable,
                                DedicatedMeasurementnotAvailable
    measurementnotAvailable
DedicatedMeasurementAvailable::= SEQUENCE {
```

```
DedicatedMeasurementValue,
   dedicatedmeasurementValue
   CFN
                                                       OPTIONAL,
   ie-Extensions
                                 ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
                                                                                                              OPTIONAL.
DedicatedMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementnotAvailable ::= NULL
DelayedActivation ::= CHOICE {
   cfn
                         CFN.
    separate-indication
                         NULL
DelayedActivationUpdate ::= CHOICE {
                  Activate-Info,
   activate
   deactivate
                  Deactivate-Info
Activate-Info ::= SEQUENCE {
   activation-type
                         Execution-Type,
   initial-dl-tx-power
                         DL-Power,
   firstRLS-Indicator
                         FirstRLS-Indicator
                                                                                 OPTIONAL, --FDD Only
                         PropagationDelay
                                                                                 OPTIONAL, --FDD Only
   propagation-delay
   iE-Extensions
                         ProtocolExtensionContainer { { Activate-Info-ExtIEs} }
                                                                                 OPTIONAL,
Activate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   },
    . . .
Deactivate-Info ::= SEQUENCE {
   deactivation-type
                         Execution-Type,
                         ProtocolExtensionContainer { { Deactivate-Info-ExtIEs} }
   iE-Extensions
                                                                                    OPTIONAL,
Deactivate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Execution-Type ::= CHOICE {
   synchronised
                  CFN,
   unsynchronised NULL
DeltaSIR
                      ::= INTEGER (0..30)
```

```
-- Step 0.1 dB, Range 0..3 dB.
DGANSSCorrections ::= SEQUENCE {
   dGANSS-ReferenceTime
                                   INTEGER(0..119),
   dGANSS-Information
                                   SEQUENCE (SIZE (1..maxSqnType)) OF SEQUENCE {
       qANSS-SignalId
                                      GANSS-Signal-ID
                                                                                                                OPTIONAL.
       qANSS-StatusHealth
                                      GANSS-StatusHealth,
-- The following IE shall be present if the StatusHealth IE value is not equal to "no data" or "invalid data"
       dGANSS-SignalInformation
                                      SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
           satId
                                          INTEGER(0..63),
           gANSS-iod
                                          BIT STRING (SIZE (10)),
           udre
                                          UDRE,
                                          INTEGER (-2047..2047),
           ganss-prc
                                          INTEGER(-127..127),
           ganss-rrc
           ie-Extensions
                                          ProtocolExtensionContainer { { DGANSS-SignalInformationItem-ExtIEs } } OPTIONAL,
                                                                                                                OPTIONAL,
                                      ProtocolExtensionContainer { { DGANSS-InformationItem-ExtIEs } }
       ie-Extensions
                                                                                                                OPTIONAL,
                                   ie-Extensions
                                                                                                                OPTIONAL,
DGANSSCorrections-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DGANSS-Corrections-Req ::= SEQUENCE {
   dGANSS-Signal-ID
                                      BIT STRING (SIZE (8)),
   ie-Extensions
                                      ProtocolExtensionContainer { { DGANSS-Corrections-Req-ExtIEs } }
                                                                                                                OPTIONAL,
    . . .
DGANSS-Corrections-Req-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-ID
                               CRITICALITY ignore EXTENSION
                                                                                             optional},
                                                             GANSS-ID
                                                                                  PRESENCE
    . . .
DGANSS-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DGANSS-SignalInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-DGNSS-ValidityPeriod CRITICALITY ignore EXTENSION DGNSS-ValidityPeriod
                                                                                     PRESENCE
                                                                                                                optional },
```

```
DGANSSThreshold ::= SEQUENCE {
   pRCDeviation
                    PRCDeviation,
   . . .
DGNSS-ValidityPeriod ::=
                              SEQUENCE {
   udreGrowthRate
                                 UDREGrowthRate,
   udreValidityTime
                                 UDREValidityTime,
                                 iE-Extensions
                                                                                              OPTIONAL,
   . . .
DGNSS-ValidityPeriod-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DGPSCorrections ::= SEQUENCE {
   qPSTOW
                                     GPSTOW,
   gPS-Status-Health
                                     GPS-Status-Health,
   satellite-DGPSCorrections-Information SEQUENCE (SIZE (1..maxNoSat)) OF
      SEOUENCE {
          sAT-ID
                                        SAT-ID,
          iode-dgps
                                        BIT STRING (SIZE (8)),
          uDRE
                                        UDRE,
                                        PRC,
          range-Correction-Rate
                                        Range-Correction-Rate,
                                        iE-Extensions
                                                                                                                 OPTIONAL,
      },
   iE-Extensions
                              OPTIONAL,
Satellite-DGPSCorrections-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
   {ID id-DGNSS-ValidityPeriod CRITICALITY ignore EXTENSION DGNSS-ValidityPeriod
                                                                        PRESENCE optional },
   . . .
DGPSCorrections-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
DGPSThreshold ::= SEQUENCE {
   pRCDeviation
                    PRCDeviation,
   iE-Extensions
                    ProtocolExtensionContainer { { DGPSThreshold-ExtIEs} }
                                                                      OPTIONAL,
```

```
DGPSThreshold-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiscardTimer ::= ENUMERATED
\{v20, v40, v60, v80, v100, v120, v140, v160, v180, v200, v250, v300, v400, v500, v750, v1000, v1250, v1500, v1750, v2000, v2500, v3000, v3500, v4000, v4500, v5000, v7500, v1000, v10000,                                                                         ::= ENUMERATED {
DiversityControlField
        may,
        must,
        must-not
DiversityMode
                                                              ::= ENUMERATED {
         none,
         sTTD.
         closedLoopModel,
         not-used-closedLoopMode2,
DL-DPCH-SlotFormat
                                                              ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
         timing-advance,
         timing-delay
                                                      ::= INTEGER (-350..150)
DL-Power
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step 0.1dB
DL-PowerBalancing-Information ::= SEQUENCE {
         powerAdjustmentType
                                                                                          PowerAdjustmentType,
                                                                                           DL-Power
         dLReferencePower
                                                                                                                               OPTIONAL,
         -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
         dLReferencePowerList DL-ReferencePowerInformationList
         -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
         maxAdjustmentStep
                                                                                          MaxAdjustmentStep
                                                                                                                                                 OPTIONAL,
         -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
         adjustmentPeriod
                                                                                          AdjustmentPeriod
                                                                                                                                                 OPTIONAL,
         -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
         adjustmentRatio
                                                                                          ScaledAdjustmentRatio OPTIONAL,
         -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
                                                                                           ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
         iE-Extensions
DL-PowerBalancing-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DL-ReferencePowerInformationList
                                        ::= SEOUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
                                RL-ID.
    dl-Reference-Power
                                DL-Power,
    iE-Extensions
                                ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
DL-ReferencePowerInformation ::= SEQUENCE {
    common-DL-ReferencePowerInformation
                                                DL-Power
                                                                OPTIONAL,
                                                DL-ReferencePowerInformationList
    individual-DL-ReferencePowerInformation
                                                                                        OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { DL-ReferencePowerInformation-ExtIEs } } OPTIONAL,
DL-ReferencePowerInformation-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
D-RNTI
                       ::= INTEGER (0..1048575)
D-RNTI-ReleaseIndication ::= ENUMERATED {
    release-D-RNTI,
    not-release-D-RNTI
DL-ScramblingCode
                           ::= INTEGER (0..15)
DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
DL-Timeslot-Information ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem
DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence,
```

```
dL-Code-Information
                                  TDD-DL-Code-Information,
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
DL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotLCR-Information ::= SEOUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF DL-TimeslotLCR-InformationItem
DL-TimeslotLCR-InformationItem ::= SEOUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tFCI-Presence
                                          TFCI-Presence,
   dL-Code-LCR-Information
                                      TDD-DL-Code-LCR-Information,
                                          ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                           OPTIONAL,
DL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem
                                                       CRITICALITY ignore EXTENSION DL-Power
                                                                                                                   PRESENCE optional
                                                                                                                                         } |
   -- Applicable to 1.28Mcps TDD only
   EXTENSION DL-Power
                                                                                                                   PRESENCE optional
    -- Applicable to 1.28Mcps TDD only
    . . .
DL-Timeslot-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem768
DL-Timeslot-InformationItem768 ::= SEQUENCE {
   timeSlot
                                  TimeSlot,
   midambleShiftAndBurstType768
                                  MidambleShiftAndBurstType768,
   tFCI-Presence
                                  TFCI-Presence,
   dL-Code-Information768
                                  TDD-DL-Code-Information768,
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-Timeslot-InformationItem768-ExtIEs} } OPTIONAL,
DL-Timeslot-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-TimeSlot-ISCP-InfoItem
DL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
   timeSlot
                              TimeSlot,
   dL-TimeslotISCP
                              DL-TimeslotISCP.
   iE-Extensions
                              ProtocolExtensionContainer { { DL-TimeSlot-ISCP-InfoItem-ExtIEs} } OPTIONAL,
DL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
DL-TimeSlot-ISCP-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-TimeSlot-ISCP-LCR-InfoItem
DL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
   timeSlotLCR
                                 TimeSlotLCR,
   dL-TimeslotISCP
                                 DL-TimeslotISCP,
                                 iE-Extensions
                                                                                                                 OPTIONAL,
DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotISCP
                     ::= INTEGER (0..91)
-- According to mapping in TS 25.123 [24]
Downlink-Compressed-Mode-Method
                                ::= ENUMERATED
   not-Used-puncturing,
   sFdiv2,
   higher-layer-scheduling,
DPC-Mode ::= ENUMERATED {
   mode0,
   mode1,
       . . .
DPC-Mode-Change-SupportIndicator ::= ENUMERATED {
  dPC-ModeChangeSupported
DPCH-ID
                     ::= INTEGER (0..239)
DPCH-ID768 ::= INTEGER (0..479)
DPCHConstantValue ::= INTEGER (-10..10)
-- Unit dB, Step 1dB
              ::= ENUMERATED {
DRACControl
   not-Used-requested,
   not-requested
DRXCycleLengthCoefficient
                                     ::= INTEGER (3..9)
-- See in TS 25.331 [16]
DRX-Information ::= SEQUENCE {
   uE-DRX-Cycle
                                         UE-DRX-Cycle,
   inactivity-Threshold-for-UE-DRX-Cycle
                                                                Inactivity-Threshold-for-UE-DRX-Cycle,
```

```
inactivity-Threshold-for-UE-Grant-Monitoring
                                                                    Inactivity-Threshold-for-UE-Grant-Monitoring,
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring,
    iE-Extensions
                                            ProtocolExtensionContainer { {DRX-Information-ExtIEs} } OPTIONAL,
DRX-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
DRX-Information-to-Modify ::= CHOICE {
    modify
                        DRX-Information-to-Modify-Items,
    deactivate
                   NULL,
DRX-Information-to-Modify-Items ::= SEQUENCE
    uE-DRX-Cycle
                                            UE-DRX-Cycle
                                                                        OPTIONAL,
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                    Inactivity-Threshold-for-UE-DRX-Cycle
                                                                                                                                        OPTIONAL,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                    Inactivity-Threshold-for-UE-Grant-Monitoring
                                                                                                                                        OPTIONAL,
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring
                                                                                OPTIONAL,
                                            ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DRX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-RNTI ::= INTEGER (0..65535)
DSCH-FlowControlInformation ::= SEQUENCE (SIZE(1..16)) OF DSCH-FlowControlItem
DSCH-FlowControlItem ::= SEOUENCE {
    dSCH-SchedulingPriority
                                        SchedulingPriorityIndicator,
   mAC-c-sh-SDU-Lengths
                                        MAC-c-sh-SDU-LengthList,
                                        ProtocolExtensionContainer { {DSCH-FlowControlItem-ExtIEs} } OPTIONAL,
   iE-Extensions
DSCH-FlowControlItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-InitialWindowSize CRITICALITY ignore EXTENSION DSCH-InitialWindowSize PRESENCE optional },
DSCH-ID
                       ::= INTEGER (0..255)
DSCH-InitialWindowSize
                                ::= INTEGER (1..255)
-- Number of MAC-c/sh SDUs.
-- 255 = Unlimited number of MAC-c/sh SDUs
DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-TDD-InformationItem
```

```
DSCH-TDD-InformationItem ::= SEQUENCE {
   dscH-ID
                                      DSCH-ID.
   dl-ccTrCHID
                                      CCTrCH-ID, -- DL CCTrCH in which the DSCH is mapped
   trChSourceStatisticsDescriptor
                                      TrCH-SrcStatisticsDescr,
    transportFormatSet
                                      TransportFormatSet,
    allocationRetentionPriority
                                      AllocationRetentionPriority,
    schedulingPriorityIndicator
                                      SchedulingPriorityIndicator,
   bler
   iE-Extensions
                                      ProtocolExtensionContainer { {DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
DSCH-TDD-InformationItem-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass
                                          CRITICALITY ignore EXTENSION TrafficClass
                                                                                                      PRESENCE mandatory | |
    { ID id-BindingID
                                          CRITICALITY ignore EXTENSION
                                                                        BindingID
                                                                                                  PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TransportLayerAddress
                                          CRITICALITY ignore EXTENSION
                                                                         TransportLayerAddress
                                                                                                      PRESENCE optional
    -- Shall be ignored if bearer establishment with ALCAP.
                                                                                                      PRESENCE optional },
   { ID id-TnlOos
                                          CRITICALITY ignore EXTENSION TnlOos
    -- Shall be ignored if bearer establishment with ALCAP.
DsField ::= BIT STRING (SIZE (8))
DTX-Cycle-2ms-Items ::= SEOUENCE {
   uE-DTX-Cycle1-2ms
                                   UE-DTX-Cycle1-2ms,
   uE-DTX-Cycle2-2ms
                                   UE-DTX-Cycle2-2ms,
   mAC-DTX-Cycle-2ms
                                   MAC-DTX-Cycle-2ms,
                                              ProtocolExtensionContainer { { DTX-Cycle-2ms-Items-ExtIEs} }
   iE-Extensions
                                                                                                                            OPTIONAL,
DTX-Cvcle-2ms-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-2ms-to-Modify-Items ::= SEQUENCE {
   uE-DTX-Cycle1-2ms
                                  UE-DTX-Cycle1-2ms
                                                              OPTIONAL,
                                  UE-DTX-Cycle2-2ms
   uE-DTX-Cycle2-2ms
                                                              OPTIONAL,
   mAC-DTX-Cycle-2ms
                                  MAC-DTX-Cycle-2ms
                                                              OPTIONAL,
   iE-Extensions
                                              OPTIONAL,
DTX-Cycle-2ms-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-10ms-Items ::= SEQUENCE {
   uE-DTX-Cycle1-10ms
                                   UE-DTX-Cycle1-10ms,
   uE-DTX-Cycle2-10ms
                                   UE-DTX-Cycle2-10ms,
   mAC-DTX-Cycle-10ms
                                  MAC-DTX-Cycle-10ms,
```

```
iE-Extensions
                                                                                                                            OPTIONAL,
DTX-Cycle-10ms-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-10ms-to-Modify-Items ::= SEQUENCE {
   uE-DTX-Cycle1-10ms
                                  UE-DTX-Cycle1-10ms
                                                              OPTIONAL,
   uE-DTX-Cycle2-10ms
                                  UE-DTX-Cycle2-10ms
                                                              OPTIONAL,
   mAC-DTX-Cycle-10ms
                                  MAC-DTX-Cycle-10ms
                                                                                                                            OPTIONAL,
                                              ProtocolExtensionContainer { { DTX-Cycle-10ms-to-Modify-Items-ExtIEs} } }
   iE-Extensions
                                                                                                                                   OPTIONAL,
    . . .
DTX-Cycle-10ms-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Information ::= SEQUENCE {
   e-DCH-TTI-Length
                                       E-DCH-TTI-Length,
   inactivity-Threshold-for-UE-DTX-Cycle2
                                                          Inactivity-Threshold-for-UE-DTX-Cycle2,
   uE-DTX-Long-Preamble
                                      UE-DTX-Long-Preamble,
                                          MAC-Inactivity-Threshold
   mAC-Inactivity-Threshold
   cOI-DTX-Timer
                               COI-DTX-Timer,
   uE-DPCCH-burst1
                               UE-DPCCH-burst1,
   uE-DPCCH-burst2
                               UE-DPCCH-burst2,
                               ProtocolExtensionContainer { {DTX-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
DTX-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Information-to-Modify ::= CHOICE {
   modify
                        DTX-Information-to-Modify-Items,
   deactivate
                        NULL,
    . . .
DTX-Information-to-Modify-Items ::= SEQUENCE {
    e-DCH-TTI-Length-to-Modify
                                   E-DCH-TTI-Length-to-Modify
   inactivity-Threshold-for-UE-DTX-Cycle2
                                                          Inactivity-Threshold-for-UE-DTX-Cycle2
                                                                                                                                   OPTIONAL,
   uE-DTX-Long-Preamble
                                   UE-DTX-Long-Preamble
                                                                      OPTIONAL,
                                      MAC-Inactivity-Threshold
   mAC-Inactivity-Threshold
                                                                              OPTIONAL,
   cQI-DTX-Timer
                                   COI-DTX-Timer
                                                                      OPTIONAL,
   uE-DPCCH-burst1
                                  UE-DPCCH-burst1
                                                                      OPTIONAL,
                                   UE-DPCCH-burst2
   uE-DPCCH-burst2
                                                                      OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {DTX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
```

```
DTX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- E
EARFCN ::= INTEGER (0..maxEARFCN)
EARFCN-Extended ::= INTEGER (0..maxEARFCN-Extended, ...)
EARFCN-Information ::= CHOICE {
    fDD
           EARFCN-FDD,
    tDD
           EARFCN,
    extension-EARFCN-Information
                                   Extension-EARFCN-Information
                              ::= ProtocolIE-Single-Container {{ Extension-EARFCN-InformationIE }}
Extension-EARFCN-Information
Extension-EARFCN-InformationIE RNSAP-PROTOCOL-IES ::= {
                                   CRITICALITY ignore TYPE EARFCN-FDD-Extended
    { ID id-EARFCN-FDD-Extended
                                                                                    PRESENCE optional }
    { ID id-EARFCN-TDD-Extended
                                   CRITICALITY ignore TYPE EARFCN-Extended
                                                                                    PRESENCE optional },
EARFCN-FDD ::= SEOUENCE {
    uL-EARFCN
                    EARFCN
    dL-EARFCN
                    EARFCN
EARFCN-FDD-Extended ::= SEQUENCE {
    uL-EARFCN
                EARFCN-Extended,
    dL-EARFCN
                   EARFCN-Extended
E-AGCH-Table-Choice ::= ENUMERATED { table 16B, table 16B-1, ... }
ECGI ::= SEQUENCE {
    pLMN-Identity
                           PLMN-Identity,
    e-UTRAN-Cell-ID
                           BIT STRING (SIZE (28)),
                           ProtocolExtensionContainer { {ECGI-ExtIEs} } OPTIONAL,
    iE-Extensions
ECGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-DDI-Value ::= INTEGER (0..62)
EDCH-FDD-DL-ControlChannelInformation ::= SEQUENCE {
    eAGCH-ERGCH-EHICH-FDD-ScramblingCode
                                                        DL-ScramblingCode
                                                                                            OPTIONAL,
```

. . .

```
FDD-DL-ChannelisationCodeNumber
   eAGCH-ChannelisationCode
                                                                                      OPTIONAL,
   primary-e-RNTI
                                                    E-RNTT
                                                                                      OPTIONAL.
   secondary-e-RNTI
                                                    E-RNTI
                                                                                      OPTIONAL.
   eRGCH-EHICH-ChannelisationCode
                                                    FDD-DL-ChannelisationCodeNumber,
   eRGCH-SignatureSequence
                                                    ERGCH-SignatureSequence
                                                                                      OPTIONAL.
   eHICH-SignatureSequence
                                                    EHICH-SignatureSequence
                                                                                      OPTIONAL,
   serving-Grant-Value
                                                    E-Serving-Grant-Value
                                                                                      OPTIONAL,
                                                    E-Primary-Secondary-Grant-Selector OPTIONAL,
   primary-Secondary-Grant-Selector
   e-RGCH-Release-Indicator
                                                    E-RGCH-Release-Indicator
                                                                                      OPTIONAL,
   iE-Extensions
                                                    ProtocolExtensionContainer { { EDCH-FDD-DL-ControlChannelInformation-ExtIEs } }
       OPTIONAL,
   . . .
EDCH-FDD-DL-ControlChannelInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }
     ID id-Default-Serving-Grant-in-DTX-Cycle2
                                                    CRITICALITY ignore EXTENSION E-Serving-Grant-Value
                                                                                                                       PRESENCE optional }
     ID id-UL-MIMO-DL-Control-Channel-Information
                                                    CRITICALITY reject EXTENSION UL-MIMO-DL-Control-Channel-Information
                                                                                                                       PRESENCE optional },
E-RGCH-E-HICH-ChannelisationCodeValidityIndicator ::= ENUMERATED {
   e-RGCH-E-HICH-Channelisation-Code-response-not-valid
EDCH-FDD-Information ::= SEQUENCE {
   eDCH-MACdFlows-Information
                                                 EDCH-MACdFlows-Information,
   hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                 HARO-Process-Allocation-2ms-EDCH
       OPTIONAL,
                                                 E-DCH-Maximum-Bitrate
   e-DCH-Maximum-Bitrate
                                                                                                                       OPTIONAL,
   e-DCH-Processing-Overload-Level
                                                 E-DCH-Processing-Overload-Level
                                                                                                                       OPTIONAL,
   e-DCH-Reference-Power-Offset
                                                 E-DCH-Reference-Power-Offset
                                                                                                                       OPTIONAL,
   iE-Extensions
                                                 ProtocolExtensionContainer { { EDCH-FDD-Information-ExtIEs } }
                                                                                                                       OPTIONAL,
EDCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                    CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                       PRESENCE optional }
     ID id-SixteenOAM-UL-Operation-Indicator
                                                                                                                       PRESENCE optional }
                                                    CRITICALITY reject EXTENSION SixteenOAM-UL-Operation-Indicator
     ID id-E-AGCH-Table-Choice
                                                    CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
                                                                                                                       PRESENCE
conditional } |
   -- The IE shall be present if the SixteenQAM UL Operation Indicator IE is set to "Activate"-
    { ID id-SixtyfourQAM-UL-Operation-Indicator
                                                    CRITICALITY reject EXTENSION SixtyfourQAM-UL-Operation-Indicator
                                                                                                                       PRESENCE optional } |
    { ID id-UL-MIMO-Information
                                                    CRITICALITY reject EXTENSION UL-MIMO-Information
                                                                                                                       PRESENCE optional },
   . . .
EDCH-FDD-InformationResponse ::= SEQUENCE {
   eDCH-MACdFlow-Specific-InformationResponse
                                                        EDCH-MACdFlow-Specific-InformationResponse,
   hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                        HARQ-Process-Allocation-2ms-EDCH
                          OPTIONAL,
   iE-Extensions
                                                        OPTIONAL,
```

```
EDCH-FDD-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
EDCH-MACdFlow-Specific-InformationResponse ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InformationResponseItem
EDCH-MACdFlow-Specific-InformationResponseItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
   bindingID
                                                    BindingID
        OPTIONAL,
    transportLayerAddress
                                                    TransportLaverAddress
        OPTIONAL,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
       OPTIONAL,
                                ProtocolExtensionContainer { {EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs} } OPTIONAL,
    iE-Extensions
EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TransportBearerNotSetupIndicator
                                               CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator
                                                                                                                         PRESENCE optional
FDD only
EDCH-FDD-Information-To-Modify ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information
                                                    EDCH-MACdFlow-Specific-InfoToModifyList,
    hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                    OPTIONAL.
    e-DCH-Maximum-Bitrate
                                                    E-DCH-Maximum-Bitrate
    OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                    E-DCH-Processing-Overload-Level
    OPTIONAL,
    e-DCH-Reference-Power-Offset
                                                    E-DCH-Reference-Power-Offset
    OPTIONAL,
    mACeReset-Indicator
                                                    MACeReset-Indicator
    OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { EDCH-FDD-Information-To-Modify-ExtIEs } }
    OPTIONAL,
    . . .
EDCH-FDD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                    CRITICALITY ignore EXTENSION E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                                PRESENCE optional }
 ID id-SixteenQAM-UL-Operation-Indicator
                                                                                                                                PRESENCE optional }
                                                    CRITICALITY reject EXTENSION SixteenQAM-UL-Operation-Indicator
 ID id-E-DCH-MACdPDUSizeFormat
                                                    CRITICALITY reject EXTENSION E-DCH-MACdPDUSizeFormat
                                                                                                                                PRESENCE optional}
 ID id-E-DCH-DL-Control-Channel-Grant-Information CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Grant-Information
                                                                                                                                PRESENCE optional }
ID id-E-AGCH-Table-Choice
                                                    CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
                                                                                                                                PRESENCE
conditional |
-- The IE shall be present if the SixteenQAM UL Operation Indicator IE is set to "Activate"-
{ ID id-SixtyfourQAM-UL-Operation-Indicator
                                                    CRITICALITY reject EXTENSION SixtyfourQAM-UL-Operation-Indicator
                                                                                                                                PRESENCE optional } |
{ ID id-UL-MIMO-Information
                                                                                                                                PRESENCE optional },
                                                    CRITICALITY reject EXTENSION UL-MIMO-Information
```

```
E-DCH-FDD-Update-Information ::= SEQUENCE
    e-DCH-MACdFlow-Specific-UpdateInformation
                                                    E-DCH-MACdFlow-Specific-UpdateInformation
           OPTIONAL.
    hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                           OPTIONAL.
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
E-DCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-DCH-DL-Control-Channel-Change-Information
                                                                CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Change-Information
        PRESENCE optional },
E-DCH-MACdFlow-Specific-UpdateInformation ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-UpdateInformation-Item
E-DCH-MACdFlow-Specific-UpdateInformation-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                    HARQ-Process-Allocation-2ms-EDCH
                           OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs} }
    OPTIONAL,
E-DCH-MACdFlow-Specific-UpdateInformation-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Change-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Change-Information-Item
E-DCH-DL-Control-Channel-Change-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Channel-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-DL-Control-Channel-Change-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-DL-Control-Channel-Grant-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Grant-Information-Item
E-DCH-DL-Control-Channel-Grant-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-Grant-Type-Information ::= CHOICE {
    e-DCH-Non-Scheduled-Transmission-Grant
                                                E-DCH-Non-Scheduled-Transmission-Grant-Items,
    e-DCH-Scheduled-Transmission-Grant
                                                NULL,
E-DCH-HARQ-PO-FDD ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-LogicalChannelInformation ::= SEOUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelInformationItem
E-DCH-LogicalChannelInformationItem ::= SEQUENCE
                                    LogicalChannelID,
    logicalChannelId
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    schedulingInformation
                                    SchedulingInformation,
                                    MACes-Guaranteed-Bitrate
    mACes-GuaranteedBitRate
                                                                    OPTIONAL,
                                    EDCH-DDI-Value,
    eDCH-DDI-Value
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeList,
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelInformationItem-ExtIEs } }
                                                                                                                                        OPTIONAL,
    . . .
E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-MaximumMACdPDU-SizeExtended
                                                                                                                 PRESENCE optional |
                                            CRITICALITY reject
                                                                    EXTENSION
                                                                                MAC-PDU-SizeExtended
     ID id-MACes-Maximum-Bitrate-LCR
                                            CRITICALITY ignore
                                                                    EXTENSION
                                                                                MACes-Maximum-Bitrate-LCR
                                                                                                                         PRESENCE optional | --
1.28Mcps TDD only
    { ID id-UE-AggregateMaximumBitRate-Enforcement-Indicator
                                                                CRITICALITY ignore EXTENSION UE-AggregateMaximumBitRate-Enforcement-Indicator
    PRESENCE optional },
    . . .
E-DCH-Maximum-Bitrate ::= INTEGER (0..5742,...,5743..11498|11499..34507)
E-DCH-PowerOffset-for-SchedulingInfo ::= INTEGER (0.. maxNrOfEDCH-HARO-PO-QUANTSTEPs)
E-DCH-Processing-Overload-Level ::= INTEGER (0..10,...)
E-DCH-Reference-Power-Offset ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-MACdPDU-SizeList ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-MACdPDU-SizeListItem ::= SEQUENCE {
    mACdPDU-Size
                                    MACdPDU-Size,
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-MACdPDU-SizeListItem-ExtIEs } }
                                                                                                                         OPTIONAL,
E-DCH-MACdPDU-SizeListItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
```

```
E-DCH-MACdPDUSizeFormat ::= ENUMERATED {
    fixedMACdPDU-Size.
    flexibleMACdPDU-Size
E-DCH-LogicalChannelToModify ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToModifyItem
E-DCH-LogicalChannelToModifyItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator
                                                                    OPTIONAL,
    schedulingInformation
                                    SchedulingInformation
                                                                    OPTIONAL,
    mACes-GuaranteedBitRate
                                    MACes-Guaranteed-Bitrate
                                                                    OPTIONAL,
    eDCH-DDI-Value
                                    EDCH-DDI-Value
                                                                    OPTIONAL,
                                    E-DCH-MACdPDU-SizeToModifyList,
    mACd-PDU-Size-List
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelToModifyItem-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
E-DCH-LogicalChannelToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                MAC-PDU-SizeExtended
                                                                                                          PRESENCE optional |
     ID id-MACes-Maximum-Bitrate-LCR
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                MACes-Maximum-Bitrate-LCR
                                                                                                                         PRESENCE optional }, --
1.28Mcps TDD only
E-DCH-MACdPDU-SizeToModifyList ::= SEOUENCE (SIZE (0..maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-LogicalChannelToDelete ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToDeleteItem
E-DCH-LogicalChannelToDeleteItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelToDeleteItem-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
    . . .
E-DCH-LogicalChannelToDeleteItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
LogicalChannelID ::= INTEGER (1..15)
EDCH-MACdFlow-ID ::= INTEGER (0..maxNrOfEDCHMACdFlows-1)
EDCH-MACdFlow-ID-LCR ::= INTEGER (0..maxNrOfEDCHMACdFlowsLCR-1)
EDCH-MACdFlows-Information ::= SEQUENCE {
```

```
eDCH-MACdFlow-Specific-Information
                                                   EDCH-MACdFlow-Specific-InfoList,
    iE-Extensions
                                                   ProtocolExtensionContainer { { EDCH-MACdFlow-Information-ExtIEs } }
                                                                                                                                     OPTIONAL,
    . . .
E-DCH-MACdFlow-Multiplexing-List ::= BIT STRING ( SIZE(maxNrOfEDCHMACdFlows) )
EDCH-MACdFlow-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoItem
EDCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                       EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                       AllocationRetentionPriority
                                                                          OPTIONAL,
    tn10oS
                                       Tnl0os
                                                                          OPTIONAL,
    payloadCRC-PresenceIndicator
                                       PayloadCRC-PresenceIndicator,
    maxNr-Retransmissions-EDCH
                                       MaxNr-Retransmissions-EDCH,
    trafficClass
                                       TrafficClass,
    eDCH-HARQ-PO-FDD
                                       E-DCH-HARQ-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                       E-DCH-MACdFlow-Multiplexing-List
                                                                          OPTIONAL,
    eDCH-Grant-Type-Information
                                       E-DCH-Grant-Type-Information
                                                                          OPTIONAL,
    bundlingModeIndicator
                                       BundlingModeIndicator
                                                                          OPTIONAL,
    eDCHLogicalChannelInformation
                                       E-DCH-LogicalChannelInformation,
    iE-Extensions
                                       ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoItem-ExtIEs } }
                                                                                                                                     OPTIONAL,
    . . .
EDCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-TrCH-SrcStatisticsDescr CRITICALITY ignore EXTENSION TrCH-SrcStatisticsDescr PRESENCE optional },
EDCH-MACdFlow-Specific-InfoToModifyList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoToModifyItem
EDCH-MACdFlow-Specific-InfoToModifyItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                       EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                       AllocationRetentionPriority
                                                                          OPTIONAL,
    transportBearerRequestIndicator
                                       TransportBearerRequestIndicator,
    tn10oS
                                       Tnl0os
                                                                          OPTIONAL,
    maxNr-Retransmissions-EDCH
                                       MaxNr-Retransmissions-EDCH
                                                                          OPTIONAL,
                                       TrafficClass
    trafficClass
                                                                          OPTIONAL,
                                       E-DCH-HARO-PO-FDD
    eDCH-HARO-PO-FDD
                                                                          OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                       E-DCH-MACdFlow-Multiplexing-List
                                                                          OPTIONAL,
    eDCH-Grant-Type-Information
                                       E-DCH-Grant-Type-Information
                                                                          OPTIONAL,
    bundlingModeIndicator
                                       BundlingModeIndicator
                                                                          OPTIONAL,
    eDCH-LogicalChannelToAdd
                                       E-DCH-LogicalChannelInformation
                                                                          OPTIONAL,
    eDCH-LogicalChannelToModify
                                       E-DCH-LogicalChannelToModify
                                                                          OPTIONAL,
    eDCH-LogicalChannelToDelete
                                       E-DCH-LogicalChannelToDelete
                                                                          OPTIONAL,
                                       iE-Extensions
    OPTIONAL,
```

```
EDCH-MACdFlow-Specific-InfoToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-MACdFlows-To-Delete ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlows-To-Delete-Item
EDCH-MACdFlows-To-Delete-Item ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                        EDCH-MACdFlow-ID,
                                        ProtocolExtensionContainer { { EDCH-MACdFlows-To-Delete-Item-ExtIEs } }
   iE-Extensions
                                                                                                                                OPTIONAL,
EDCH-MACdFlows-To-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-RL-Indication ::= ENUMERATED {
    non-EDCH
E-DCH-Non-Scheduled-Transmission-Grant-Items ::= SEQUENCE {
    -- The following IE shall be ignored if id-Ext-Max-Bits-MACe-PDU-non-scheduled is present in E-DCH-Non-Scheduled-Transmission-Grant-Items-
ExtIEs
    maxBits-MACe-PDU-non-scheduled
                                                Max-Bits-MACe-PDU-non-scheduled,
    hARO-Process-Allocation-NonSched-2ms
                                                HARO-Process-Allocation-2ms-EDCH
                OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs} }
    iE-Extensions
    OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the maximum number of bits to be signalled exceeds maxNrOfBits-MACe-PDU-non-scheduled
    { ID id-Ext-Max-Bits-MACe-PDU-non-scheduled CRITICALITY reject
                                                                         EXTENSION Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                                                                                        PRESENCE
optional},
    . . .
E-DCH-TFCI-Table-Index ::= INTEGER (0..1,...,2..7)
E-DCH-Serving-cell-change-informationResponse ::= SEQUENCE {
    e-DCH-serving-cell-outcome-choice
                                           E-DCH-serving-cell-change-choice,
   iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-serving-cell-change-informationResponse-ExtIEs} } OPTIONAL,
E-DCH-serving-cell-change-informationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-choice ::= CHOICE {
    e-DCH-serving-cell-change-successful
                                                E-DCH-serving-cell-change-successful,
```

```
e-DCH-serving-cell-change-unsuccessful
                                                E-DCH-serving-cell-change-unsuccessful,
E-DCH-serving-cell-change-successful ::= SEQUENCE {
    e-DCH-RL-InformationList-Rsp
                                                     E-DCH-RL-InformationList-Rsp,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-serving-cell-change-successful-ExtIEs} } OPTIONAL,
E-DCH-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-RL-InformationList-Rsp ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF E-DCH-RL-InformationList-Rsp-Item
E-DCH-RL-InformationList-Rsp-Item ::= SEQUENCE {
    e-DCH-reconfigured-RL-Id
                                                RL-ID,
    e-DCH-FDD-DL-Control-Channel-Info
                                                 EDCH-FDD-DL-ControlChannelInformation,
                                                 ProtocolExtensionContainer { { E-DCH-RL-InformationList-Rsp-Item-ExtIEs} } 
    iE-Extensions
                                                                                                                                  OPTIONAL,
    . . .
E-DCH-RL-InformationList-Rsp-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
    iE-Extensions
                                    ProtocolExtensionContainer { { E-DCH-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
    . . .
E-DCH-serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TTI-Length ::= CHOICE {
                DTX-Cycle-2ms-Items,
    two-ms
    ten-ms
                DTX-Cycle-10ms-Items,
    . . .
E-DCH-TTI-Length-to-Modify ::= CHOICE {
                DTX-Cycle-2ms-to-Modify-Items,
                DTX-Cycle-10ms-to-Modify-Items,
    ten-ms
EDPCH-Information-FDD ::= SEQUENCE {
    maxSet-E-DPDCHs
                                                             Max-Set-E-DPDCHs,
    punctureLimit
                                                             PunctureLimit,
```

```
e-TFCS-Information
                                                              E-TFCS-Information,
   e-TTI
                                                          E-TTI.
   e-DPCCH-PO
                                                          E-DPCCH-PO.
   e-RGCH-2-IndexStepThreshold
                                                          E-RGCH-2-IndexStepThreshold,
    e-RGCH-3-IndexStepThreshold
                                                          E-RGCH-3-IndexStepThreshold,
   hARO-Info-for-E-DCH
                                                          HARO-Info-for-E-DCH,
   hSDSCH-Configured-Indicator
                                                          HSDSCH-Configured-Indicator,
                                       ProtocolExtensionContainer { { EDPCH-Information-FDD-ExtIEs } }
   iE-Extensions
                                                                                                                     OPTIONAL,
EDPCH-Information-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                  CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
                                                                                                                     PRESENCE optional },
    . . .
EDPCH-Information-RLReconfPrepare-FDD ::= SEQUENCE {
   maxSet-E-DPDCHs
                                              Max-Set-E-DPDCHs
                                                                      OPTIONAL,
   punctureLimit
                                              PunctureLimit
                                                                      OPTIONAL,
   e-TFCS-Information
                                              E-TFCS-Information
                                                                      OPTIONAL,
   e-TTT
                                              E-TTT
                                                                      OPTIONAL,
   e-DPCCH-PO
                                              E-DPCCH-PO
                                                                      OPTIONAL,
   e-RGCH-2-IndexStepThreshold
                                              E-RGCH-2-IndexStepThreshold
                                                                                  OPTIONAL,
    e-RGCH-3-IndexStepThreshold
                                              E-RGCH-3-IndexStepThreshold
                                                                                  OPTIONAL,
   hARO-Info-for-E-DCH
                                              HARQ-Info-for-E-DCH
                                                                                  OPTIONAL,
   hSDSCH-Configured-Indicator
                                              HSDSCH-Configured-Indicator
                                                                                  OPTIONAL,
                                       iE-Extensions
                                                                                                                                   OPTIONAL,
EDPCH-Information-RLReconfPrepare-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                  CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
                                                                                                                     PRESENCE optional },
   . . .
EDPCH-Information-RLReconfRequest-FDD ::= SEQUENCE {
   maxSet-E-DPDCHs
                                                          Max-Set-E-DPDCHs
               OPTIONAL,
                                                          PunctureLimit
   punctureLimit
               OPTIONAL,
                                                          E-TFCS-Information
    e-TFCS-Information
               OPTIONAL,
                                                          E-TTI
    e-TTI
               OPTIONAL,
    e-DPCCH-PO
                                                          E-DPCCH-PO
   OPTIONAL,
    e-RGCH-2-IndexStepThreshold
                                                          E-RGCH-2-IndexStepThreshold
   OPTIONAL,
    e-RGCH-3-IndexStepThreshold
                                                          E-RGCH-3-IndexStepThreshold
               OPTIONAL,
                                                          HARO-Info-for-E-DCH
   hARO-Info-for-E-DCH
               OPTIONAL,
   hSDSCH-Configured-Indicator
                                                          HSDSCH-Configured-Indicator
               OPTIONAL,
```

```
ProtocolExtensionContainer { { EDPCH-Information-RLReconfRequest-FDD-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
EDPCH-Information-RLReconfRequest-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-MinimumReducedE-DPDCH-GainFactor
                                                    CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
                                                                                                                         PRESENCE optional },
    . . .
E-DPCCH-PO ::= INTEGER (0..maxNrOfEDPCCH-PO-QUANTSTEPs)
E-DPDCH-PowerInterpolation ::= BOOLEAN
E-Primary-Secondary-Grant-Selector ::= ENUMERATED {
   primary,
    secondary
EHICH-SignatureSequence ::= INTEGER (0..maxNrofSigSegERGHICH-1)
E-RGCH-Release-Indicator ::= ENUMERATED {e-RGCHreleased}
ERGCH-SignatureSequence ::= INTEGER (0..maxNrofSigSeqERGHICH-1)
E-Serving-Grant-Value ::= INTEGER (0..38)
E-RGCH-2-IndexStepThreshold ::= INTEGER (0..37)
E-RGCH-3-IndexStepThreshold ::= INTEGER (0..37)
EDCH-Serving-RL ::= CHOICE {
    e-DCH-Serving-RL-in-this-DRNS
                                            EDCH-Serving-RL-in-this-DRNS,
    e-DCH-Serving-RL-not-in-this-DRNS
                                            NULL,
    . . .
EDCH-Serving-RL-in-this-DRNS ::= SEQUENCE {
    e-DCH-Serving-RL-Id
                                    RL-ID,
                                    ProtocolExtensionContainer { { EDCH-Serving-RL-in-this-DRNS-ExtIEs} }
    iE-Extensions
                                                                                                                     OPTIONAL,
EDCH-Serving-RL-in-this-DRNS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Enhanced-FACH-Information-ResponseFDD ::= SEQUENCE
    common-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
    dedicated-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
    priorityQueueInfo-EnhancedPCH
                                                PriorityOueue-InfoList-EnhancedFACH-PCH
                                                                                                                         OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                            HSDSCH-Initial-Capacity-Allocation,
```

```
hSDSCH-RNTI
                                                            HSDSCH-RNTI
                OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { Enhanced-FACH-Information-ResponseFDD-ExtIEs } }
                                                                                                                                        OPTIONAL.
Enhanced-FACH-Information-ResponseFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Enhanced-FACH-Information-ResponseLCR ::= SEQUENCE {
    common-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
    dedicated-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
    priorityQueueInfo-EnhancedPCH
                                                PriorityQueue-InfoList-EnhancedFACH-PCH
                                                                                                                         OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation
                                                            HSDSCH-Initial-Capacity-Allocation,
    hSDSCH-RNTI
                                                            HSDSCH-RNTI
                OPTIONAL,
                                        ProtocolExtensionContainer { { Enhanced-FACH-Information-ResponseLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
Enhanced-FACH-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Enhanced-FACH-Support-Indicator ::= NULL
EnhancedHSServingCC-Abort ::= ENUMERATED {abortEnhancedHSServingCC,...}
Enhanced-PCH-Capability ::= ENUMERATED {
    enhanced-pch-capable,
    enhanced-pch-not-capable
E-RNTI ::= INTEGER (0..65535)
E-ROCH-PowerOffset ::= INTEGER(0..255,...)
E-TFCI ::= INTEGER (0..127)
E-TFCI-BetaEC-Boost ::= INTEGER (0..127,...)
E-TFCI-Boost-Information ::= SEQUENCE {
    e-TFCI-BetaEC-Boost
                                                    E-TFCI-BetaEC-Boost,
    uL-Delta-T2TP
                                                    UL-Delta-T2TP
    -- This IE shall be present if the E-TFCI BetaEC Boost IE value is not set to 127.
   iE-Extensions
                                                    ProtocolExtensionContainer { { E-TFCI-Boost-Information-ExtIEs} }
                                                                                                                                 OPTIONAL,
E-TFCI-Boost-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
E-TFCS-Information ::= SEQUENCE {
   e-DCH-TFCI-Table-Index
                                                       E-DCH-TFCI-Table-Index.
   e-DCH-Min-Set-E-TFCI
                                                E-TFCI,
   reference-E-TFCI-Information
                                                Reference-E-TFCI-Information,
                                                ProtocolExtensionContainer { {E-TFCS-Information-ExtIEs} }
   iE-Extensions
                                                                                                               OPTIONAL,
E-TFCS-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE
optional }|
   { ID id-E-TFCI-Boost-Information
                                                   CRITICALITY reject EXTENSION E-TFCI-Boost-Information
   PRESENCE optional } |
   { ID id-E-DPDCH-PowerInterpolation
                                                   CRITICALITY reject EXTENSION E-DPDCH-PowerInterpolation
       PRESENCE optional },
E-DCH-Minimum-Set-E-TFCIValidityIndicator ::= ENUMERATED {
   e-DCH-Minimum-Set-E-TFCI-response-not-valid
E-TTI ::= ENUMERATED {
   tti10,
   tti2
-- 10ms TTI, 2ms TTI
E-AGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-RGCH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
E-HICH-PowerOffset ::= INTEGER (0..255,...)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
Enhanced-PrimaryCPICH-EcNo
                                 ::= INTEGER (0..49)
EventA ::= SEOUENCE {
   measurementTreshold
                         MeasurementThreshold,
   measurementHysteresisTime MeasurementHysteresisTime
                                                           OPTIONAL,
   iE-Extensions
                         ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
EventB ::= SEQUENCE {
   measurementTreshold
                           MeasurementThreshold,
   measurementHysteresisTime MeasurementHysteresisTime
                                                                OPTIONAL,
                           ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
   iE-Extensions
EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventC ::= SEQUENCE {
   measurementIncreaseDecreaseThreshold
                                          MeasurementIncreaseDecreaseThreshold,
   measurementChangeTime
                               MeasurementChangeTime,
                           ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
   iE-Extensions
EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventD ::= SEQUENCE {
   measurementIncreaseDecreaseThreshold
                                           MeasurementIncreaseDecreaseThreshold,
   measurementChangeTime
                                MeasurementChangeTime,
                            ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventE ::= SEQUENCE {
   measurementThreshold1
                                MeasurementThreshold,
    measurementThreshold2
                                MeasurementThreshold
                                                                OPTIONAL,
   measurementHysteresisTime
                               MeasurementHysteresisTime
                                                                OPTIONAL,
    reportPeriodicity
                                ReportPeriodicity
                                                            OPTIONAL,
                            ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
   iE-Extensions
EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventF ::= SEQUENCE {
   measurementThreshold1
                                MeasurementThreshold,
   measurementThreshold2
                                MeasurementThreshold
                                                                OPTIONAL,
   measurementHysteresisTime
                               MeasurementHysteresisTime
                                                                OPTIONAL,
```

```
ReportPeriodicity
    reportPeriodicity
                                                         OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventH ::= SEOUENCE {
   measurementThreshold1
                                MeasurementThreshold,
    measurementThreshold2
                                MeasurementThreshold
                                                                 OPTIONAL,
                                MeasurementHysteresisTime
                                                                 OPTIONAL,
    measurementHysteresisTime
    reportPeriodicity
                                ReportPeriodicity
                                                                 OPTIONAL,
    measurementFluctuationRange INTEGER (0..100)
                                                                 OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {EventH-ExtIEs} } OPTIONAL,
    . . .
EventH-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Event1F-Parameters
                        ::= SEOUENCE {
    measurementQuantity
                            MeasurementQuantity,
    threshold
                            INTEGER(-120..165),
    . . .
Event1I-Parameters
                        ::= SEOUENCE {
    threshold
                            INTEGER(-120..-25),
ExtendedGSMCellIndividualOffset ::= INTEGER (-50..-11|11..50)
E-DCH-Information ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD,
    e-DCH-TDD-Information
                                                 E-DCH-TDD-Information,
                                                 ProtocolExtensionContainer { { E-DCH-Information-ExtIEs} }
    iE-Extensions
                                                                                                                          OPTIONAL,
E-DCH-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information ::= SEQUENCE {
                                                 CodeRate,
    minCR
    maxCR
                                                 CodeRate,
    harqInfo
                                                 HARQ-Info-for-E-DCH,
    n-E-UCCH
                                                 N-E-UCCH,
```

```
ProtocolExtensionContainer { { E-PUCH-Information-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
E-PUCH-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-TFCS-Information-TDD ::= SEQUENCE {
    e-DCH-OPSK-RefBetaInfo
                                                E-DCH-OPSK-RefBetaInfo,
    e-DCH-sixteenQAM-RefBetaInfo
                                                E-DCH-sixteenQAM-RefBetaInfo,
                                                ProtocolExtensionContainer { { E-TFCS-Information-TDD-ExtIEs } }
   iE-Extensions
                                                                                                                          OPTIONAL,
E-TFCS-Information-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-OPSK-RefBetaInfo ::= SEQUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-sixteenQAM-RefBetaInfo ::= SEQUENCE (SIZE (1..maxNrOfRefBetas)) OF E-DCH-RefBeta-Item
E-DCH-RefBeta-Item ::= SEOUENCE {
    refCodeRate
                            CodeRate-short,
    refBeta
                            RefBeta
E-DCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-InfoTDDItem
E-DCH-MACdFlow-InfoTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                                    AllocationRetentionPriority,
    tnlQos
                                                    TnlQos
                                                                                 OPTIONAL,
    bindingID
                                                    BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                    TransportLayerAddress
                                                                                 OPTIONAL,
    payloadCRC-PresenceIndicator
                                                    PayloadCRC-PresenceIndicator,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    MaxNr-Retransmissions-EDCH,
    eDCH-HARO-PO-TDD
                                                    E-DCH-HARO-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                          OPTIONAL,
    eDCH-Grant-TypeTDD
                                                    E-DCH-Grant-TypeTDD,
    eDCHLogicalChannelInformation
                                                    E-DCH-LogicalChannelInformation,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-MACdFlow-InfoTDDItem-ExtIEs} }
    OPTIONAL,
    . . .
E-DCH-MACdFlow-InfoTDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-eDCH-MACdFlow-Retransmission-Timer-LCR CRITICALITY ignore
                                                                             EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
                                                                                                                                         PRESENCE
optional }|
    { ID id-TrafficClass
                                                                             EXTENSION TrafficClass
                                                    CRITICALITY ignore
    PRESENCE mandatory },
```

```
E-DCH-MACdFlow-Retransmission-Timer-LCR ::= ENUMERATED {
ms10, ms15, ms20, ms25, ms30, ms35, ms40, ms45, ms50, ms55, ms60, ms65, ms70, ms75, ms80, ms85, ms90,
ms95, ms100, ms110, ms120, ms140, ms160, ms200, ms240, ms280, ms320, ms400, ms480, ms560,...
E-DCH-HARO-PO-TDD ::= INTEGER (0..6)
E-DCH-Grant-TypeTDD ::= ENUMERATED {
    scheduled,
    non-scheduled
E-DCH-TimeslotResource ::= BIT STRING (SIZE (13))
E-DCH-PowerResource ::= INTEGER(1..32)
TddE-PUCH-Offset ::= INTEGER(0..255)
E-DCH-TDD-Information ::= SEQUENCE {
    e-DCH-TDD-Maximum-Bitrate
                                                    E-DCH-TDD-Maximum-Bitrate
                                                                                                                         OPTIONAL,
                                                    E-DCH-Processing-Overload-Level
    e-DCH-Processing-Overload-Level
                                                                                                                         OPTIONAL,
                                                    E-DCH-PowerOffset-for-SchedulingInfo
    e-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                         OPTIONAL,
                                                    ProtocolExtensionContainer { { E-DCH-TDD-Information-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-DCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate ::= INTEGER (0..9201,...)
E-DCH-Information-Reconfig ::= SEOUENCE {
    e-PUCH-Information
                                                E-PUCH-Information
                                                                                                                     OPTIONAL,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
                                                E-DCH-MACdFlows-Information-TDD
    e-DCH-MACdFlows-to-Add
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                EDCH-MACdFlows-To-Delete
                                                                                                                     OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                E-DCH-Non-Scheduled-Grant-Info
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information
                                                E-DCH-TDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Information-Reconfig-ExtIEs} }
    iE-Extensions
                                                                                                                         OPTIONAL,
E-DCH-Information-Reconfig-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information-to-Modify ::= SEQUENCE {
    e-DCH-TDD-Information-to-Modify-List
                                            E-DCH-TDD-Information-to-Modify-List
                                                                                     OPTIONAL,
   mACeReset-Indicator
                                            MACeReset-Indicator
                                                                                     OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-TDD-Information-to-Modify-ExtIEs } }
                                                                                                                                 OPTIONAL,
```

```
E-DCH-TDD-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-E-DCH-MACdPDUSizeFormat
                                            CRITICALITY reject EXTENSION E-DCH-MACdPDUSizeFormat
                                                                                                                      PRESENCE optional } |
     ID id-UE-TS0-CapabilityLCR
                                                                                                                      PRESENCE optional },
                                            CRITICALITY ignore EXTENSION UE-TSO-CapabilityLCR
    . . .
E-DCH-TDD-Information-to-Modify-List ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-ModifyTDDItem
E-DCH-MACdFlow-ModifyTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority
                                                                                      OPTIONAL,
    transportBearerRequestIndicator
                                                     TransportBearerRequestIndicator,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    tnl0os
                                                     Tnl0os
                                                                                 OPTIONAL,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH
                                                                                     OPTIONAL,
    eDCH-HARO-PO-TDD
                                                     E-DCH-HARO-PO-TDD
                                                                                                                  OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                                     E-DCH-MACdFlow-Multiplexing-List
                                                                                                                  OPTIONAL,
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD
                                                                                                                  OPTIONAL,
                                                     E-DCH-LogicalChannelInformation
    e-DCH-LogicalChannelToAdd
                                                                                                                     OPTIONAL,
    e-DCH-LogicalChannelToModify
                                                     E-DCH-LogicalChannelToModify
                                                                                                                      OPTIONAL,
    e-DCH-LogicalChannelToDelete
                                                     E-DCH-LogicalChannelToDelete
                                                                                                                      OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { {E-DCH-MACdFlow-ModifyTDDItem-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
E-DCH-MACdFlow-ModifyTDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-eDCH-MACdFlow-Retransmission-Timer-LCR
                                                                                 EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
                                                         CRITICALITY ignore
    PRESENCE optional } |
    { ID id-TrafficClass
                                                         CRITICALITY ignore
                                                                                 EXTENSION TrafficClass
            PRESENCE optional },
    . . .
E-DCH-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-ResponseTDD
                                                     E-AGCH-Specific-InformationRespListTDD OPTIONAL,
    e-HICH-Information-Response
                                                     E-HICH-InformationResp OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                     E-DCH-Non-Scheduled-Grant-Info OPTIONAL,
    e-RNTI
                                                     E-RNTI.
                                                     ProtocolExtensionContainer { { E-DCH-Information-Response-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
E-DCH-TDD-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-TDD-MACdFlow-Specific-InformationResp-Item
E-DCH-TDD-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    e-DCH-MacdFlow-Id
                                                     EDCH-MACdFlow-ID,
```

```
bindingID
                                                     BindingID
                                                                                  OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                  OPTIONAL.
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    . . .
E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-ItemTDD
E-AGCH-Specific-InformationResp-ItemTDD ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs } }
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-HICH-InformationResp::= SEQUENCE {
    timeslot
                                                     TimeSlot,
                                                     MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    e-HICH-TimeOffset
                                                     E-HICH-TimeOffset,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
E-HICH-InformationResp-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-TimeOffset ::= INTEGER (4..44)
E-DCH-Non-Scheduled-Grant-Info ::= SEQUENCE
    timeslotResource
                                                 E-DCH-TimeslotResource,
                                                 E-DCH-PowerResource,
    powerResource
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                 TDD-ChannelisationCode,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-ExtIEs } }
                                                                                                                                          OPTIONAL,
E-DCH-Non-Scheduled-Grant-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
E-DCH-768-Information ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information.
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD,
    e-DCH-TDD-Information768
                                                 E-DCH-TDD-Information768,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-ExtIEs} } 
                                                                                                                          OPTIONAL,
E-DCH-768-Information-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information768 ::= SEQUENCE {
                                                     E-DCH-TDD-Maximum-Bitrate768
    e-DCH-TDD-Maximum-Bitrate768
                                                                                                                          OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                     E-DCH-Processing-Overload-Level
                                                                                                                          OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                     E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                          OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-TDD-Information768-ExtIEs }
                                                                                                                                  OPTIONAL,
E-DCH-TDD-Information768-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate768 ::= INTEGER (0..17713,...)
E-DCH-768-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                 E-PUCH-Information
                                                                                                                      OPTIONAL,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                 E-DCH-MACdFlows-Information-TDD
                                                                                                                      OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                 EDCH-MACdFlows-To-Delete
                                                                                                                      OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info768
                                                 E-DCH-Non-Scheduled-Grant-Info768
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information768
                                                 E-DCH-TDD-Information768
                                                                                                                      OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                 E-DCH-TDD-Information-to-Modify
                                                                                                                      OPTIONAL,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-768-Information-Reconfig-ExtIEs} }
                                                                                                                                  OPTIONAL,
    . . .
E-DCH-768-Information-Reconfig-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-768-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL.
    e-AGCH-Specific-Information-Response768TDD
                                                     E-AGCH-Specific-InformationRespList768TDD OPTIONAL,
    e-HICH-Information-Response 768
                                                     E-HICH-InformationResp768 OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info768
                                                     E-DCH-Non-Scheduled-Grant-Info768 OPTIONAL,
    e-RNTI
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-768-Information-Response-ExtIEs } }
                                                                                                                                         OPTIONAL,
```

```
E-DCH-768-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespList768TDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-Item768TDD
E-AGCH-Specific-InformationResp-Item768TDD ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-InformationResp768::= SEQUENCE {
                                                     TimeSlot,
    timeslot
                                                     MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
    e-HICH-TimeOffset
                                                     E-HICH-TimeOffset,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp768-ExtIEs } }
                                                                                                                                  OPTIONAL,
    . . .
E-HICH-InformationResp768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-DCH-Non-Scheduled-Grant-Info768 ::= SEQUENCE {
                                                 E-DCH-TimeslotResource,
    timeslotResource
    powerResource
                                                 E-DCH-PowerResource,
   repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode768
                                                 TDD-ChannelisationCode768,
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info768-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Non-Scheduled-Grant-Info768-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-LCR-Information ::= SEQUENCE {
    e-PUCH-LCR-Information
                                                E-PUCH-LCR-Information,
    e-TFCS-Information-TDD
                                                 E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                 E-DCH-MACdFlows-Information-TDD,
    e-DCH-LCR-TDD-Information
                                                 E-DCH-LCR-TDD-Information,
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Information-LCR-ExtIEs} }
                                                                                                                          OPTIONAL,
```

```
E-DCH-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-PUCH-LCR-Information ::= SEOUENCE {
   minCR
                                                CodeRate,
   maxCR
                                                CodeRate,
   harqInfo
                                                HARQ-Info-for-E-DCH,
   pRxdesBase
                                                E-PUCH-PRXdesBase,
                                                TDD-TPC-UplinkStepSize-LCR,
    e-PUCH-TPC-Step-Size
   n-E-UCCH-LCR
                                                N-E-UCCH-LCR,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-PUCH-Information-LCR-ExtIEs } }
                                                                                                                        OPTIONAL,
E-PUCH-Information-LCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-E-PUCH-PowerControlGAP
                                        CRITICALITY ignore
                                                                EXTENSION ControlGAP
                                                                                            PRESENCE optional
    . . .
E-PUCH-PRXdesBase ::= INTEGER(-112..-50)
--SETP=1
E-DCH-LCR-TDD-Information ::= SEQUENCE {
    e-DCH-Physical-Layer-Category-LCR
                                                E-DCH-Physical-Layer-Category-LCR
                                                                                                                    OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                E-DCH-Processing-Overload-Level
                                                                                                                    OPTIONAL,
    e-DCH-PowerOffset-for-SchedulingInfo
                                                E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                    OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-LCR-TDD-Information-ExtIEs } }
   iE-Extensions
E-DCH-LCR-TDD-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                CRITICALITY reject EXTENSION Extended-E-DCH-LCRTDD-PhysicalLayerCategory
    PRESENCE optional }
    -- This IE shall be used if the E-DCH Physical Layer Category has a value larger than 5.
    { ID id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD CRITICALITY ignore EXTENSION MaxNr-Retransmissions-EDCH
                                                                                                                                       PRESENCE
optional }
    { ID id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD CRITICALITY ignore EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR PRESENCE
optional }|
    { ID id-E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                CRITICALITY ignore EXTENSION E-AGCH-UE-Inactivity-Monitor-Threshold
                                                                                                                                       PRESENCE
optional }
    { ID id-SNPL-Carrier-Group-Indicator
                                                                CRITICALITY reject EXTENSION SNPL-Carrier-Group-Indicator
                                                                                                                                       PRESENCE
optional }
    { ID id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory
                                                                CRITICALITY reject EXTENSION Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory
    PRESENCE optional }
    { ID id-UE-TS0-CapabilityLCR
                                                                CRITICALITY ignore EXTENSION UE-TS0-CapabilityLCR
                                                                                                                                       PRESENCE
optional },
E-DCH-Physical-Layer-Category-LCR ::= INTEGER (1..5)
```

```
Extended-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER (6,...)
Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER (1..8,...)
E-DCH-LCR-Information-Reconfig ::= SEQUENCE {
    e-PUCH-LCR-Information
                                                E-PUCH-LCR-Information
                                                                                                                     OPTIONAL.
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                E-DCH-MACdFlows-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                EDCH-MACdFlows-To-Delete
                                                                                                                     OPTIONAL,
                                                E-DCH-LCR-TDD-Information
    e-DCH-LCR-TDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Information-Reconfig-LCR-ExtIEs} } 
    iE-Extensions
                                                                                                                                 OPTIONAL,
E-DCH-Information-Reconfig-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-LCR-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-Response-LCR-TDD
                                                    E-AGCH-Specific-InformationRespList-LCR-TDD OPTIONAL,
    e-HICH-Specific-Information-Response-LCR
                                                     E-HICH-Specific-InformationResp-LCR OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info-LCR
                                                     E-DCH-Non-Scheduled-Grant-Info-LCR OPTIONAL,
    e-RNTI
                                                     E-RNTI OPTIONAL,
                                                     ProtocolExtensionContainer { { E-DCH-Information-Response-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-Information-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespList-LCR-TDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-Item-LCR-TDD
E-AGCH-Specific-InformationResp-Item-LCR-TDD ::= SEQUENCE {
    timeSlotLCR
                                                    TimeSlotLCR,
    midambleShiftLCR
                                                    MidambleShiftLCR,
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
                                                    ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-LCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-ItemTDD-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-Specific-InformationResp-LCR::= SEQUENCE {
    e-HICH-Scheduled-InformationResp-LCR
                                                     E-HICH-Scheduled-InformationRespList-LCR-TDD
                                                                                                                     OPTIONAL,
    e-HICH-non-Scheduled-InformationResp-LCR
                                                     E-HICH-InformationResp-LCR
                                                                                                                     OPTIONAL,
    e-HICH-TimeOffset-lcr
                                                     E-HICH-TimeOffset-LCR,
```

```
ProtocolExtensionContainer { { E-HICH-Specific-InformationResp-LCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-HICH-Specific-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-Scheduled-InformationRespList-LCR-TDD ::= SEQUENCE (SIZE (1..maxNrOfEHICHCodes)) OF E-HICH-Scheduled-InformationResp-Item-LCR-TDD
E-HICH-Scheduled-InformationResp-Item-LCR-TDD ::= SEQUENCE {
    e-HICH-EI
                                                E-HICH-EI,
    e-HICH-Scheduled-InformationResp-LCR
                                                E-HICH-InformationResp-LCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-HICH-Scheduled-InformationResp-LCR-ExtIEs } }
                                                                                                                                         OPTIONAL,
E-HICH-Scheduled-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-EI ::= INTEGER (0..3)
E-HICH-InformationResp-LCR::= SEQUENCE {
    timeSlotLCR
                                                     TimeSlotLCR,
    midambleShiftLCR
                                                     MidambleShiftLCR,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
    signatureSequenceGroupIndex
                                                     SignatureSequenceGroupIndex,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-LCR-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
E-HICH-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-TimeOffset-LCR ::= INTEGER (4..15)
E-DCH-SubframeNumber-LCR ::= ENUMERATED{s0,s1}
E-DCH-TimeslotResource-LCR ::= BIT STRING (SIZE (5))
E-DCH-Non-Scheduled-Grant-Info-LCR ::= SEQUENCE {
    timeslotResource-LCR
                                                E-DCH-TimeslotResource-LCR,
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    subframenumber
                                                E-DCH-SubframeNumber-LCR,
    tddE-PUCH-Offset
                                                TddE-PUCH-Offset,
```

```
tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-LCR-ExtIEs } }
                                                                                                                                        OPTIONAL,
E-DCH-Non-Scheduled-Grant-Info-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Enabling-Delay ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128}
-- Unit radio frame
Ext-Reference-E-TFCI-PO ::= INTEGER(30..31,...)
ExtendedPropagationDelay ::= INTEGER(255..1023)
Extended-RNC-ID
                              ::= INTEGER (4096..65535)
Extended-RNTI
                               ::= INTEGER (1048576..4194303,...)
-- From 2^20 to 2^22-1
Extended-Round-Trip-Time-Value ::= INTEGER(32767..103041)
-- See also mapping in TS 25.133 [23]
Extended-S-RNTI-Group
                                ::= SEQUENCE {
    extended-sRNTI
                                    Extended-RNTI,
    extended-sRNTI-BitMaskIndex
                                    ENUMERATED {
       b1,
       b2,
       b3,
        b4,
       b5,
       b6,
       b7,
       b8,
        b9,
       b10,
        b11,
        b12,
        b13,
        b14,
        b15,
       b16,
       b17,
       b18,
       b19,
       b20,
       b21,...
ExtendedAffectedUEInformationForMBMS
                                        ::= SEQUENCE (SIZE (0..maxNrOfUEs)) OF Extended-RNTI
```

. . .

```
Ext-Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(19983..22978,...,22979..34507)
E-DCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE {
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR,
    e-DCH-SPS-Indicator
                                            E-DCH-SPS-Indicator,
    e-DCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                             OPTIONAL.
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-SPS-Indicator ::= BIT STRING (SIZE (16))
E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE {
                                            Repetition-Period-List-LCR
    repetition-Period-List-LCR
                                                                             OPTIONAL,
    e-DCH-SPS-Indicator
                                            E-DCH-SPS-Indicator
                                                                             OPTIONAL,
    e-DCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
           OPTIONAL,
E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR ::= SEQUENCE {
    initial-E-DCH-SPS-resource
                                                Initial-E-DCH-SPS-resource
                                                                                     OPTIONAL,
    e-DCH-SPS-HICH-Information
                                                E-DCH-SPS-HICH-Information
                                                                                     OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
           OPTIONAL,
E-DCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
Initial-E-DCH-SPS-resource ::= SEQUENCE {
    timeslot-Resource-Related-Information
                                                E-DCH-TimeslotResource-LCR,
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriodIndex
                                                RepetitionPeriodIndex,
    repetitionLength
                                                RepetitionLength,
    subframeNumber
                                                ENUMERATED {v0, v1},
    tddE-PUCH-Offset
                                                TddE-PUCH-Offset,
                                                TDD-ChannelisationCode,
    tdd-ChannelisationCode
    n-E-UCCHLCR
                                                N-E-UCCH-LCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { Initial-E-DCH-SPS-resource-ExtIEs } }
                                                                                                                                         OPTIONAL,
```

```
Initial-E-DCH-SPS-resource-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-SPS-HICH-Information ::= SEQUENCE {
    e-HICH-Configuration
                                                E-HICH-Configuration,
    signatureSequenceGroupIndex
                                            SignatureSequenceGroupIndex,
                                                ProtocolExtensionContainer { { E-DCH-SPS-HICH-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-SPS-HICH-Information-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-Configuration ::= CHOICE {
    same-As-Scheduled-E-HICH
                                        Same-As-Scheduled-E-HICH,
    explicit
                                        E-HICH-InformationResp-ExplicitConfiguration-LCR,
Same-As-Scheduled-E-HICH ::= SEQUENCE {
    e-HICH-EI
                                                E-HICH-EI,
E-HICH-InformationResp-ExplicitConfiguration-LCR ::= SEQUENCE {
    timeSlotLCR
                                                    TimeSlotLCR,
    midambleShiftLCR
                                                    MidambleShiftLCR,
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-ExplicitConfiguration-LCR-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
E-HICH-InformationResp-ExplicitConfiguration-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- F
FACH-FlowControlInformation ::= SEQUENCE (SIZE (1..16)) OF FACH-FlowControlInformationItem
FACH-FlowControlInformationItem ::= SEQUENCE {
    fACH-SchedulingPriority
                                    SchedulingPriorityIndicator,
    mAC-c-sh-SDU-Lengths
                                    MAC-c-sh-SDU-LengthList,
    fACH-InitialWindowSize
                                    FACH-InitialWindowSize,
```

```
ProtocolExtensionContainer { {FACH-FlowControlInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FACH-FlowControlInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
FACH-InitialWindowSize
                                ::= INTEGER { unlimited(255) } (0..255)
-- Number of frames MAC-c-sh SDUs.
-- 255 = Unlimited number of FACH data frames
FACH-InformationList ::= SEOUENCE (SIZE(0.. maxNrOfFACHs)) OF FACH-InformationItem
FACH-InformationItem ::= SEQUENCE {
    transportFormatSet
                                    TransportFormatSet,
                                    ProtocolExtensionContainer { { FACH-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FACH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Fast-Reconfiguration-Mode ::= ENUMERATED {fast,...}
Fast-Reconfiguration-Permission ::= ENUMERATED {allowed,...}
FDD-DCHs-to-Modify
                                ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem
FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode
                                        UL-FP-Mode
                                                        OPTIONAL,
    toAWS
                                        ToAWS
                                                    OPTIONAL,
    toAWE
                                        ToAWE
                                                    OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                        FDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions
                                        ProtocolExtensionContainer { {FDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
FDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos
                                        CRITICALITY
                                                        ignore
                                                                     EXTENSION
                                                                               TnlOos PRESENCE optional
    . . .
FDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifySpecificItem
FDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
    dCH-ID
                                    DCH-ID,
    ul-TransportformatSet
                                    TransportFormatSet
                                                            OPTIONAL,
    dl-TransportformatSet
                                    TransportFormatSet
                                                            OPTIONAL,
    allocationRetentionPriority
                                    AllocationRetentionPriority
                                                                    OPTIONAL,
    frameHandlingPriority
                                    FrameHandlingPriority
                                                                OPTIONAL,
    not-Used-dRACControl
                                                NULL
                                                            OPTIONAL,
```

```
ProtocolExtensionContainer { {FDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Guaranteed-Rate-Information
                                                CRITICALITY ignore
                                                                        EXTENSION Guaranteed-Rate-Information
                                                                                                                                PRESENCE optional
      ID id-TrafficClass
                                                                        EXTENSION TrafficClass
                                                                                                                     PRESENCE optional } |
                                                CRITICALITY ignore
    { ID id-Unidirectional-DCH-Indicator
                                                CRITICALITY reject
                                                                        EXTENSION Unidirectional-DCH-Indicator
                                                                                                                     PRESENCE optional },
FDD-DL-ChannelisationCodeNumber
                                    ::= INTEGER (0..511)
-- According to the mapping in TS 25.213 [27]. The maximum value is equal to the DL spreading factor -1--
FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF FDD-DL-CodeInformationItem
FDD-DL-CodeInformationItem ::= SEOUENCE {
    dl-ScramblingCode
                                                                DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber
                                                                FDD-DL-ChannelisationCodeNumber,
    transmission-Gap-Pattern-Sequence-ScramblingCode-Information
                                                                        Transmission-Gap-Pattern-Sequence-ScramblingCode-Information OPTIONAL,
                                            ProtocolExtensionContainer { {FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FDD-DL-CodeInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-sizel,
    step-size1-5,
    step-size2,
                                        ::= INTEGER { lowest(0), highest(15) } (0..15)
SchedulingPriorityIndicator
F-DPCH-SlotFormat ::= INTEGER (0..9)
F-DPCH-SlotFormatSupportRequest ::= NULL
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS
FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
FPACH-Information ::= SEQUENCE {
```

```
timeSlotLCR
                                TimeSlotLCR,
    tDD-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    midambleShiftLCR
                                MidambleShiftLCR.
                                INTEGER (1..4),
FTPICH-Information ::= SEQUENCE {
    fTPICH-Offset
                                            FTPICH-Offset,
                                            ProtocolExtensionContainer { { FTPICH-Information-ExtIEs } }
    iE-Extensions
                                                                                                                 OPTIONAL,
FTPICH-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
FTPICH-SlotFormat ::= INTEGER (0..9,...)
FTPICH-Offset ::= INTEGER (0..149)
FTPICH-Information-Removal ::= ENUMERATED {
    remove,
    . . .
FTPICH-Information-To-Modify ::= SEQUENCE {
    fTPICH-Offset
                                            FTPICH-Offset
                                                                                 OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { FTPICH-Information-To-Modify-ExtIEs } }
                                                                                                                                 OPTIONAL,
FTPICH-Information-To-Modify-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
FTPICH-Information-Reconf
                                ::=SEQUENCE{
    setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information
                                                                    Setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information,
                                                                    ProtocolExtensionContainer { { FTPICH-Information-Reconf-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
FTPICH-Information-Reconf-ExtIEs
                                  RNSAP-PROTOCOL-EXTENSION ::= {
FTPICH-Reconfiguration-Information ::= SEQUENCE {
    fTPICH-SlotFormat
                                            FTPICH-SlotFormat
                                                                                OPTIONAL,
    fTPICH-ChannelisationCodenumber
                                            FDD-DL-ChannelisationCodeNumber
                                                                                OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { FTPICH-Reconfiguration-Information-ExtIEs } }
                                                                                                                                        OPTIONAL,
FTPICH-Reconfiguration-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
```

OPTIONAL,

```
FTPICH-Information-Response ::= SEQUENCE {
    fTPICH-SlotFormat
                                            FTPICH-SlotFormat,
    fTPICH-ChannelisationCodenumber
                                            FDD-DL-ChannelisationCodeNumber,
   iE-Extensions
                                            ProtocolExtensionContainer { { FTPICH-Information-Response-ExtIEs } }
FTPICH-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                ::= INTEGER { lowest(0), highest(15) } (0..15)
FrameHandlingPriority
                        ::= INTEGER (0..255)
FrameOffset
-- Frames
                            ::= ENUMERATED {
FrequencyBandIndicator
   bandI,
    bandII,
    bandIII,
    bandIV,
    bandV,
    bandVI,
    bandVII,
    bandVIII,
    bandIX,
    bandX,
    bandXI,
    bandXII,
    bandXIII,
    bandXIV,
    bandXV,
    bandXVI,
    bandXVII,
    bandXVIII,
    bandXIX,
    bandXX,
    bandXXI,
    bandXXII,
    reserved23,
    reserved24,
    bandXXV,
    bandXXVI
-- G
GapLength
                       ::= INTEGER (1..14)
-- Unit Slot
```

```
GapDuration
                        ::= INTEGER (1..144,...)
-- Unit Frame
GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
    SEQUENCE {
        cell-GAIgeographicalCoordinate
                                            GeographicalCoordinate,
                                ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
       iE-Extensions
GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-CellAdditionalShapes ::= CHOICE {
    pointWithUncertainty
                                                     GA-PointWithUnCertainty,
    pointWithUncertaintyEllipse
                                                     GA-PointWithUnCertaintyEllipse,
    pointWithAltitude
                                                     GA-PointWithAltitude,
    pointWithAltitudeAndUncertaintyEllipsoid
                                                     GA-PointWithAltitudeAndUncertaintyEllipsoid,
    ellipsoidArc
                                                     GA-EllipsoidArc,
    . . .
GA-AltitudeAndDirection ::= SEQUENCE {
    directionOfAltitude
                            ENUMERATED {height, depth},
    altitude
                            INTEGER (0..32767),
    . . .
GA-EllipsoidArc ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    innerRadius
                                INTEGER (0..65535),
    uncertaintyRadius
                                INTEGER (0..127),
    offsetAngle
                                INTEGER (0..179),
    includedAngle
                                INTEGER (0..179),
    confidence
                                INTEGER (0..127),
    iE-Extensions
                                ProtocolExtensionContainer { { GA-EllipsoidArc-ExtIEs} } OPTIONAL,
GA-EllipsoidArc-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-AddClockModels ::= CHOICE {
   navClockModel
                                    GANSS-NAVclockModel,
    cnavClockModel
                                    GANSS-CNAVclockModel,
    qlonassClockModel
                                    GANSS-GLONASSclockModel,
    sbasClockModel
                                    GANSS-SBASclockModel,
GANSS-AddIonoModelReq ::= BIT STRING (SIZE(2))
```

```
GANSS-AddNavigationModelsReq ::= BOOLEAN
GANSS-AddOrbitModels ::= CHOICE {
    navKeplerianSet
                                    GANSS-NavModel-NAVKeplerianSet,
    cnavKeplerianSet
                                    GANSS-NavModel-CNAVKeplerianSet,
    glonassECEF
                                    GANSS-NavModel-GLONASSecef,
    sbasECEF
                                    GANSS-NavModel-SBASecef,
GANSS-AddUTCModelsReq ::= BOOLEAN
GANSS-Additional-Ionospheric-Model ::= SEQUENCE {
    dataID
                                        BIT STRING (SIZE(2)),
    alpha-beta-parameters
                                        GPS-Ionospheric-Model,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-Additional-Ionospheric-Model-ExtIEs } }
                                                                                                                         OPTIONAL,
GANSS-Additional-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Additional-Navigation-Models ::= SEQUENCE {
    ganss-Transmission-Time
                                GANSS-Transmission-Time,
    non-broadcastIndication
                                ENUMERATED { true }
                                                                                                                                 OPTIONAL,
    ganssSatInfoNavList
                                Ganss-Sat-Info-AddNavList,
   ie-Extensions
                                ProtocolExtensionContainer { { GANSS-Additional-Navigation-Models-ExtIEs } } OPTIONAL,
GANSS-Additional-Navigation-Models-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Additional-Time-Models ::= SEQUENCE (SIZE (1..maxGANSS-1)) OF GANSS-Time-Model
GANSS-Additional-UTC-Models ::= CHOICE {
    utcModel1
                        GANSS-UTCmodelSet1,
    utcModel2
                        GANSS-UTCmodelSet2,
    utcModel3
                        GANSS-UTCmodelSet3,
GANSS-Almanac ::= SEQUENCE {
    ganss-wk-number
                                    INTEGER(0..255),
    gANSS-AlmanacModel
                                    CHOICE {
        gANSS-keplerianParameters
                                        SEQUENCE {
                                            INTEGER(0..255),
            t-oa
            iod-a
                                            INTEGER(0..3),
```

```
gANSS-SatelliteInformationKP
                                          GANSS-SatelliteInformationKP,
           ie-Extensions
                                          ProtocolExtensionContainer { { GANSS-KeplerianParametersAlm-ExtIEs } } OPTIONAL,
       },
       extension-GANSS-AlmanacModel
                                          Extension-GANSS-AlmanacModel
   ie-Extensions
                                  OPTIONAL,
GANSS-KeplerianParametersAlm-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Extension-GANSS-AlmanacModel
                             ::= ProtocolIE-Single-Container {{ Extension-GANSS-AlmanacModel-IE }}
Extension-GANSS-AlmanacModel-IE RNSAP-PROTOCOL-IES ::= {
    { ID id-GANSS-alm-keplerianNAVAlmanac
                                                  CRITICALITY
                                                                 ignore
                                                                             TYPE
                                                                                    GANSS-alm-keplerianNAVAlmanac
    PRESENCE mandatory |
    { ID id-GANSS-alm-keplerianReducedAlmanac
                                                  CRITICALITY
                                                                 ignore
                                                                             TYPE
                                                                                    GANSS-alm-keplerianReducedAlmanac
    PRESENCE
               mandatory}
    { ID id-GANSS-alm-keplerianMidiAlmanac
                                                                             TYPE
                                                  CRITICALITY
                                                                 ignore
                                                                                    GANSS-alm-keplerianMidiAlmanac
   PRESENCE
              mandatory}
    { ID id-GANSS-alm-keplerianGLONASS
                                                  CRITICALITY
                                                                 ignore
                                                                             TYPE
                                                                                    GANSS-alm-keplerianGLONASS
    PRESENCE
               mandatory}
    { ID id-GANSS-alm-ecefSBASAlmanac
                                                  CRITICALITY
                                                                             TYPE
                                                                                    GANSS-alm-ecefSBASAlmanac
                                                                 ignore
   PRESENCE
               mandatory}
GANSS-alm-keplerianNAVAlmanac ::= SEQUENCE {
                              INTEGER (0..255),
    sat-info-NAVkpList
                              GANSS-SAT-Info-Almanac-NAVkpList,
                              ProtocolExtensionContainer { GANSS-ALM-NAVKeplerianSet-ExtIEs } }
   ie-Extensions
                                                                                                               OPTIONAL,
GANSS-ALM-NAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-alm-keplerianReducedAlmanac ::= SEQUENCE {
                              INTEGER (0..255),
    sat-info-REDkpList
                              GANSS-SAT-Info-Almanac-REDkpList,
   ie-Extensions
                              ProtocolExtensionContainer { GANSS-ALM-ReducedKeplerianSet-ExtIEs } }
                                                                                                               OPTIONAL,
```

```
GANSS-ALM-ReducedKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-alm-keplerianMidiAlmanac ::= SEQUENCE {
                              INTEGER (0..255),
   sat-info-MIDIkpList
                              GANSS-SAT-Info-Almanac-MIDIkpList,
                              ie-Extensions
                                                                                                             OPTIONAL,
GANSS-ALM-MidiAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-alm-keplerianGLONASS ::= SEQUENCE {
   sat-info-GLOkpList
                              GANSS-SAT-Info-Almanac-GLOkpList,
                              ProtocolExtensionContainer { GANSS-ALM-GlonassAlmanacSet-ExtIEs } }
   ie-Extensions
                                                                                                             OPTIONAL,
    . . .
GANSS-ALM-GlonassAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
GANSS-alm-ecefSBASAlmanac ::= SEQUENCE {
   sat-info-SBASecefList
                              GANSS-SAT-Info-Almanac-SBASecefList,
   ie-Extensions
                              ProtocolExtensionContainer { GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs } }
                                                                                                             OPTIONAL,
    . . .
GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
GANSS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-completeAlmanacProvided CRITICALITY
                                                ignore EXTENSION CompleteAlmanacProvided PRESENCE
                                                                                                             optional },
```

```
GANSS-Auxiliary-Information ::= CHOICE {
   ganssID1
               GANSS-AuxInfoGANSS-ID1,
                                           -- This choice may only be present if GANSS ID indicates Modernized GPS
   ganssID3
               GANSS-AuxInfoGANSS-ID3,
                                           -- This choice may only be present if GANSS ID indicates GLONASS
GANSS-AuxInfoGANSS-ID1 ::= SEOUENCE (SIZE(1.. maxGANSSSat)) OF SEOUENCE {
                      INTEGER(0..63),
   signalsAvailable BIT STRING (SIZE(8)),
   ie-Extensions ProtocolExtensionContainer { GANSS-AuxInfoGANSS-ID1-element-ExtIEs } } OPTIONAL,
GANSS-AuxInfoGANSS-ID1-element-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoGANSS-ID3 ::= SEOUENCE (SIZE(1.. maxGANSSSat)) OF SEOUENCE (
   svID
           INTEGER(0..63),
   signalsAvailable BIT STRING (SIZE(8)),
   channelNumber
                     INTEGER (-7..13),
   ie-Extensions ProtocolExtensionContainer { GANSS-AuxInfoGANSS-ID3-element-ExtIEs } } OPTIONAL,
GANSS-AuxInfoGANSS-ID3-element-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-AuxInfoReq ::= BOOLEAN
GANSS-Clock-Model ::= SEQUENCE (SIZE (1..maxGANSSClockMod)) OF SEQUENCE {
   t-oc
                                       BIT STRING (SIZE (14)),
   a-i2
                                       BIT STRING (SIZE (12)),
   a-i1
                                       BIT STRING (SIZE (18)),
   a-i0
                                       BIT STRING (SIZE (28)),
   t-gd
                                       BIT STRING (SIZE (10))
                                                                                                                 OPTIONAL,
   model-id
                                       INTEGER(0..1,...)
                                                                                                                 OPTIONAL,
                                       ProtocolExtensionContainer { { GANSS-ClockModelItem-ExtIEs } }
   ie-Extensions
                                                                                                                 OPTIONAL,
GANSS-ClockModelItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-CNAVclockModel ::= SEQUENCE {
   cnavToc
                       BIT STRING (SIZE (11)),
   cnavTop
                       BIT STRING (SIZE (11)),
```

```
cnavURA0
                        BIT STRING (SIZE (5)),
    cnavURA1
                        BIT STRING (SIZE (3)),
    cnavURA2
                        BIT STRING (SIZE (3)),
    cnavAf2
                        BIT STRING (SIZE (10)),
    cnavAf1
                        BIT STRING (SIZE (20)),
    cnavAf0
                        BIT STRING (SIZE (26)),
    cnavTqd
                        BIT STRING (SIZE (13)),
    cnavISC11cp
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC11cd
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC11ca
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC12c
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC15i5
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    cnavISC15q5
                        BIT STRING (SIZE (13))
                                                                                         OPTIONAL,
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-CNAVclockModel-ExtIEs } } OPTIONAL,
GANSS-CNAVclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Common-Data ::= SEQUENCE {
    ganss-Ionospheric-Model
                                        GANSS-Ionospheric-Model
    OPTIONAL,
    ganss-Rx-Pos
                                        GANSS-RX-Pos
    OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-Common-Data-ExtIEs } }
                                                                                                                     OPTIONAL,
GANSS-Common-Data-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Additional-Ionospheric-Model
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Ionospheric-Model
                                                                                                                          PRESENCE optional } |
    { ID id-GANSS-Earth-Orientation-Parameters
                                                     CRITICALITY ignore EXTENSION GANSS-Earth-Orientation-Parameters
                                                                                                                          PRESENCE optional },
    . . .
GANSS-CommonDataInfoReq ::= SEQUENCE {
    ionospheric-Model
                                        BOOLEAN
    OPTIONAL,
                                        ProtocolExtensionContainer { GANSS-CommonDataInfoReq-ExtIEs } }
    ie-Extensions
                                                                                                                      OPTIONAL
GANSS-CommonDataInfoReq-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddIonoModelReq
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-AddIonoModelReq
    PRESENCE optional }
    {ID id-GANSS-EarthOrientParaReg
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-EarthOrientParaReq
                                                                                                                      PRESENCE optional } ,
GANSS-Data-Bit-Assistance ::= SEOUENCE {
```

```
INTEGER (0..59,...),
    ganssTod
    dataBitAssistancelist
                                        GANSS-DataBitAssistanceList,
                                        ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-Data-Bit-Assistance-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-DataBitAssistanceItem
GANSS-DataBitAssistanceItem ::= SEOUENCE {
                                    INTEGER(0..63),
    satId
    dataBitAssistanceSgnList
                                    GANSS-DataBitAssistanceSgnList,
    ie-Extensions
                                    ProtocolExtensionContainer { GANSS-DataBitAssistanceItem-ExtIEs } }
                                                                                                                     OPTIONAL,
    . . .
GANSS-DataBitAssistanceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceSgnList ::= SEQUENCE (SIZE (1..maxSgnType)) OF GANSS-DataBitAssistanceSgnItem
GANSS-DataBitAssistanceSgnItem ::= SEQUENCE {
    ganss-SignalId
                           GANSS-Signal-ID,
    ganssDataBits
                            BIT STRING (SIZE (1..1024)),
                            ProtocolExtensionContainer { { GANSS-DataBitAssistanceSqnItem-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL.
GANSS-DataBitAssistanceSgnItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqItem ::= SEQUENCE {
    ganssTod
                                            INTEGER (0..86399),
    ganss-Data-Bit-Assistance-RegList
                                            GANSS-Data-Bit-Assistance-RegList,
   iE-Extensions
                                            ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-RegItem-ExtIEs } } OPTIONAL,
    . . .
GANSS-Data-Bit-Assistance-Regitem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqList ::= SEQUENCE {
    dGANSS-Signal-ID
                                        BIT STRING (SIZE (8)),
    ganss-DataBitInterval
                                        INTEGER(0..15),
    ganss-SatelliteInfo
                                        SEQUENCE (SIZE (1..maxGANSSSat)) OF INTEGER(0..63)
        OPTIONAL,
```

```
ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-ReqList-ExtIEs } } OPTIONAL,
    iE-Extensions
GANSS-Data-Bit-Assistance-RegList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Delta-T ::= INTEGER(-128..127)
GANSS-DeltaUT1 ::= SEQUENCE {
                       BIT STRING (SIZE(11)),
   b2
                       BIT STRING (SIZE(10)),
   ie-Extensions
                    ProtocolExtensionContainer { { GANSS-DeltaUT1-ExtIEs } }
                                                                                    OPTIONAL,
GANSS-DeltaUT1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Earth-Orientation-Parameters ::= SEQUENCE {
                      BIT STRING (SIZE (16)),
    Xma
                       BIT STRING (SIZE (21)),
   pmXdot
                       BIT STRING (SIZE (15)),
   pmY
                       BIT STRING (SIZE (21)),
   pmYdot
                       BIT STRING (SIZE (15)),
    deltaUT1
                       BIT STRING (SIZE (31)),
    deltaUT1dot
                       BIT STRING (SIZE (19)),
                        ProtocolExtensionContainer { GANSS-Earth-Orientation-Parameters-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-Earth-Orientation-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-EarthOrientParaReq ::= BOOLEAN
GANSS-GenericDataInfoReqList ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-GenericDataInfoReqItem
GANSS-GenericDataInfoReqItem ::= SEQUENCE {
   ganss-Id
                                                GANSS-ID
        OPTIONAL,
    ganss-Navigation-Model-And-Time-Recovery
                                                BOOLEAN
                                                                                                                                       OPTIONAL,
    ganss-Time-Model-GNSS-GNSS
                                                BIT STRING (SIZE (9))
                                                                                                                                       OPTIONAL,
    ganss-UTC-Model
                                                BOOLEAN
                                                                                                                                       OPTIONAL,
    ganss-Almanac
                                                BOOLEAN
                                                                                                                                       OPTIONAL,
    ganss-Real-Time-Integrity
                                                BOOLEAN
                                                                                                                                       OPTIONAL,
    ganss-Data-Bit-Assistance-Req
                                                                                                                                       OPTIONAL,
                                                GANSS-Data-Bit-Assistance-RegItem
                                                ProtocolExtensionContainer { GANSS-GenericDataInfoReqItem-ExtIEs } }
    ie-Extensions
                                                                                                                                OPTIONAL,
```

```
GANSS-GenericDataInfoReqItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddNavigationModelsReg CRITICALITY ignore EXTENSION
                                                                      GANSS-AddNavigationModelsReg
                                                                                                                     PRESENCE
                                                                                                                                    optional}
    {ID id-GANSS-AddUTCModelsReg
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-AddUTCModelsReq
                                                                                                                     PRESENCE
                                                                                                                                    optional}
    {ID id-GANSS-AuxInfoReg
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-AuxInfoReq
                                                                                                                     PRESENCE
                                                                                                                                    optional}
    -- The following IE shall be present if 'GANSS-ID' in 'GANSS-GenericDataInfoRegItem' is '0' (SBAS)
    {ID id-GANSS-SBAS-ID
                                       CRITICALITY ignore EXTENSION
                                                                      GANSS-SBAS-ID
                                                                                              PRESENCE
                                                                                                                 optional } ,
GANSS-Generic-Data ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-Generic-DataItem
GANSS-Generic-DataItem ::= SEQUENCE {
   ganss-Id
                                               GANSS-ID
       OPTIONAL,
                                               DGANSSCorrections
   dganss-Correction
       OPTIONAL,
   ganss-Navigation-Model-And-Time-Recovery
                                              GANSS-Navigation-Model-And-Time-Recovery
       OPTIONAL,
    ganss-Time-Model
                                               GANSS-Time-Model
       OPTIONAL,
                                               GANSS-UTC-Model
    ganss-UTC-TIME
       OPTIONAL,
    ganss-Almanac
                                               GANSS-Almanac
       OPTIONAL,
    ganss-Real-Time-Integrity
                                               GANSS-Real-Time-Integrity
       OPTIONAL,
    ganss-Data-Bit-Assistance
                                               GANSS-Data-Bit-Assistance
       OPTIONAL,
   ie-Extensions
                                               OPTIONAL,
GANSS-Generic-DataItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GANSS-Additional-Time-Models
                                                  CRITICALITY ignore EXTENSION GANSS-Additional-Time-Models
                                                                                                                             PRESENCE optional }
     ID id-GANSS-Additional-Navigation-Models
                                                                                                                     PRESENCE optional }
                                                   CRITICALITY ignore EXTENSION GANSS-Additional-Navigation-Models
     ID id-GANSS-Additional-UTC-Models
                                                   CRITICALITY ignore EXTENSION GANSS-Additional-UTC-Models
                                                                                                                                    PRESENCE
optional }
                                                   CRITICALITY ignore EXTENSION GANSS-Auxiliary-Information
    { ID id-GANSS-Auxiliary-Information
                                                                                                                                    PRESENCE
optional }
    -- The following element shall be present if 'GANSS-ID' in 'GANSS-Generic-DataItem' is '0' ('SBAS')
    { ID id-GANSS-SBAS-ID
                                                   CRITICALITY ignore EXTENSION GANSS-SBAS-ID
                                                                                                                     PRESENCE optional },
    . . .
GANSS-GLONASSclockModel ::= SEQUENCE {
   gloTau
                           BIT STRING (SIZE (22)),
   qloGamma
                           BIT STRING (SIZE (11)),
   qloDeltaTau
                           BIT STRING (SIZE (5))
                                                                                              OPTIONAL,
    ie-Extensions
                           ProtocolExtensionContainer { GANSS-GLONASSclockModel-ExtIEs } }
                                                                                              OPTIONAL,
```

```
GANSS-GLONASSclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-ID ::= INTEGER(0..7,...)
GANSS-Information ::= SEQUENCE {
    gANSS-CommonDataInfoReq
                                        GANSS-CommonDataInfoReq
                                                                                                                          OPTIONAL,
    gANSS-GenericDataInfoRegList
                                        GANSS-GenericDataInfoReqList
                                                                                                                          OPTIONAL,
                                        ProtocolExtensionContainer { { GANSS-Information-ExtIEs } }
    ie-Extensions
                                                                                                                      OPTIONAL,
GANSS-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos
                                        BIT STRING (SIZE (12)),
    alpha-one-ionos
                                        BIT STRING (SIZE (12)),
    alpha-two-ionos
                                        BIT STRING (SIZE (12)),
    gANSS-IonosphereRegionalStormFlags GANSS-IonosphereRegionalStormFlags
                                                                                                                      OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-Ionospheric-Model-ExtIEs } }
                                                                                                                      OPTIONAL,
GANSS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-IonosphereRegionalStormFlags ::= SEQUENCE {
    storm-flag-one
                                        BOOLEAN.
    storm-flag-two
                                        BOOLEAN
    storm-flag-three
                                        BOOLEAN,
    storm-flag-four
                                        BOOLEAN,
    storm-flag-five
                                        BOOLEAN,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-IonosphereRegionalStormFlags-ExtIEs } } OPTIONAL,
    . . .
GANSS-IonosphereRegionalStormFlags-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NAVclockModel ::= SEQUENCE {
    navToc
                            BIT STRING (SIZE (16)),
    navaf2
                            BIT STRING (SIZE (8)),
```

```
navaf1
                           BIT STRING (SIZE (16)),
    navaf0
                           BIT STRING (SIZE (22)),
    navTqd
                           BIT STRING (SIZE (8)),
    ie-Extensions
                           ProtocolExtensionContainer { { GANSS-NAVclockModel-ExtIEs } } OPTIONAL,
GANSS-NAVclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Navigation-Model-And-Time-Recovery ::= SEQUENCE {
    ganss-Transmission-Time
                               GANSS-Transmission-Time,
                                                       OPTIONAL,
    non-broadcastIndication
                               ENUMERATED { true }
    ganssSatInfoNav
                               GANSS-Sat-Info-Nav,
                               ProtocolExtensionContainer { GANSS-Navigation-Model-And-Time-Recovery-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-Navigation-Model-And-Time-Recovery-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-NavModel-CNAVKeplerianSet ::= SEQUENCE {
    cnavTop
                         BIT STRING (SIZE (11)),
    cnavURAindex
                         BIT STRING (SIZE (5)),
    cnavDeltaA
                         BIT STRING (SIZE (26)),
                         BIT STRING (SIZE (25)),
    cnavAdot
    cnavDeltaNo
                           BIT STRING (SIZE (17)),
    cnavDeltaNoDot
                           BIT STRING (SIZE (23)),
    cnavMo
                           BIT STRING (SIZE (33)),
    cnavE
                           BIT STRING (SIZE (33)),
    cnav0meqa
                          BIT STRING (SIZE (33)),
    cnavOMEGA0
                           BIT STRING (SIZE (33)),
    cnavDeltaOmegaDot
                           BIT STRING (SIZE (17)),
                           BIT STRING (SIZE (33)),
    cnavIo
    cnavIoDot
                           BIT STRING (SIZE (15)),
    cnavCis
                           BIT STRING (SIZE (16)),
    cnavCic
                           BIT STRING (SIZE (16)),
    cnavCrs
                           BIT STRING (SIZE (24)),
    cnavCrc
                           BIT STRING (SIZE (24)),
    cnavCus
                           BIT STRING (SIZE (21)),
    cnavCuc
                           BIT STRING (SIZE (21)),
                           ProtocolExtensionContainer { { GANSS-NavModel-CNAVKeplerianSet-ExtIEs } }
    ie-Extensions
                                                                                                                   OPTIONAL,
GANSS-NavModel-CNAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-GLONASSecef ::= SEQUENCE {
```

```
gloEn
                                BIT STRING (SIZE (5)),
    qloP1
                              BIT STRING (SIZE(2)),
    aloP2
                              BIT STRING (SIZE (1)),
    qloM
                              BIT STRING (SIZE (2))
    OPTIONAL,
                           BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
    qloX
    qloXdot
    gloXdotdot
                           BIT STRING (SIZE (27)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
BIT STRING (SIZE (27)),
    aloY
    aloYdot
    gloYdotdot
    gloZ
                          BIT STRING (SIZE (24)),
BIT STRING (SIZE (5)),
    aloZdot
    aloZdotdot
    ie-Extensions
                             ProtocolExtensionContainer { { GANSS-NavModel-GLONASSecef-ExtIEs } }
                                                                                                                                       OPTIONAL,
GANSS-NavModel-GLONASSecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-NAVKeplerianSet ::= SEQUENCE {
    navURA
             BIT STRING (SIZE (4)),
    navFitFlag
                          BIT STRING (SIZE (1)),
                             BIT STRING (SIZE (16)),
    navToe
    nav0mega
                             BIT STRING (SIZE (32)),
    navDeltaN
                             BIT STRING (SIZE (16)),
    navM0
                             BIT STRING (SIZE (32)),
    navOmegaADot
                          BIT STRING (SIZE (24)),
BIT STRING (SIZE (32)),
    navE
                      BIT STRING (SIZE (14)), BIT STRING (SIZE (32)),
    navIDot
    navAPowerHalf
                             BIT STRING (SIZE (32)),
    navI0
                        BIT STRING (SIZE (32)),
BIT STRING (SIZE (32)),
BIT STRING (SIZE (16)),
    navOmegaA0
    navCrs
    navCis
    navCus
    navCrc
    navCic
    navCuc
                              BIT STRING (SIZE (16)),
                                ProtocolExtensionContainer { GANSS-NavModel-NAVKeplerianSet-ExtIEs } }
    ie-Extensions
                                                                                                                                       OPTIONAL,
GANSS-NavModel-NAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-SBASecef ::= SEQUENCE {
    -- the following IE shall be present if 'GANSS-SBASclockModel' in 'GANSS-AddClockModels' is not included in 'Ganss-Sat-Info-AddNavList'
    sbasTo
                                BIT STRING (SIZE (13))
                                                                                                                OPTIONAL,
```

```
sbasAccuracy
                           BIT STRING (SIZE (4)),
    sbasXq
                           BIT STRING (SIZE (30)),
    sbasYq
                           BIT STRING (SIZE (30)),
    sbasZq
                         BIT STRING (SIZE (25)),
    sbasXqDot
                         BIT STRING (SIZE (17)),
    sbasYqDot
                           BIT STRING (SIZE (17)),
    sbasZqDot
                           BIT STRING (SIZE (18)),
    sbasXqDotDot
                           BIT STRING (SIZE (10)),
    sbagYgDotDot
                           BIT STRING (SIZE (10)),
    sbasZgDotDot
                           BIT STRING (SIZE (10)),
                            ProtocolExtensionContainer { GANSS-NavModel-SBASecef-ExtIEs } }
    ie-Extensions
GANSS-NavModel-SBASecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Orbit-Model ::= CHOICE {
    gANSS-keplerianParameters
                                        SEQUENCE {
        toe-nav
                                            BIT STRING (SIZE (14)),
        ganss-omega-nav
                                            BIT STRING (SIZE (32)),
        delta-n-nav
                                            BIT STRING (SIZE (16)),
        m-zero-nav
                                            BIT STRING (SIZE (32)),
        omegadot-nav
                                            BIT STRING (SIZE (24)),
        ganss-e-nav
                                            BIT STRING (SIZE (32)),
        idot-nav
                                            BIT STRING (SIZE (14)),
        a-sgrt-nav
                                            BIT STRING (SIZE (32)),
       i-zero-nav
                                            BIT STRING (SIZE (32)),
                                            BIT STRING (SIZE (32)),
        omega-zero-nav
        c-rs-nav
                                            BIT STRING (SIZE (16)),
        c-is-nav
                                            BIT STRING (SIZE (16)),
        c-us-nav
                                            BIT STRING (SIZE (16)),
       c-rc-nav
                                            BIT STRING (SIZE (16)),
        c-ic-nav
                                            BIT STRING (SIZE (16)),
        c-uc-nav
                                            BIT STRING (SIZE (16)),
        ie-Extensions
                                            ProtocolExtensionContainer { GANSS-KeplerianParametersOrb-ExtIEs } }
                                                                                                                         OPTIONAL,
GANSS-KeplerianParametersOrb-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Real-Time-Integrity ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
    bad-ganss-satId
                                        INTEGER(0..63),
```

```
bad-ganss-signalId
                                      BIT STRING(SIZE(8))
                                                                                                                OPTIONAL,
   ie-Extensions
                                      OPTIONAL,
GANSS-RealTimeInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-RX-Pos ::= SEQUENCE {
   latitudeSign
                           ENUMERATED{north, south},
   degreesOfLatitude
                           INTEGER(0..2147483647),
   degreesOfLongitude
                           INTEGER (-2147483648..2147483647),
   directionOfAltitude
                           ENUMERATED{height,depth},
   altitude
                           INTEGER(0..32767),
                           ProtocolExtensionContainer { { GANSS-RX-Pos-ExtIEs } } OPTIONAL,
   ie-Extensions
GANSS-RX-Pos-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SatelliteInformationKP ::= SEOUENCE (SIZE (1..maxGANSSSatAlmanac)) OF SEOUENCE {
    satId
                                      INTEGER(0..63),
                                      BIT STRING (SIZE (11)),
   ganss-e-alm
   ganss-delta-I-alm
                                      BIT STRING (SIZE (11)),
   ganss-omegadot-alm
                                      BIT STRING (SIZE (11)),
    ganss-svhealth-alm
                                      BIT STRING (SIZE (4)),
   ganss-delta-a-sqrt-alm
                                      BIT STRING (SIZE (17)),
    ganss-omegazero-alm
                                      BIT STRING (SIZE (16)),
    ganss-m-zero-alm
                                      BIT STRING (SIZE (16)),
   ganss-omega-alm
                                      BIT STRING (SIZE (16)),
                                      BIT STRING (SIZE (14)),
    ganss-af-zero-alm
   ganss-af-one-alm
                                      BIT STRING (SIZE (11)),
   ie-Extensions
                                      ProtocolExtensionContainer { GANSS-SatelliteInformationKPItem-ExtIEs } } OPTIONAL,
GANSS-SatelliteInformationKPItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Ganss-Sat-Info-AddNavList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
   satId
                              INTEGER (0..63),
   svHealth
                              BIT STRING (SIZE (6)),
   iod
                              BIT STRING (SIZE (11)),
    ganssAddClockModels
                              GANSS-AddClockModels,
   ganssAddOrbitModels
                               GANSS-AddOrbitModels,
```

```
ProtocolExtensionContainer { { Ganss-Sat-Info-AddNavList-ExtIEs } } OPTIONAL,
    ie-Extensions
Ganss-Sat-Info-AddNavList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-GLOkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    qloAlmNA
                           BIT STRING (SIZE(11)),
    qloAlmnA
                         BIT STRING (SIZE(5)),
    qloAlmHA
                         BIT STRING (SIZE(5)),
    gloAlmLambdaA
                         BIT STRING (SIZE(21)),
    gloAlmTlambdaA
                           BIT STRING (SIZE(21)),
                   BIT STRING (SIZE(22)),
BIT STRING (SIZE(22)),
BIT STRING (SIZE(7)),
    gloAlmDeltaIA
    gloAkmDeltaTA
    gloAlmDeltaTdotA
    gloAlmEpsilonA
                           BIT STRING (SIZE(15)),
    qloAlmOmeqaA
                           BIT STRING (SIZE(16)),
    gloAlmTauA
                           BIT STRING (SIZE(10)),
    qloAlmCA
                           BIT STRING (SIZE(1)),
    qloAlmMA
                           BIT STRING (SIZE(2))
    OPTIONAL,
    ie-Extensions
                           ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-GLOkp-ExtIEs } }
                                                                                                                   OPTIONAL,
GANSS-SAT-Info-Almanac-GLOkp-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-MIDIkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    svID
               INTEGER(0..63),
   midiAlmE
                           BIT STRING (SIZE (11)),
   midiAlmDeltaI
                        BIT STRING (SIZE (11)),
                        BIT STRING (SIZE (11)),
   midiAlmOmegaDot
   midiAlmSqrtA
                           BIT STRING (SIZE (17)),
    midiAlmOmega0
                           BIT STRING (SIZE (16)),
    midiAlmOmega
                           BIT STRING (SIZE (16)),
   midiAlmMo
                           BIT STRING (SIZE (16)),
   midiAlmaf0
                           BIT STRING (SIZE (11)),
    midiAlmaf1
                           BIT STRING (SIZE (10)),
    midiAlmL1Health
                           BIT STRING (SIZE (1)),
    midiAlmL2Health
                           BIT STRING (SIZE (1)),
    midiAlmL5Health
                           BIT STRING (SIZE (1)),
    ie-Extensions
                           ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-MIDIkp-ExtIEs } }
                                                                                                                   OPTIONAL,
GANSS-SAT-Info-Almanac-MIDIkp-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-SAT-Info-Almanac-NAVkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
                              INTEGER(0..63),
    navAlmE
                            BIT STRING (SIZE (16)),
    navAlmDeltaI
                           BIT STRING (SIZE (16)),
    navAlmOMEGADOT
                           BIT STRING (SIZE (16)),
                       BIT STRING (SIZE (8)),
BIT STRING (SIZE (24)),
    navAlmSVHealth
    navAlmSgrtA
    navAlmOMEGAo
    navAlmOmega
    navAlmMo
                          BIT STRING (SIZE (11)),
    navAlmaf0
    navAlmaf1
                           BIT STRING (SIZE (11)),
    ie-Extensions
                        ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-NAVkp-ExtIEs } }
                                                                                                                                OPTIONAL,
GANSS-SAT-Info-Almanac-NAVkp-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-REDkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
                              INTEGER(0..63),
    svID
    redAlmDeltaA
                              BIT STRING (SIZE (8)),
                          BIT STRING (SIZE (8)),
BIT STRING (SIZE (7)),
    redAlmOmega0
    redAlmPhi0
                           BIT STRING (SIZE (7)),
                      BIT STRING (SIZE (1)),
BIT STRING (SIZE (1)),
BIT STRING (SIZE (1)),
    redAlmL1Health
    redAlmL2Health
    redAlmL5Health
                              ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-REDkp-ExtIEs } }
    ie-Extensions
                                                                                                                                OPTIONAL,
GANSS-SAT-Info-Almanac-REDkp-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-SBASecefList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    sbasAlmDataID
                              BIT STRING (SIZE(2)),
    svID
                              INTEGER(0..63),
    sbasAlmHealth
                           BIT STRING (SIZE(8)),
    sbasAlmXg
                            BIT STRING (SIZE(15)),
    sbasAlmYq
                            BIT STRING (SIZE(15)),
    sbasAlmZg
                           BIT STRING (SIZE(9)),
                         BIT STRING (SIZE(3)),
BIT STRING (SIZE(3)),
    sbasAlmXgdot
    sbasAlmYgDot
    sbasAlmZgDot
                              BIT STRING (SIZE(4)),
    sbasAlmTo
                              BIT STRING (SIZE(11)),
```

OPTIONAL,

```
ie-Extensions
                            ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-SBASecef-ExtIEs } }
    . . .
GANSS-SAT-Info-Almanac-SBASecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Sat-Info-Nav ::= SEOUENCE (SIZE(1..maxGANSSSat)) OF SEOUENCE {
    satId
                                INTEGER(0..63),
    svHealth
                                BIT STRING (SIZE(5)),
    iod
                                BIT STRING (SIZE(10)),
    ganssClockModel
                                GANSS-Clock-Model,
                                GANSS-Orbit-Model,
    ganssOrbitModel
    ie-Extensions
                                ProtocolExtensionContainer { GANSS-Sat-Info-Nav-ExtIEs } } OPTIONAL,
GANSS-Sat-Info-Nav-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SBAS-ID ::= ENUMERATED
                                waas,
                                egnos,
                                msas,
                                gagan,
GANSS-SBASclockModel ::= SEQUENCE {
    sbasTo
                           BIT STRING (SIZE (13)),
    sbasAgfo
                           BIT STRING (SIZE (12)),
    sbasAgf1
                           BIT STRING (SIZE (8)),
                           ProtocolExtensionContainer { { GANSS-SBASclockModel-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-SBASclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Signal-ID ::= INTEGER(0..7,...)
GANSS-StatusHealth ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
```

. . .

```
udre-scale-0dot3,
  udre-scale-0dot2,
  udre-scale-0dot1,
  no-data,
  invalid-data
GANSS-Time-ID ::= INTEGER(0..7,...)
GANSS-Time-Model ::= SEQUENCE {
    ganss-time-model-Ref-Time
                                        INTEGER(0..37799),
    ganss-t-a0
                                        INTEGER (-2147483648..2147483647),
    ganss-t-a1
                                        INTEGER(-8388608..8388607)
                                                                                                                     OPTIONAL,
    ganss-t-a2
                                        INTEGER(-64..63)
                                                                                                                     OPTIONAL,
    gnss-to-id
                                        ENUMERATED{gps,...,galileo,gzss,glonass},
    ganss-wk-number
                                        INTEGER(0..8191)
                                                                                                                     OPTIONAL,
                                        ProtocolExtensionContainer { GANSS-Time-Model-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-Time-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-ganss-Delta-T CRITICALITY
                                            ignore EXTENSION GANSS-Delta-T
                                                                                 PRESENCE
                                                                                             optional},
    . . .
GANSS-Transmission-Time ::= SEQUENCE {
                                INTEGER(0..8191)
    ganssDay
    OPTIONAL,
    ganssTod
                                INTEGER(0..86399),
                                ProtocolExtensionContainer { GANSS-Transmission-Time-ExtIEs } }
    ie-Extensions
    OPTIONAL,
GANSS-Transmission-Time-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTC-Model ::= SEQUENCE {
    a-one-utc
                                        BIT STRING (SIZE (24)),
    a-zero-utc
                                        BIT STRING (SIZE (32)),
    t-ot-utc
                                        BIT STRING (SIZE (8)),
    w-n-t-utc
                                        BIT STRING (SIZE (8)),
    delta-t-ls-utc
                                        BIT STRING (SIZE (8)),
    w-n-lsf-utc
                                        BIT STRING (SIZE (8)),
    dn-utc
                                        BIT STRING (SIZE (8)),
    delta-t-lsf-utc
                                        BIT STRING (SIZE (8)),
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-UTC-Model-ExtIEs } }
                                                                                                                     OPTIONAL,
```

```
GANSS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet1 ::= SEQUENCE {
   ut.cA0
                      BIT STRING (SIZE(16)),
   utcA1
                     BIT STRING (SIZE(13)),
   ut.cA2
                    BIT STRING (SIZE(7)),
   utcDeltaTls
                     BIT STRING (SIZE(8)),
   utcTot
                      BIT STRING (SIZE(16)),
   utcWNot
                      BIT STRING (SIZE(13)),
   utcWNlsf
                     BIT STRING (SIZE(8)),
                    BIT STRING (SIZE(4)),
   utcDN
   utcDeltaTlsf BIT STRING (SIZE(8)),
   ie-Extensions
                  ProtocolExtensionContainer { { GANSS-UTCmodelSet1-ExtIEs } }
                                                                                    OPTIONAL,
GANSS-UTCmodelSet1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet2 ::= SEQUENCE {
           BIT STRING (SIZE(11)),
   tauC
                      BIT STRING (SIZE(32)),
   deltaUT1
                                                                                    OPTIONAL,
                     GANSS-DeltaUT1
                      BIT STRING (SIZE(2))
                                                                                     OPTIONAL,
   ie-Extensions
                     ProtocolExtensionContainer { { GANSS-UTCmodelSet2-ExtIEs } }
                                                                                    OPTIONAL,
GANSS-UTCmodelSet2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
GANSS-UTCmodelSet3 ::= SEQUENCE {
                      BIT STRING (SIZE(24)),
   utcA1wnt
   utcA0wnt
                      BIT STRING (SIZE(32)),
   utcTot
                    BIT STRING (SIZE(8)),
   utcWNt
                      BIT STRING (SIZE(8)),
   utcDeltaTls
                      BIT STRING (SIZE(8)),
   utcWNlsf
                      BIT STRING (SIZE(8)),
                      BIT STRING (SIZE(8)),
   utcDN
                      BIT STRING (SIZE(8)),
   utcDeltaTlsf
   utcStandardID
                     BIT STRING (SIZE(3)),
   ie-Extensions
                      ProtocolExtensionContainer { GANSS-UTCmodelSet3-ExtIEs } }
                                                                                    OPTIONAL,
```

```
GANSS-UTCmodelSet3-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithAltitude ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
   iE-Extensions
                                ProtocolExtensionContainer { { GA-PointWithAltitude-ExtIEs} } OPTIONAL,
GA-PointWithAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithAltitudeAndUncertaintyEllipsoid ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
    uncertaintyEllipse
                                GA-UncertaintyEllipse,
    uncertaintyAltitude
                                INTEGER (0..127),
    confidence
                                INTEGER (0..127),
    iE-Extensions
                                ProtocolExtensionContainer { { GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs} } OPTIONAL,
GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithUnCertaintyEllipse ::= SEQUENCE {
    geographicalCoordinates
                                GeographicalCoordinate,
    uncertaintyEllipse
                                GA-UncertaintyEllipse,
    confidence
                                INTEGER (0..127),
    iE-Extensions
                                ProtocolExtensionContainer { GA-PointWithUnCertaintyEllipse-ExtIEs} } OPTIONAL,
GA-PointWithUnCertaintyEllipse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-UncertaintyEllipse ::= SEQUENCE {
    uncertaintySemi-major
                                INTEGER (0..127),
    uncertaintySemi-minor
                                INTEGER (0..127),
    orientationOfMajorAxis
                                INTEGER (0..179),
                                                   -- The values 90..179 shall not be used.
    . . .
GA-PointWithUnCertainty ::=SEQUENCE {
                                GeographicalCoordinate,
    geographicalCoordinates
    uncertaintyCode
                           INTEGER (0..127),
    iE-Extensions
                            ProtocolExtensionContainer { {GA-PointWithUnCertainty-ExtIEs} } OPTIONAL,
```

```
GA-PointWithUnCertainty-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-AccessPointPosition ::= SEQUENCE {
   geographicalCoordinate
                           GeographicalCoordinate,
   iE-Extensions ProtocolExtensionContainer { {GA-AccessPoint-ExtIEs} } OPTIONAL,
GA-AccessPoint-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GeographicalCoordinate ::= SEQUENCE {
   GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GERAN-Cell-Capability ::= BIT STRING (SIZE (16))
-- First bit: A/Gb mode --
-- Second bit: Iu mode --
-- Note: undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver. -
GERAN-Classmark ::=
                       OCTET STRING
   -- GERAN Classmark as defined in (38) --
GERAN-SI-Type ::= CHOICE {
   sI
                           GERAN-SystemInfo,
                           GERAN-SystemInfo,
   pSΙ
GERAN-SystemInfo ::= SEQUENCE (SIZE (1..maxNrOfGERANSI)) OF
      SEQUENCE {
          gERAN-SI-block
                           OCTET STRING (SIZE (1..23)),
          iE-Extensions
                           ProtocolExtensionContainer { GERAN-SystemInfo-ExtIEs } }
                                                                                   OPTIONAL,
GERAN-SystemInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GenericTrafficCategory ::= BIT STRING (SIZE (8))
```

```
GPS-Almanac ::= SEQUENCE {
   wn<sub>a</sub>-alm
                           BIT STRING (SIZE (8)),
   satellite-Almanac-Information
                                       SEQUENCE (SIZE (1..maxNoSat)) OF
       SEQUENCE {
           data-id
                              DATA-ID.
           sAT-ID
                               SAT-ID,
           qps-e-alm
                              BIT STRING (SIZE (16)),
           qps-toa-alm
                              BIT STRING (SIZE (8)),
           gps-delta-I-alm BIT STRING (SIZE (16)),
           omegadot-alm
                               BIT STRING (SIZE (16)),
           svhealth-alm
                              BIT STRING (SIZE (8)),
           gps-a-sqrt-alm BIT STRING (SIZE (24)),
                          BIT STRING (SIZE (24)),
           omegazero-alm
           m-zero-alm
                               BIT STRING (SIZE (24)),
           gps-omega-alm
                               BIT STRING (SIZE (24)),
           gps-af-zero-alm
                              BIT STRING (SIZE (11)),
           gps-af-one-alm
                               BIT STRING (SIZE (11)),
           iE-Extensions
                               ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtIEs} }
                                                                                                              OPTIONAL,
           . . .
    -- This GPS-Almanac-Information is for the 1st 16 satellites
                        BIT STRING (SIZE (364))
    sVGlobalHealth-alm
                                                      OPTIONAL,
                           ProtocolExtensionContainer { GPS-Almanac-ExtIEs} }
   iE-Extensions
                                                                                      OPTIONAL,
    . . .
Satellite-Almanac-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Satellite-Almanac-Information-ExtItem CRITICALITY ignore EXTENSION Satellite-Almanac-Information-ExtItem
                                                                                                                                    PRESENCE
   optional}|
    { ID id-completeAlmanacProvided
                                                  CRITICALITY ignore EXTENSION CompleteAlmanacProvided
   PRESENCE optional },
Satellite-Almanac-Information-ExtItem ::= SEQUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF
       SEQUENCE {
           data-id
                               DATA-ID,
           sAT-ID
                               SAT-ID.
                               BIT STRING (SIZE (16)),
           gps-e-alm
           gps-toa-alm
                               BIT STRING (SIZE (8)),
           gps-delta-I-alm BIT STRING (SIZE (16)),
           omegadot-alm
                              BIT STRING (SIZE (16)),
           svhealth-alm
                               BIT STRING (SIZE (8)),
           gps-a-sgrt-alm
                               BIT STRING (SIZE (24)),
           omegazero-alm
                               BIT STRING (SIZE (24)),
           m-zero-alm
                               BIT STRING (SIZE (24)),
           gps-omega-alm
                               BIT STRING (SIZE (24)),
           gps-af-zero-alm
                               BIT STRING (SIZE (11)),
           gps-af-one-alm
                               BIT STRING (SIZE (11)),
           iE-Extensions
                               ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtItemIEs} }
                                                                                                                     OPTIONAL,
```

```
-- Includes the GPS-Almanac-Information for the 17<sup>th</sup> through 32<sup>nd</sup> satellites.
Satellite-Almanac-Information-ExtItemIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPSInformation ::= SEQUENCE (SIZE (1..maxNoGPSTypes)) OF
    SEQUENCE {
       gPSInformationItem
                                ENUMERATED {
           gPS-NavigationModel-and-TimeRecovery,
           gPS-Ionospheric-Model,
           gPS-UTC-Model,
           gPS-Almanac,
           gPS-RealTime-Integrity,
                                ProtocolExtensionContainer { GPSInformation-ExtIEs} }
       iE-Extensions
                                                                                             OPTIONAL,
-- This IE shall be present if the Information Type IE indicates 'GPS Information'
GPSInformation-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-Ionospheric-Model ::= SEOUENCE {
    alpha-zero-ionos
                      BIT STRING (SIZE (8)),
    alpha-one-ionos
                           BIT STRING (SIZE (8)),
                     BIT STRING (SIZE (8)),
BIT STRING (SIZE (8)),
    alpha-two-ionos
    alpha-three-ionos BIT STRING (SIZE (8)),
    beta-zero-ionos
                           BIT STRING (SIZE (8)),
   beta-one-ionos
                           BIT STRING (SIZE (8)),
                       BIT STRING (SIZE (8)),
   beta-two-ionos
   beta-three-ionos
                         BIT STRING (SIZE (8)),
    iE-Extensions
                           ProtocolExtensionContainer { GPS-Ionospheric-Model-ExtIEs} }
                                                                                                 OPTIONAL,
GPS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF
    SEOUENCE {
       tx-tow-nav
                                        INTEGER (0..1048575),
       sAT-ID
                                        SAT-ID,
        tlm-message-nav
                                        BIT STRING (SIZE (14)),
       tlm-revd-c-nav
                                        BIT STRING (SIZE (2)),
       ho-word-nav
                                        BIT STRING (SIZE (22)),
       w-n-nav
                                        BIT STRING (SIZE (10)),
       ca-or-p-on-12-nav
                                        BIT STRING (SIZE (2)),
       user-range-accuracy-index-nav BIT STRING (SIZE (4)),
```

```
sv-health-nav
                                        BIT STRING (SIZE (6)),
       iodc-nav
                                       BIT STRING (SIZE (10)),
       12-p-dataflag-nav
                                       BIT STRING (SIZE (1)),
       sfl-reserved-nav
                                       BIT STRING (SIZE (87)),
                                       BIT STRING (SIZE (8)),
       t-qd-nav
       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-sgrt-nav
                                       BIT STRING (SIZE (32)),
        t-oe-nav
                                        BIT STRING (SIZE (16)),
        fit-interval-flag-nav
                                        BIT STRING (SIZE (1)),
        aodo-nav
                                        BIT STRING (SIZE (5)),
       c-ic-nav
                                        BIT STRING (SIZE (16)),
        omega-zero-nav
                                        BIT STRING (SIZE (32)),
        c-is-nav
                                        BIT STRING (SIZE (16)),
       i-zero-nav
                                        BIT STRING (SIZE (32)),
        c-rc-nav
                                        BIT STRING (SIZE (16)),
        gps-omega-nav
                                       BIT STRING (SIZE (32)),
        omegadot-nav
                                       BIT STRING (SIZE (24)),
        idot-nav
                                        BIT STRING (SIZE (14)),
        spare-zero-fill
                                       BIT STRING (SIZE (20)),
                                        ProtocolExtensionContainer { GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs} }
       iE-Extensions
                                                                                                                                       OPTIONAL,
GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-RealTime-Integrity ::= CHOICE {
    badSatellites
                                BadSatellites
    noBadSatellite
                                NULL
GPS-RX-POS ::= SEQUENCE {
    geographicalCoordinate
                                GeographicalCoordinate,
    altitudeAndDirection
                                GA-AltitudeAndDirection,
   iE-Extensions
                                ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
GPS-RX-POS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-Status-Health ::= ENUMERATED {
  udre-1-0,
```

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```
udre-0-75,
  udre-0-5.
  udre-0-3.
  udre-0-1,
  no-data,
  invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
   a-one-utc
                       BIT STRING (SIZE (24)),
   a-zero-utc
                         BIT STRING (SIZE (32)),
   t-ot-utc
                       BIT STRING (SIZE (8)),
   delta-t-ls-utc
                      BIT STRING (SIZE (8)),
   w-n-t-utc
                       BIT STRING (SIZE (8)),
                      BIT STRING (SIZE (8)),
   w-n-lsf-utc
   dn-utc
                       BIT STRING (SIZE (8)),
   OPTIONAL,
   . . .
GPS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Guaranteed-Rate-Information ::= SEQUENCE {
   quaranteed-UL-Rate
                             Guaranteed-Rate OPTIONAL,
   quaranteed-DL-Rate
                             Guaranteed-Rate OPTIONAL,
   iE-Extensions
                             ProtocolExtensionContainer { {Guaranteed-Rate-Information-ExtIEs} } OPTIONAL,
Guaranteed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Guaranteed-Rate
                   ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...
-- H
HARQ-Info-for-E-DCH ::= ENUMERATED {
   rv0,
   rvtable
HARQ-MemoryPartitioning ::= CHOICE {
   implicit
                  HARQ-MemoryPartitioning-Implicit,
   explicit
                  HARQ-MemoryPartitioning-Explicit,
    . . .
```

```
HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
   number-of-Processes INTEGER (1..8,...,12|14|16),
   iE-Extensions
                             ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }
                                                                                                                      OPTIONAL.
HARO-MemoryPartitioning-Implicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HARQ-MemoryPartitioning-Explicit
                                ::= SEQUENCE
   hARQ-MemoryPartitioningList
                                    HARQ-MemoryPartitioningList,
                                     ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }
   iE-Extensions
                                                                                                                             OPTIONAL,
   . . .
HARO-MemoryPartitioning-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-MemoryPartitioningItem
HARQ-MemoryPartitioningInfoExtForMIMO ::= SEQUENCE (SIZE (4|6|8)) OF HARQ-MemoryPartitioningItem
HARO-MemoryPartitioningItem ::= SEOUENCE {
   process-Memory-Size
                                     ENUMERATED {
                                     hms800, hms1600, hms2400, hms3200, hms4000,
                                     hms4800, hms5600, hms6400, hms7200, hms8000,
                                     hms8800, hms9600, hms10400, hms11200, hms12000,
                                     hms12800, hms13600, hms14400, hms15200, hms16000,
                                     hms17600, hms19200, hms20800, hms22400, hms24000,
                                     hms25600, hms27200, hms28800, hms30400, hms32000,
                                     hms36000, hms40000, hms44000, hms48000, hms52000,
                                     hms56000, hms60000, hms64000, hms68000, hms72000,
                                     hms76000, hms80000, hms88000, hms96000, hms104000,
                                     hms112000, hms120000, hms128000, hms136000, hms144000,
                                     hms152000, hms160000, hms176000, hms192000, hms208000,
                                     hms224000, hms240000, hms256000, hms272000, hms288000,
                                     hms304000,...},
                                     ProtocolExtensionContainer { { HARQ-MemoryPartitioningItem-ExtIEs } }
   iE-Extensions
                                                                                                                      OPTIONAL,
HARO-MemoryPartitioningItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HARQ-Preamble-Mode ::= ENUMERATED {
  mode0,
  mode1
HARO-Process-Allocation-2ms-EDCH ::= BIT STRING ( SIZE(maxNrOfEDCHHAROProcesses2msEDCH) )
```

```
HARO-Preamble-Mode-Activation-Indicator ::=ENUMERATED
    hargPreambleModeSupported
HCS-Prio ::= INTEGER (0..7)
-- 0 = lowest priority, ...7 = highest priority
HSDSCH-Configured-Indicator ::= ENUMERATED {
    configured-HS-DSCH,
   no-configured-HS-DSCH
HSDSCH-FDD-Information ::= SEOUENCE {
   hSDSCH-MACdFlows-Information
                                              HSDSCH-MACdFlows-Information.
    uE-Capabilities-Info
                                              UE-Capabilities-Info,
   mAChs-Reordering-Buffer-Size-for-RLC-UM
                                              MAChsReorderingBufferSize-for-RLC-UM,
    cgiFeedback-CycleK
                                              COI-Feedback-Cycle,
    cgiRepetitionFactor
                                              COI-RepetitionFactor
                                                                                        OPTIONAL,
    -- This IE shall be present if the COI Feedback Cycle k IE is set to a value greater than 0.
    ackNackRepetitionFactor
                                              AckNack-RepetitionFactor,
    cgiPowerOffset
                                              COI-Power-Offset,
    ackPowerOffset
                                              Ack-Power-Offset,
   nackPowerOffset
                                              Nack-Power-Offset,
   hsscch-PowerOffset
                                              HSSCCH-PowerOffset
                                                                                        OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }
                                                                                                                          OPTIONAL,
HSDSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HARQ-Preamble-Mode
                                                  CRITICALITY ignore EXTENSION HARO-Preamble-Mode
                                                                                                                          PRESENCE optional}
 ID id-MIMO-ActivationIndicator
                                                  CRITICALITY reject EXTENSION MIMO-ActivationIndicator
                                                                                                                          PRESENCE optional}
 ID id-HSDSCH-MACdPDUSizeFormat
                                                  CRITICALITY reject EXTENSION HSDSCH-MACdPDUSizeFormat
                                                                                                                          PRESENCE optional }
                                                  CRITICALITY ignore EXTENSION SixtyfourQAM-UsageAllowedIndicator
                                                                                                                          PRESENCE optional }
 ID id-SixtyfourQAM-UsageAllowedIndicator
 ID id-UE-with-enhanced-HS-SCCH-support-indicator CRITICALITY ignore EXTENSION NULL
                                                                                                                          PRESENCE optional}
 ID id-EnhancedHSServingCC-Abort
                                                  CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort
                                                                                                                          PRESENCE optional }
 ID id-UE-SupportIndicatorExtension
                                                  CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension
                                                                                                                          PRESENCE optional }
 ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
   PRESENCE optional } |
 ID id-Single-Stream-MIMO-ActivationIndicator
                                                  CRITICALITY reject EXTENSION Single-Stream-MIMO-ActivationIndicator
                                                                                                                          PRESENCE optional |
PRESENCE optional }
{ ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator
                                                                     CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-
ActivationIndicator
                       PRESENCE optional } |
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator
                                                                                    CRITICALITY ignore
                                                                                                            EXTENSION
{\tt PowerOffsetForSecondaryCPICHforMIMOwithfour transmitant ennasRequestIndicator}
                                                                            PRESENCE optional | |
{ ID id-Multiflow-Information
                                                  CRITICALITY reject EXTENSION Multiflow-Information
                                                                                                                          PRESENCE optional },
HSDSCH-FDD-Information-Response ::= SEQUENCE {
   hSDSCH-MACdFlow-Specific-InfoList-Response
                                                  HSDSCH-MACdFlow-Specific-InfoList-Response
                   OPTIONAL.
```

```
hSSCCH-Specific-InfoList-Response
                                                    HSSCCH-FDD-Specific-InfoList-Response
                    OPTIONAL.
    hSPDSCH-and-HSSCCH-ScramblingCode
                                                    DL-ScramblingCode
    OPTIONAL.
    measurement-Power-Offset
                                                    Measurement-Power-Offset
                    OPTIONAL,
    hARO-MemoryPartitioning
                                                    HARO-MemoryPartitioning
                    OPTIONAL,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }
                                                                                                                                        OPTIONAL,
HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-User-Plane-Congestion-Fields-Inclusion
                                                    CRITICALITY ignore EXTENSION User-Plane-Congestion-Fields-Inclusion
                                                                                                                                PRESENCE optional }
 ID id-HARO-Preamble-Mode-Activation-Indicator
                                                    CRITICALITY ignore EXTENSION HARO-Preamble-Mode-Activation-Indicator
                                                                                                                                PRESENCE optional }
 ID id-MIMO-InformationResponse
                                                    CRITICALITY ignore EXTENSION MIMO-InformationResponse
                                                                                                                                PRESENCE optional}
 ID id-SixtyfourOAM-DL-UsageIndicator
                                                    CRITICALITY ignore EXTENSION SixtyfourOAM-DL-UsageIndicator
                                                                                                                                PRESENCE optional}
                                                    CRITICALITY ignore EXTENSION HSDSCH-TBSizeTableIndicator
 ID id-HSDSCH-TBSizeTableIndicator
                                                                                                                                PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO
  ID id-power-offset-for-S-CPICH-for-MIMO
                                                                                                                                PRESENCE optional }
 ID id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order CRITICALITY ignore EXTENSION Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order PRESENCE
optional}
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas
                                                                PRESENCE optional |
                                                    CRITICALITY ignore EXTENSION Precoder-Weight-Set-Restriction
{ ID id-PrecoderWeightSetRestriction
                                                                                                                                PRESENCE optional }.
HS-DSCH-FDD-Secondary-Serving-Information ::= SEQUENCE {
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
                                                                                                                 OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                                    SixtyfourOAM-UsageAllowedIndicator
                                                                                                                 OPTIONAL,
                                                    ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-ActivationIndicator
                                                CRITICALITY reject EXTENSION MIMO-ActivationIndicator
                                                                                                                         PRESENCE optional }
{ID id-Single-Stream-MIMO-ActivationIndicator
                                                CRITICALITY reject EXTENSION Single-Stream-MIMO-ActivationIndicator
                                                                                                                         PRESENCE optional}
{ID id-DiversityMode
                                                CRITICALITY reject EXTENSION DiversityMode
                                                                                                                         PRESENCE optional}
{ID id-TransmitDiversityIndicator
                                                CRITICALITY reject EXTENSION TransmitDiversityIndicator
                                                                                                                         PRESENCE optional }
{ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
    PRESENCE optional }
{ID id-OrdinalNumberOfFrequency
                                                CRITICALITY reject EXTENSION OrdinalNumberOfFrequency
                                                                                                                         PRESENCE optional } |
{ID id-MIMO-withfourtransmitantennas-ActivationIndicator
                                                            CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ActivationIndicator
    PRESENCE optional } |
{ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-
ActivationIndicator
                        PRESENCE optional } |
{ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore EXTENSION
{\tt PowerOffsetForSecondaryCPICHforMIMOwithfour transmitant ennas Request Indicator}
                                                                                PRESENCE optional } |
{ID id-Multiflow-OrdinalNumberOfFrequency
                                                CRITICALITY reject EXTENSION Multiflow-OrdinalNumberOfFrequency
                                                                                                                         PRESENCE optional },
HS-DSCH-FDD-Secondary-Serving-Information-Response ::= SEQUENCE {
```

```
hSSCCH-Specific-InfoList-Response
                                         HSSCCH-FDD-Specific-InfoList-Response
                                                                                                  OPTIONAL,
   hSPDSCH-and-HSSCCH-ScramblingCode
                                         DL-ScramblingCode
                                                                                                  OPTIONAL,
   measurement-Power-Offset
                                         Measurement-Power-Offset
                                                                                                  OPTIONAL.
   sixtyfourOAM-DL-UsageIndicator
                                         SixtyfourOAM-DL-UsageIndicator
                                                                                                  OPTIONAL,
   hSDSCH-TBSizeTableIndicator
                                         HSDSCH-TBSizeTableIndicator
                                                                                                  OPTIONAL.
                                         ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs } }
   iE-Extensions
       OPTIONAL.
HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
                                                                                                          PRESENCE optional }
{ID id-MIMO-InformationResponse
                                         CRITICALITY ignore EXTENSION MIMO-InformationResponse
ID id-power-offset-for-S-CPICH-for-MIMO
                                         CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO
                                                                                                         PRESENCE optional }
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas
                                                            PRESENCE optional |
{ID id-PrecoderWeightSetRestriction
                                         CRITICALITY ignore EXTENSION Precoder-Weight-Set-Restriction
                                                                                                          PRESENCE optional },
   . . .
HS-DSCH-Secondary-Serving-Information-To-Modify ::= SEQUENCE {
   hsscch-PowerOffset
                                             HSSCCH-PowerOffset
                                                                                            OPTIONAL,
   hSSCCH-CodeChangeGrant
                                             HSSCCH-Code-Change-Grant
                                                                                            OPTIONAL,
   sixtyfourQAM-UsageAllowedIndicator
                                             SixtyfourQAM-UsageAllowedIndicator
                                                                                            OPTIONAL,
                                             ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Information-To-Modify-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
HS-DSCH-Secondary-Serving-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-Mode-Indicator
                                                 CRITICALITY reject EXTENSION MIMO-Mode-Indicator
                                                                                                                        PRESENCE optional}
{ID id-Single-Stream-MIMO-Mode-Indicator
                                                 CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator
                                                                                                                        PRESENCE optional}
{ID id-DiversityMode
                                                 CRITICALITY reject EXTENSION DiversityMode
                                                                                                                        PRESENCE optional}
{ID id-TransmitDiversityIndicator
                                                 CRITICALITY reject EXTENSION TransmitDiversityIndicator
                                                                                                                        PRESENCE optional
-- This IE shall be present if Diversity Mode IE is present and is not set to "none"
{ID id-NonCellSpecificTxDiversity
                                                 CRITICALITY reject EXTENSION NonCellSpecificTxDiversity
                                                                                                                        PRESENCE optional }
ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
   PRESENCE optional } |
{ID id-OrdinalNumberOfFrequency
                                                 CRITICALITY reject EXTENSION OrdinalNumberOfFrequency
                                                                                                                        PRESENCE optional }
{ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional}
ModeIndicator PRESENCE optional |
{ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore
{\tt PowerOffsetForSecondaryCPICHforMIMOwithfour transmitant ennasRequestIndicator}
                                                                               PRESENCE optional } |
    {ID id-Multiflow-OrdinalNumberOfFrequency
                                                 CRITICALITY reject EXTENSION Multiflow-OrdinalNumberOfFrequency
                                                                                                                        PRESENCE optional },
   . . .
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised ::= SEQUENCE {
   hsscch-PowerOffset
                                             HSSCCH-PowerOffset
                                                                                            OPTIONAL,
   sixtyfourQAM-UsageAllowedIndicator
                                             SixtyfourQAM-UsageAllowedIndicator
                                                                                           OPTIONAL,
                          ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtlEs } }
   iE-Extensions
       OPTIONAL,
```

```
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-Mode-Indicator
                                                  CRITICALITY reject EXTENSION MIMO-Mode-Indicator
                                                                                                                           PRESENCE optional}
{ID id-Single-Stream-MIMO-Mode-Indicator
                                                  CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator
                                                                                                                           PRESENCE optional}
{ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
    PRESENCE optional }
{ID id-OrdinalNumberOfFrequency
                                                  CRITICALITY reject EXTENSION OrdinalNumberOfFrequency
                                                                                                                           PRESENCE optional }
{ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional}
ModeIndicator PRESENCE optional }
{ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator CRITICALITY ignore
{\tt PowerOffsetForSecondaryCPICH} for {\tt MIMOwith} four transmit antennas {\tt RequestIndicator}
                                                                             PRESENCE optional }
    {ID id-Multiflow-OrdinalNumberOfFrequency
                                                  CRITICALITY reject EXTENSION Multiflow-OrdinalNumberOfFrequency
                                                                                                                           PRESENCE optional }.
    . . .
HS-DSCH-FDD-Secondary-Serving-Update-Information ::= SEQUENCE {
   hsSCCHCodeChangeIndicator
                                              HSSCCH-CodeChangeIndicator
                                                                                         OPTIONAL,
   hS-PDSCH-Code-Change-Indicator
                                              HS-PDSCH-Code-Change-Indicator
                                                                                         OPTIONAL,
    -- This IE shall never be included. If received it shall be ignored.
    iE-Extensions
                                              ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtIEs } }
   OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Update-Information-Extles RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-PrecoderWeightSetRestriction
                                                                                                                    PRESENCE optional },
                                              CRITICALITY ignore EXTENSION Precoder-Weight-Set-Restriction
    . . .
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response ::= SEQUENCE
   hS-DSCH-Secondary-Serving-cell-choice
                                              HS-DSCH-Secondary-Serving-cell-change-choice,
   iE-Extensions
                                              ProtocolExtensionContainer { { HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs }
       OPTIONAL,
    . . .
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-cell-change-choice ::= CHOICE
   hS-Secondary-Serving-cell-change-successful
                                                      HS-Secondary-Serving-cell-change-successful,
   hS-Secondary-Serving-cell-change-unsuccessful
                                                      HS-Secondary-Serving-cell-change-unsuccessful,
    . . .
HS-Secondary-Serving-cell-change-successful ::= SEQUENCE {
   hS-DSCH-FDD-Secondary-Serving-Information-Response
                                                          HS-DSCH-FDD-Secondary-Serving-Information-Response,
   hSDSCH-RNTI
                                                          HSDSCH-RNTI,
                                      ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-successful-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
```

```
HS-Secondary-Serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-Secondary-Serving-cell-change-unsuccessful ::= SEOUENCE {
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL,
HS-Secondary-Serving-cell-change-unsuccessful-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Remove ::= NULL
HSDSCH-Information-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                    HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                         OPTIONAL,
    priorityOueue-Info-to-Modify
                                                    PriorityOueue-InfoList-to-Modify
                                                                                                         OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                    MAChsReorderingBufferSize-for-RLC-UM
                                                                                                         OPTIONAL,
    cgiFeedback-CycleK
                                                    COI-Feedback-Cvcle
                                                                                                         OPTIONAL,
                                                                                                                         -- For FDD only
                                                    CQI-RepetitionFactor
    cqiRepetitionFactor
                                                                                                                         -- For FDD only
                                                                                                         OPTIONAL,
                                                    AckNack-RepetitionFactor
    ackNackRepetitionFactor
                                                                                                         OPTIONAL,
                                                                                                                         -- For FDD only
    cgiPowerOffset
                                                    CQI-Power-Offset
                                                                                                         OPTIONAL,
                                                                                                                         -- For FDD only
    ackPowerOffset
                                                    Ack-Power-Offset
                                                                                                         OPTIONAL,
                                                                                                                         -- For FDD only
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                                         -- For FDD only
                                                                                                         OPTIONAL,
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
                                                                                                                         -- For FDD only
                                                                                                         OPTIONAL,
    hSSCCH-CodeChangeGrant
                                                    HSSCCH-Code-Change-Grant
                                                                                                         OPTIONAL,
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                         OPTIONAL,
                                                                                                                         -- For TDD only
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } }
    iE-Extensions
    OPTIONAL,
HSDSCH-Information-to-Modify-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HARO-Preamble-Mode
                                            CRITICALITY ignore EXTENSION HARO-Preamble-Mode
                                                                                                                                PRESENCE optional }
 ID id-HS-PDSCH-Code-Change-Grant
                                            CRITICALITY ignore EXTENSION HS-PDSCH-Code-Change-Grant
                                                                                                                                PRESENCE optional }
     -- Applicable to FDD only
 ID id-MIMO-Mode-Indicator
                                                                                                                                PRESENCE optional }
                                            CRITICALITY reject EXTENSION MIMO-Mode-Indicator
  ID id-HSDSCH-MACdPDUSizeFormat
                                            CRITICALITY reject EXTENSION HSDSCH-MACdPDUSizeFormat
                                                                                                                                PRESENCE optional}
                                                                                                                                PRESENCE optional}
 ID id-SixtyfourQAM-UsageAllowedIndicator CRITICALITY ignore EXTENSION SixtyfourQAM-UsageAllowedIndicator
 ID id-UE-Capabilities-Info
                                            CRITICALITY ignore EXTENSION UE-Capabilities-Info
                                                                                                                                PRESENCE optional}
 ID id-EnhancedHSServingCC-Abort
                                            CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort
                                                                                                                                PRESENCE optional }
 ID id-UE-SupportIndicatorExtension
                                            CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension
                                                                                                                                PRESENCE optional }
 ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
        PRESENCE optional | |
  ID id-Single-Stream-MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator
                                                                                                                                PRESENCE optional }
 ID id-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator PRESENCE optional
 ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-
ModeIndicator PRESENCE optional }
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator
                                                                                        CRITICALITY ignore
                                                                                                                 EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator
                                                                                PRESENCE optional |
{ ID id-Multiflow-Reconfiguration
                                            CRITICALITY reject EXTENSION Multiflow-Reconfiguration
                                                                                                                                PRESENCE optional },
    . . .
```

```
HSDSCH-Information-to-Modify-Unsynchronised ::= SEOUENCE
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                    HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                                        OPTIONAL.
    priorityOueueInfotoModifyUnsynchronised
                                                    PriorityOueue-InfoList-to-Modify-Unsynchronised
                                                                                                                         OPTIONAL.
    cqiPowerOffset
                                                    COI-Power-Offset
                                                                                    OPTIONAL,
                                                                                                -- For FDD only
    ackPowerOffset.
                                                    Ack-Power-Offset
                                                                                    OPTIONAL.
                                                                                                -- For FDD only
                                                    Nack-Power-Offset
    nackPowerOffset.
                                                                                    OPTIONAL,
                                                                                                -- For FDD only
    hsscch-PowerOffset
                                                    HSSCCH-PowerOffset
                                                                                    OPTIONAL,
                                                                                                -- Only for FDD
                                                                                                -- For TDD only
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                    OPTIONAL,
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs } }
    iE-Extensions
        OPTIONAL,
HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HARO-Preamble-Mode
                                            CRITICALITY ignore EXTENSION HARO-Preamble-Mode
                                                                                                                                PRESENCE optional}
 ID id-MIMO-Mode-Indicator
                                            CRITICALITY reject EXTENSION MIMO-Mode-Indicator
                                                                                                                                PRESENCE optional}
  ID id-SixtyfourOAM-UsageAllowedIndicator CRITICALITY ignore EXTENSION SixtyfourOAM-UsageAllowedIndicator
                                                                                                                                PRESENCE optional}
 ID id-EnhancedHSServingCC-Abort
                                            CRITICALITY reject EXTENSION EnhancedHSServingCC-Abort
                                                                                                                                PRESENCE optional}
 ID id-UE-SupportIndicatorExtension
                                            CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension
                                                                                                                                PRESENCE optional }
 ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
    PRESENCE optional } |
  ID id-Single-Stream-MIMO-Mode-Indicator CRITICALITY reject EXTENSION Single-Stream-MIMO-Mode-Indicator
                                                                                                                                PRESENCE optional | |
                                                        CRITICALITY reject EXTENSION MIMO-withfourtransmitantennas-ModeIndicator
{ ID id-MIMO-withfourtransmitantennas-ModeIndicator
    PRESENCE optional }
{ ID id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator CRITICALITY reject EXTENSION DualStream-MIMO-withfourtransmitantennas-
ModeIndicator PRESENCE optional }
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator
                                                                                        CRITICALITY ignore
                                                                                                                 EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator
                                                                                    PRESENCE optional } |
{ ID id-Multiflow-Reconfiguration
                                            CRITICALITY reject EXTENSION Multiflow-Reconfiguration
                                                                                                                                PRESENCE optional },
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem
HSDSCH-MACdPDUSizeFormat ::= ENUMERATED {
    indexedMACdPDU-Size,
    flexibleMACdPDU-Size
HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    trafficClass
                                        TrafficClass.
    bindingID
                                        BindingID
                                                                                OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                                OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }
                                                                                                                                        OPTIONAL.
HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
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```
{ID id-TnlQos
                            CRITICALITY ignore
                                                    EXTENSION TnlQos PRESENCE optional } |
    {ID id-TrCH-SrcStatisticsDescr CRITICALITY ignore EXTENSION TrCH-SrcStatisticsDescr PRESENCE optional },
    . . .
HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-Response
HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEOUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    bindingID
                                        BindingID
                                                                                 OPTIONAL,
                                        TransportLayerAddress
                                                                                OPTIONAL,
    transportLayerAddress
   hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation
                                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                                 OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    trafficClass
                                        TrafficClass
                                                                                 OPTIONAL,
    bindingID
                                        BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                        TransportLayerAddress
                                                                                 OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }
    OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlQos
                            CRITICALITY ignore
                                                    EXTENSION TnlQos PRESENCE optional },
    . . .
HSDSCH-MACdFlows-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info
                                                    HSDSCH-MACdFlow-Specific-InfoList,
   priorityQueue-Info
                                                    PriorityQueue-InfoList,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }
    OPTIONAL,
HSDSCH-MACdFlows-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item
```

```
HSDSCH-MACdFlows-to-Delete-Item ::= SEQUENCE
    hsDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID.
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs} }
                                                                                                                         OPTIONAL.
    . . .
HSDSCH-MACdFlows-to-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Initial-Capacity-Allocation: = SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator
                                    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                    MACdPDU-Size,
   hSDSCH-InitialWindowSize
                                    HSDSCH-InitialWindowSize,
    iE-Extensions
                                    ProtocolExtensionContainer { {HSDSCH-Initial-Capacity-AllocationItem-ExtIEs} } OPTIONAL,
    . . .
HSDSCH-Initial-Capacity-AllocationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY ignore
                                                                EXTENSION MAC-PDU-SizeExtended PRESENCE optional },
    . . .
HSDSCH-InitialWindowSize
                                    ::= INTEGER (1..255)
-- Number of MAC-d PDUs.
HSDSCH-PreconfigurationInfo ::= SEQUENCE {
    setsOfHS-SCCH-Codes
                           SetsOfHS-SCCH-Codes.
   hARQ-MemoryPartitioning
                                HARQ-MemoryPartitioning,
    eDCH-FDD-DL-ControlChannelInformation
                                                EDCH-FDD-DL-ControlChannelInformation
                                                                                             OPTIONAL,
   hARO-Preamble-Mode-Activation-Indicator
                                                HARO-Preamble-Mode-Activation-Indicator
                                                                                            OPTIONAL,
    mIMO-N-M-Ratio
                           MIMO-InformationResponse
                                                            OPTIONAL,
    continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                        Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
    OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-PreconfigurationInfo-ExtIEs} }
                                                                                                                         OPTIONAL,
    . . .
HSDSCH-PreconfigurationInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-power-offset-for-S-CPICH-for-MIMO
                                                            CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO
    PRESENCE optional } |
{ ID id-Additional-EDCH-Preconfiguration-Information
                                                            CRITICALITY ignore EXTENSION Additional-EDCH-Preconfiguration-Information
    PRESENCE optional }
{ ID id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order
                                                            CRITICALITY ignore EXTENSION Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order
    PRESENCE optional }
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas
                                                                PRESENCE optional |
{ ID id-FTPICH-Information-Response
                                                            CRITICALITY ignore EXTENSION FTPICH-Information-Response PRESENCE optional },
    . . .
```

```
Additional-EDCH-Preconfiguration-Information ::= SEQUENCE (SIZE (1..maxNrOfEDCH-1)) OF Additional-EDCH-Preconfiguration-Information-ItemIEs
Additional-EDCH-Preconfiguration-Information-ItemIEs
                                                        ::= SEQUENCE {
    eDCH-FDD-DL-ControlChannelInformation
                                                EDCH-FDD-DL-ControlChannelInformation,
    iE-Extensions
                                    ProtocolExtensionContainer { { Additional-EDCH-Preconfiguration-Information-ItemIEs-ExtIEs} } OPTIONAL,
Additional-EDCH-Preconfiguration-Information-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-PreconfigurationSetup ::= SEOUENCE {
    mAChsResetScheme
                           MAChsResetScheme,
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    secondaryServingCells
                                SecondaryServingCells
                                                                OPTIONAL,
    numPrimaryHS-SCCH-Codes
                                NumHS-SCCH-Codes
                                                            OPTIONAL,
    hARO-Preamble-Mode
                           HARO-Preamble-Mode
                                                                    OPTIONAL,
    mIMO-ActivationIndicator
                                    MIMO-ActivationIndicator
                                                                        OPTIONAL,
    hSDSCH-MACdPDUSizeFormat
                                    HSDSCH-MACdPDUSizeFormat
                                                                        OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                            SixtyfourQAM-UsageAllowedIndicator
                                                                                        OPTIONAL,
    uE-with-enhanced-HS-SCCH-support-indicator
                                                    NULL
                                                                OPTIONAL.
    continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                    Continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                                                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCHPreconfigurationSetup-ExtIEs } }
                                                                                                                                OPTIONAL,
HSDSCHPreconfigurationSetup-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-UE-SupportIndicatorExtension
                                                        CRITICALITY ignore EXTENSION UE-SupportIndicatorExtension
                                                                                                                                PRESENCE optional } |
ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator
                                                                CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
    PRESENCE optional } |
{ ID id-MIMO-withfourtransmitantennas-ActivationIndicator
                                                                CRITICALITY ignore EXTENSION MIMO-withfourtransmitantennas-ActivationIndicator
        PRESENCE optional |
{ ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator
                                                                        CRITICALITY ignore EXTENSION DualStream-MIMO-withfourtransmitantennas-
ActivationIndicator
                        PRESENCE optional } |
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator
                                                                                         CRITICALITY ignore
                                                                                                                 EXTENSION
{\tt PowerOffsetForSecondaryCPICHforMIMOwithfour transmitant ennasRequestIndicator}
                                                                                    PRESENCE optional |
 ID id-Multiflow-Information
                                                        CRITICALITY ignore EXTENSION Multiflow-Information
                                                                                                                                PRESENCE optional }
 ID id-FTPICH-Information
                                                        CRITICALITY ignore EXTENSION FTPICH-Information
                                                                                                                                PRESENCE optional }
 ID id-UL-CLTD-Information
                                                        CRITICALITY ignore EXTENSION UL-CLTD-Information
                                                                                                                                PRESENCE optional}
 ID id-UL-MIMO-Information
                                                        CRITICALITY ignore EXTENSION UL-MIMO-Information
                                                                                                                                PRESENCE optional }
                                                        CRITICALITY ignore EXTENSION SixteenQAM-UL-Operation-Indicator
 ID id-SixteenQAM-UL-Operation-Indicator
                                                                                                                                PRESENCE optional } |
 ID id-SixtyfourQAM-UL-Operation-Indicator
                                                        CRITICALITY reject EXTENSION SixtyfourQAM-UL-Operation-Indicator
                                                                                                                                PRESENCE optional },
HS-SCCH-PreconfiguredCodes
                                        ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HS-SCCH-PreconfiguredCodesItem
HS-SCCH-PreconfiguredCodesItem ::= SEQUENCE {
```

```
hS-SCCH-CodeNumber
                             HS-SCCH-CodeNumber,
   iE-Extensions
                         ProtocolExtensionContainer { { HS-SCCH-PreconfiguredCodesItem-ExtIEs} } OPTIONAL,
HS-SCCH-PreconfiguredCodesItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-CodeNumber ::= INTEGER (0..127)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-DSCH-serving-cell-change-information ::= SEQUENCE {
   hS-PDSCH-RLID
                             RL-ID,
   hSDSCH-FDD-Information
                             HSDSCH-FDD-Information
   OPTIONAL,
                             ProtocolExtensionContainer { { HS-DSCH-serving-cell-change-information-ExtIEs} }
   iE-Extensions
                                                                                                              OPTIONAL,
HS-DSCH-serving-cell-change-information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-
Information
              PRESENCE optional } |
PRESENCE optional },
HS-DSCH-serving-cell-change-informationResponse ::= SEQUENCE {
   hS-DSCH-serving-cell-choice
                                HS-DSCH-serving-cell-change-choice,
                                 ProtocolExtensionContainer { { HS-DSCH-serving-cell-change-informationResponse-ExtIEs} } OPTIONAL,
   iE-Extensions
HS-DSCH-serving-cell-change-informationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-serving-cell-change-choice ::= CHOICE {
   hS-serving-cell-change-successful
                                        HS-serving-cell-change-successful,
   hS-serving-cell-change-unsuccessful
                                        HS-serving-cell-change-unsuccessful,
HSDSCH-TBSizeTableIndicator ::= ENUMERATED {
   octet-aligned
HS-serving-cell-change-successful ::= SEQUENCE {
   hSDSCH-FDD-Information-Response
                                    HSDSCH-FDD-Information-Response,
```

```
hSDSCH-RNTI
                                        HSDSCH-RNTI,
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-serving-cell-change-successful-ExtIEs} } OPTIONAL,
HS-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                            CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-SCCH-
Less-Information-Response
                                PRESENCE optional },
HS-serving-cell-change-unsuccessful ::= SEQUENCE {
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL.
HS-serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
HSPDSCH-First-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of first HS-PDSCH code
HSPDSCH-Second-Code-Index ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)
    -- index of second HS-PDSCH code
HSPDSCH-Second-Code-Support ::= BOOLEAN
    -- true: applied, false: not applied
HSDSCH-TDD-Information ::= SEQUENCE {
   hSDSCH-MACdFlows-Information
                                                HSDSCH-MACdFlows-Information,
    uE-Capabilities-Info
                                                UE-Capabilities-Info,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset
                                                TDD-AckNack-Power-Offset,
    iE-Extensions
                                                ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } }
                                                                                                                                 OPTIONAL,
HSDSCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HSDSCH-MACdPDUSizeFormat
                                    CRITICALITY reject
                                                            EXTENSION HSDSCH-MACdPDUSizeFormat PRESENCE optional |
{ ID id-HSSICH-SIRTarget
                                    CRITICALITY ignore
                                                            EXTENSION UL-SIR
    PRESENCE optional } |
-- Applicable to 1.28Mcps TDD only
{ ID id-HSSICH-TPC-StepSize
                                    CRITICALITY ignore
                                                            EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                     PRESENCE optional } |
-- Mandatory for 1.28Mcps TDD only
{ ID id-tSN-Length
                                    CRITICALITY reject
                                                            EXTENSION TSN-Length
                                                                                                  PRESENCE optional }
-- Applicable for 1.28Mcps TDD when using multiple frequencies
{ ID id-MIMO-ActivationIndicator
                                    CRITICALITY reject
                                                            EXTENSION MIMO-ActivationIndicator
                                                                                                                         PRESENCE optional },
HSDSCH-TDD-Information-Response ::= SEQUENCE {
```

```
hSDSCH-MACdFlow-Specific-InfoList-Response
                                                    HSDSCH-MACdFlow-Specific-InfoList-Response
                                                                                                          OPTIONAL,
    hSSCCH-TDD-Specific-InfoList-Response
                                                    HSSCCH-TDD-Specific-InfoList-Response
                                                                                                          OPTIONAL.
    -- Not Applicable to 1.28Mcps TDD
   hSSCCH-TDD-Specific-InfoList-Response-LCR
                                                    HSSCCH-TDD-Specific-InfoList-Response-LCR
                                                                                                          OPTIONAL.
    -- Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD. This HSSCCH Specific Information is for the first Frequency repetition, HSSCCH Specific
Information for Frequency repetitions 2 and on, should be defined in MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
    hSPDSCH-TDD-Specific-InfoList-Response
                                                    HSPDSCH-TDD-Specific-InfoList-Response
                                                                                                          OPTIONAL,
    hSPDSCH-TDD-Specific-InfoList-Response-LCR
                                                    HSPDSCH-TDD-Specific-InfoList-Response-LCR
                                                                                                          OPTIONAL,
    hARQ-MemoryPartitioning
                                                    HARQ-MemoryPartitioning
                                                                                                          OPTIONAL,
    -- For 1.28Mcps TDD, this HARQ Memory Partitioning Information is for the first Frequency repetition, HARQ Memory Partitioning Information for
Frequency repetitions 2 and on, should be defined in MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
                                                    ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-TDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-User-Plane-Congestion-Fields-Inclusion
                                                                CRITICALITY ignore EXTENSION User-Plane-Congestion-Fields-Inclusion
            PRESENCE optional } |
{ ID id-hSSCCH-TDD-Specific-InfoList-Response768
                                                                CRITICALITY ignore EXTENSION HSSCCH-TDD-Specific-InfoList-Response768
        PRESENCE optional } |
{ ID id-hSPDSCH-TDD-Specific-InfoList-Response768
                                                                CRITICALITY ignore EXTENSION HSPDSCH-TDD-Specific-InfoList-Response768
            PRESENCE optional |
{ ID id-UARFCNforNt
                                                                CRITICALITY ignore EXTENSION UARFON
                                        PRESENCE optional } |
-- Applicable to 1.28Mcps TDD when using multiple frequencies ,This is the UARFCN for the first Frequency repetition
{ ID id-multipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
                                                                CRITICALITY ignore EXTENSION MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
PRESENCE optional } |
-- Applicable to 1.28Mcps TDD when using multiple frequencies ,This MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR is the HS-SCCH and HARO
Memory Partitioning information for the 2<sup>nd</sup> and beyond HS-PDSCH frequencies
{ ID id-multicarrier-number
                                                                CRITICALITY ignore EXTENSION Multicarrier-Number
                            PRESENCE optional } |
-- Applicable for 1.28Mcps TDD when using multiple frequencies
{ID id-MIMO-SFMode-For-HSPDSCHDualStream
                                                    CRITICALITY reject
                                                                             EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
            PRESENCE optional } |
{ID id-MIMO-ReferenceSignal-InformationListLCR
                                                    CRITICALITY reject EXTENSION MIMO-ReferenceSignal-InformationListLCR
                                                                                                                                         PRESENCE
optional}|
 ID id-TS0-HS-PDSCH-Indication-LCR CRITICALITY ignore
                                                                                                                  PRESENCE optional } |
                                                             EXTENSION TS0-HS-PDSCH-Indication-LCR
{ ID id-Out-of-Sychronization-Window
                                                                                 EXTENSION Out-of-Sychronization-Window
                                                        CRITICALITY reject
    PRESENCE optional },
Multicarrier-Number ::= INTEGER (1..maxHSDPAFrequency)
HSPDSCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response
HSPDSCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
                                                    ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs } }
    iE-Extensions
    OPTIONAL,
```

```
HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-TDD-Specific-InfoList-Response-LCR ::= SEOUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF HSPDSCH-TDD-Specific-InfoItem-Response-LCR
HSPDSCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR
                                                TimeSlotLCR,
   midambleShiftLCR
                                                MidambleShiftLCR,
                                                ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }
    iE-Extensions
   OPTIONAL,
HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-TDD-Specific-InfoList-Response768 ::= SEOUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response768
HSPDSCH-TDD-Specific-InfoItem-Response768 ::= SEQUENCE {
    timeslot
   midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
   iE-Extensions
                                                    ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-768-ExtIEs } }
       OPTIONAL.
    . . .
HSPDSCH-TDD-Specific-InfoItem-Response-768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response
HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE {
    code-Number
                                                    INTEGER (0..127),
                                                    ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }
    iE-Extensions
   OPTIONAL,
    . . .
HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB
HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response
HSSCCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
```

```
midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode.
   hSSICH-Info
                                                    HSSICH-Info.
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs } }
    OPTIONAL,
HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR
HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEOUENCE {
    timeslotLCR
                                                TimeSlotLCR,
   midambleShiftLCR
                                                MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                                TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
   hSSICH-InfoLCR
                                                HSSICH-InfoLCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }
   OPTIONAL,
HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSCCH-TDD-Specific-InfoList-Response768 ::= SEOUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response768
HSSCCH-TDD-Specific-InfoItem-Response768 ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
   midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
   hSSICH-Info768
                                                    HSSICH-Info768,
   iE-Extensions
                                                    ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response768-ExtIEs } }
   OPTIONAL,
HSSCCH-TDD-Specific-InfoItem-Response768-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
HSSICH-Info ::= SEQUENCE {
   hsSICH-ID
                                                    HS-SICH-ID,
   timeslot
                                                    TimeSlot,
                                                    MidambleShiftAndBurstType,
   midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
```

```
HSSICH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSICH-InfoLCR ::= SEQUENCE {
   hsSICH-ID
                                                    HS-SICH-ID,
    timeslotLCR
                                                    TimeSlotLCR,
    midambleShiftLCR
                                                    MidambleShiftLCR,
    tDD-ChannelisationCode
                                                TDD-ChannelisationCode,
                                                    ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                OPTIONAL,
HSSICH-Info-LCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SICH-ID-Extension
                                            CRITICALITY ignore
                                                                                                          PRESENCE optional },
                                                                    EXTENSION HS-SICH-ID-Extension
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
HSSICH-Info768 ::= SEQUENCE {
   hsSICH-ID
                                                    HS-SICH-ID,
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType768
                                                    MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                    TDD-ChannelisationCode768,
                                                    ProtocolExtensionContainer { { HSSICH-Info-768-ExtIEs } }
    iE-Extensions
                                                                                                                                OPTIONAL,
HSSICH-Info-768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Reception-Quality-Value ::= SEQUENCE
                               HS-SICH-failed,
    failed-HS-SICH
    missed-HS-SICH
                               HS-SICH-missed.
    total-HS-SICH
                               HS-SICH-total,
    iE-Extensions
                                ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs} } OPTIONAL,
HS-SICH-Reception-Quality-Value-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SICH-failed ::= INTEGER (0..20)
HS-SICH-missed ::= INTEGER (0..20)
HS-SICH-total ::= INTEGER (0..20)
HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in TS 25.133 [23]
HS-SICH-ID ::= INTEGER (0..31)
```

```
HS-SICH-ID-Extension ::= INTEGER (32..255,...)
HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
HSSCCH-Code-Change-Grant
                            ::= ENUMERATED {
    changeGranted
HS-PDSCH-Code-Change-Indicator ::= ENUMERATED {
    hsPDSCHCodeChangeNeeded
HS-PDSCH-Code-Change-Grant ::= ENUMERATED {
    changeGranted
HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                 OPTIONAL,
    cgiFeedback-CycleK
                                                    CQI-Feedback-Cycle
                                                                                                 OPTIONAL,
    cqiRepetitionFactor
                                                     CQI-RepetitionFactor
                                                                                                 OPTIONAL,
    ackNackRepetitionFactor
                                                    AckNack-RepetitionFactor
                                                                                                 OPTIONAL,
                                                    COI-Power-Offset
    cqiPowerOffset
                                                                                                 OPTIONAL,
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                 OPTIONAL,
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                 OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
                                                                                                                                         OPTIONAL,
    . . .
HSDSCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-HS-PDSCH-Code-Change-Indicator
                                                CRITICALITY ignore EXTENSION HS-PDSCH-Code-Change-Indicator
                                                                                                                          PRESENCE optional }
{ID id-PrecoderWeightSetRestriction
                                                CRITICALITY ignore EXTENSION Precoder-Weight-Set-Restriction
                                                                                                                          PRESENCE optional },
HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator
                                                     HSSCCH-CodeChangeIndicator
                                                                                                 OPTIONAL,
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                 OPTIONAL,
                                                     ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
HSDSCH-TDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MIMO-ReferenceSignal-InformationListLCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSICH-ReferenceSignal-InformationLCR
HSSICH-ReferenceSignal-InformationLCR ::= SEQUENCE {
   midambleConfigurationLCR
                                    MidambleConfigurationLCR,
    midambleShift
                                    INTEGER (0..15),
    timeSlotLCR
                                    TimeSlotLCR,
```

```
ProtocolExtensionContainer { { HSSICH-ReferenceSignal-InformationLCR-ExtIEs } }
    iE-Extensions
                                                                                                                                OPTIONAL,
HSSICH-ReferenceSignal-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Semi-PersistentScheduling-Information-LCR ::= SEQUENCE {
                                            Transport-Block-Size-List-LCR,
    transport-Block-Size-List
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR,
   hS-DSCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                                     OPTIONAL,
   hS-DSCH-SPS-Operation-Indicator
                                            HS-DSCH-SPS-Operation-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
        OPTIONAL,
HS-DSCH-Semi-PersistentScheduling-Information-LCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-Physical-Layer-Category ::= INTEGER (1..64)
Transport-Block-Size-List-LCR := SEQUENCE (SIZE (1..maxNoOfTBSs-Mapping-HS-DSCH-SPS)) OF Transport-Block-Size-Item-LCR
Transport-Block-Size-Item-LCR ::= SEQUENCE {
    transport-Block-Size-maping-Index-LCR
                                                Transport-Block-Size-maping-Index-LCR,
    transport-Block-Size-Index-LCR
                                                Transport-Block-Size-Index-LCR,
                                                ProtocolExtensionContainer { { Transport-Block-Size-Item-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                        OPTIONAL,
    . . .
Transport-Block-Size-Item-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Transport-Block-Size-maping-Index-LCR ::= INTEGER (0..maxNoOfTBSs-Mapping-HS-DSCH-SPS-1)
Transport-Block-Size-Index-LCR ::= INTEGER (1..maxNoOfHS-DSCH-TBSsLCR)
TSO-HS-PDSCH-Indication-LCR ::= NULL
Repetition-Period-List-LCR ::= SEQUENCE (SIZE (1..maxNoOfRepetition-Period-LCR)) OF Repetition-Period-Item-LCR
Repetition-Period-Item-LCR ::= SEQUENCE {
    repetitionPeriodIndex
                                RepetitionPeriodIndex,
    repetitionPeriod
                                RepetitionPeriod,
    repetitionLength
                                RepetitionLength
                                                                OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { Repetition-Period-Item-LCR-ExtIEs } }
                                                                                                                         OPTIONAL,
Repetition-Period-Item-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
```

```
RepetitionPeriodIndex ::= INTEGER (0..maxNoOfRepetitionPeriod-SPS-LCR-1)
SPS-Reservation-Indicator ::= ENUMERATED {
    reserve
HS-DSCH-SPS-Operation-Indicator ::= CHOICE {
    logicalChannellevel
                          LogicalChannellevel,
   priorityQueuelevel
                                PriorityQueuelevel,
LogicalChannellevel ::= BIT STRING (SIZE (16))
PriorityOueuelevel ::= BIT STRING (SIZE (8))
HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE {
    transport-Block-Size-List
                                            Transport-Block-Size-List-LCR
                                                                                         OPTIONAL.
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR
                                                                                     OPTIONAL,
    hS-DSCH-SPS-Reservation-Indicator
                                            SPS-Reservation-Indicator
                                                                                     OPTIONAL,
    hS-DSCH-SPS-Operation-Indicator
                                            HS-DSCH-SPS-Operation-Indicator
                                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
                            OPTIONAL.
HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR ::= SEQUENCE {
   hS-SICH-InformationList-for-HS-DSCH-SPS
                                                HS-SICH-InformationList-for-HS-DSCH-SPS,
   initial-HS-PDSCH-SPS-Resource
                                                Initial-HS-PDSCH-SPS-Resource
                                                                                        OPTIONAL,
    buffer-Size-for-HS-DSCH-SPS
                                                Process-Memory-Size
                                                                                        OPTIONAL,
                                                Number-of-Processes-for-HS-DSCH-SPS
    number-of-Processes-for-HS-DSCH-SPS
                                                                                        OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs } }
           OPTIONAL,
    . . .
HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SICH-InformationList-for-HS-DSCH-SPS ::= SEQUENCE (SIZE (1..maxNoOf-HS-SICH-SPS)) OF HS-SICH-InformationItem-for-HS-DSCH-SPS
HS-SICH-InformationItem-for-HS-DSCH-SPS ::= SEQUENCE {
    hS-SICH-Mapping-Index
                                    HS-SICH-Mapping-Index
                                                                    OPTIONAL,
   hS-SICH-Type
                                    HS-SICH-Type,
                                    ProtocolExtensionContainer { { HS-SICH-InformationItem-for-HS-DSCH-SPS-ExtIEs } }
   iE-Extensions
                                                                                                                                        OPTIONAL,
```

```
HS-SICH-InformationItem-for-HS-DSCH-SPS-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
HS-SICH-Mapping-Index ::= INTEGER (0..maxNoOf-HS-SICH-SPS-1)
HS-SICH-Type ::= CHOICE {
   hS-SCCH-Associated-HS-SICH
                                        HS-SCCH-Associated-HS-SICH,
    non-HS-SCCH-Associated-HS-SICH
                                        Non-HS-SCCH-Associated-HS-SICH,
HS-SCCH-Associated-HS-SICH ::= SEQUENCE {
    hsSICH-ID
                                        HS-SICH-ID,
    extended-HS-SICH-ID
                                        HS-SICH-ID-Extension
                                                                         OPTIONAL,
Non-HS-SCCH-Associated-HS-SICH::= SEQUENCE {
    non-HS-SCCH-Aassociated-HS-SICH-ID Non-HS-SCCH-Aassociated-HS-SICH-ID.
Non-HS-SCCH-Aassociated-HS-SICH-ID ::= INTEGER (0..255)
Initial-HS-PDSCH-SPS-Resource::= SEQUENCE {
    repetitionPeriodIndex
                                                RepetitionPeriodIndex,
    repetitionLength
                                                RepetitionLength
                                                                             OPTIONAL,
    hS-PDSCH-Offset
                                                TDD-PhysicalChannelOffset,
   hS-PDSCH-Midamble-Configuation
                                                MidambleShiftLCR,
    timeslot-Resource-Related-Information
                                                HS-DSCH-TimeslotResourceLCR,
                                                TDD-ChannelisationCode,
    startCode
    endCode
                                                TDD-ChannelisationCode,
    transport-Block-Size-Index
                                                Transport-Block-Size-Index-LCR,
                                                ModulationSPS-LCR,
    modulationType
    hS-SICH-Mapping-Index
                                                HS-SICH-Mapping-Index,
                                                ProtocolExtensionContainer { { Initial-HS-PDSCH-SPS-Resource-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
Initial-HS-PDSCH-SPS-Resource-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-TimeslotResourceLCR ::= BIT STRING (SIZE (5))
ModulationSPS-LCR ::= ENUMERATED {
    qPSK,
    sixteenQAM,
    . . .
```

```
Number-of-Processes-for-HS-DSCH-SPS ::= INTEGER (1..16)
-- I
IMEI
            ::= OCTET STRING (SIZE(8))
IMEISV
            ::= OCTET STRING (SIZE(8))
IMSI
            ::= OCTET STRING (SIZE(3..8))
Inactivity-Threshold-for-UE-DTX-Cycle2 ::= ENUMERATED {v1, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
Inactivity-Threshold-for-UE-DRX-Cycle ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512}
-- Unit subframe
Inactivity-Threshold-for-UE-Grant-Monitoring ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256}
-- Unit E-DCH TTI
InformationAvailable::= SEOUENCE {
    requestedDataValue
                           RequestedDataValue,
    iE-Extensions
                            ProtocolExtensionContainer { { InformationAvailable-ExtIEs} }
                                                                                                 OPTIONAL,
    . . .
InformationAvailable-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
InformationExchangeID ::= INTEGER (0..1048575)
InformationNotAvailable ::= NULL
InformationReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                            PeriodicInformation,
                           OnModificationInformation,
    onModification
InformationReportPeriodicity ::= CHOICE {
                   INTEGER (1..60,...),
    min
-- Unit min, Step 1min
    hour
                    INTEGER (1..24,...),
-- Unit hour, Step 1hour
InformationThreshold ::= CHOICE {
    dGPSThreshold
                        DGPSThreshold,
```

```
dGANSSThreshold
                        DGANSSThreshold
InformationType ::= SEQUENCE {
    informationTypeItem
                            ENUMERATED {
        qA-AccessPointPositionwithAltitude,
       gA-AccessPointPosition,
        iPDLParameters.
        gPSInformation,
       dGPSCorrections,
       gPS-RX-POS,
       sFNSFN-GA-AccessPointPosition,
        cell-Capacity-Class,
       nACC-Related-Data,
        mBMSBearerServiceFullAddress,
        interFrequencyCellInformation,
       qANSSInformation,
       dGANSSCorrections,
       gANSS-RX-Pos,
       mBMS-Counting-Information,
       mBMS-Transmission-Mode,
        mBMS-Neighbouring-Cell-Information,
        mBMS-RLC-Sequence-Number,
        aNR-Cell-Information,
        cOmmonERGCH-Cell-Information
    qPSInformation
                                GPSInformation
                                                        OPTIONAL,
                                ProtocolExtensionContainer { { InformationType-ExtIEs} }
    iE-Extensions
                                                                                                OPTIONAL,
-- The GPS Information IE shall be present if the Information Exchange Type IE indicates 'GPS Information'
-- For information exchange on the Iur-g interface, only the Cell Capacity Class is used.
InformationType-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- The following IE shall be present if the Information Type Item IE indicates 'GANSS Information'
    { ID id-GANSS-Information
                                        CRITICALITY ignore EXTENSION GANSS-Information
                                                                                                PRESENCE conditional } |
-- The following IE shall be present if the Information Type Item IE indicates 'DGANSS Corrections'
    { ID id-DGANSS-Corrections-Req
                                       CRITICALITY ignore EXTENSION DGANSS-Corrections-Req
                                                                                                PRESENCE conditional }
-- The following IE shall be present if the Information Type Item IE indicates 'MBMS RLC Sequence Number'
    { ID id-MBMS-RLC-Sequence-Number-Information
                                                      CRITICALITY ignore EXTENSION MBMS-RLC-Sequence-Number-Information
                                                                                                                                PRESENCE conditional
Initial-DL-DPCH-TimingAdjustment-Allowed ::= ENUMERATED {
    initial-DL-DPCH-TimingAdjustment-Allowed
InnerLoopDLPCStatus
                       ::= ENUMERATED {active, inactive}
```

```
IPDLParameters ::= CHOICE {
   iPDL-FDD-Parameters
                               IPDL-FDD-Parameters,
   iPDL-TDD-Parameters
                                                      --3.84Mcps TDD and 7.68Mcps TDD only
                               IPDL-TDD-Parameters.
    extension-IPDLParameters
                               Extension-IPDLParameters
                          ::= ProtocolIE-Single-Container {{ Extension-IPDLParametersIE }}
Extension-IPDLParameters
Extension-IPDLParametersIE RNSAP-PROTOCOL-IES ::= {
   { ID id-IPDL-TDD-ParametersLCR CRITICALITY reject TYPE IPDL-TDD-ParametersLCR PRESENCE mandatory },
   . . .
Inter-Frequency-Cell-List ::= SEOUENCE (SIZE (0..maxCellsMeas)) OF Inter-Frequency-Cell
Inter-Frequency-Cell ::= SEQUENCE {
   dL-UARFCN
                               UARFCN,
   uL-UARFCN
                               UARFCN
                                           OPTIONAL,
   primaryScramblingCode
                               PrimaryScramblingCode,
   iE-Extensions
                               OPTIONAL,
Inter-Frequency-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Inter-Frequency-Cell-Information ::= SEOUENCE {
   inter-Frequency-Cell-Information-SIB11
                                               Inter-Frequency-Cell-Information-SIB11,
   inter-Frequency-Cell-Information-SIB12
                                               Inter-Frequency-Cell-Information-SIB12,
                               ProtocolExtensionContainer { {Inter-Frequency-Cell-Information-ExtIEs } }
   iE-Extensions
                                                                                                              OPTIONAL,
    . . .
Inter-Frequency-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Inter-Frequency-Cell-Information-SIB11 ::= SEOUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB11-Per-Indication
Inter-Frequency-Cell-Information-SIB12 ::= SEQUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB12-Per-Indication
Inter-Frequency-Cells-Information-SIB11-Per-Indication ::= SEQUENCE {
   inter-Frequency-Cell-Indication-SIB11 Inter-Frequency-Cell-Indication,
   inter-Frequency-Cell-List-SIB11
                                      Inter-Frequency-Cell-SIB11-or-SIB12-List,
   iE-Extensions
                               ProtocolExtensionContainer { { Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtIEs } }
                                                                                                                                    OPTIONAL,
    . . .
Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Inter-Frequency-Cells-Information-SIB12-Per-Indication ::= SEQUENCE {
    inter-Frequency-Cell-Indication-SIB12 Inter-Frequency-Cell-Indication,
    inter-Frequency-Cell-List-SIB12
                                        Inter-Frequency-Cell-SIB11-or-SIB12-List,
    iE-Extensions
                                ProtocolExtensionContainer { { Inter-Frequency-Cells-Information-SIB12-Per-Indication-ExtIEs } }
                                                                                                                                        OPTIONAL.
Inter-Frequency-Cells-Information-SIB12-Per-Indication-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
Inter-Frequency-Cell-Indication ::= INTEGER (0..1)
Inter-Frequency-Cell-SIB11-or-SIB12-List ::= SEQUENCE (SIZE (0..maxCellSIB11OrSIB12)) OF Inter-Frequency-Cell-SIB11-or-SIB12
Inter-Frequency-Cell-SIB11-or-SIB12 ::= SEQUENCE
    interFrequencyCellID
                                InterFrequencyCellID,
    dL-UARFCN
                                UARFCN,
    uL-UARFCN
                                UARFCN
                                            OPTIONAL,
    primaryScramblingCode
                                PrimaryScramblingCode,
    iE-Extensions
                                ProtocolExtensionContainer { {Inter-Frequency-Cell-ExtIEs} }
                                                                                                   OPTIONAL,
InterFrequencyCellID ::= INTEGER (0..31)
InterStream-Interference-Compensation ::= INTEGER(0..15,...)
IPDL-FDD-Parameters ::= SEQUENCE {
    iPSpacingFDD
                                IPSpacingFDD,
    iPLength
                                IPLength,
   iPOffset
                                IPOffset,
                                Seed,
   burstModeParameters
                                BurstModeParameters
                                                        OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-FDD-Parameters-ExtIEs} }
                                                                                                   OPTIONAL,
IPDL-FDD-Parameters-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-Parameters ::= SEQUENCE {
    iPSpacingTDD
                                IPSpacingTDD,
    iPStart
                                IPStart,
   iPSlot
                                IPSlot,
   iP-P-CCPCH
                                IP-P-CCPCH,
   burstModeParameters
                                BurstModeParameters
                                                        OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-TDD-Parameters-ExtIEs} }
                                                                                                   OPTIONAL,
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
```

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```
IPDL-TDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-ParametersLCR ::= SEQUENCE {
    iPSpacingTDD
                                IPSpacingTDD,
    iPStart
                                IPStart,
    iPSub
                                IPSub,
    burstModeParameters
                                BurstModeParameters
                                                        OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-TDD-ParametersLCR-ExtIEs} } OPTIONAL,
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
IPDL-TDD-ParametersLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IPLength ::= ENUMERATED {
   ipl5,
    ipl10,
IPMulticastAddress ::= OCTET STRING (SIZE (4..16))
IPOffset ::= INTEGER (0..9)
IP-P-CCPCH ::= ENUMERATED {
    switchOff-1-Frame,
    switchOff-2-Frames
IPSlot ::= INTEGER (0..14)
IPSpacingFDD ::= ENUMERATED {
    ipsF5,
    ipsF7,
    ipsF10,
    ipsF15,
    ipsF20,
    ipsF30,
    ipsF40,
    ipsF50,
IPSpacingTDD ::= ENUMERATED {
    ipsT30,
    ipsT40,
    ipsT50,
    ipsT70,
    ipsT100,
```

```
IPStart ::= INTEGER (0..4095)
IPSub ::= ENUMERATED {
   first,
   second,
   both
IdleIntervalInformation ::= SEQUENCE {
   idleIntervalInfo-k
                                              INTEGER(2..3),
   idleIntervalInfo-offset
                                              INTEGER(0..7),
-- J
LABased ::= SEQUENCE {
   laiList
                    LAI-List,
   iE-Extensions ProtocolExtensionContainer { {LABased-ExtIEs} } OPTIONAL,
LABased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
LAI-List
          ::= SEQUENCE (SIZE (1..maxNrOfLAIs)) OF
   LAI
                 ::= OCTET STRING (SIZE (2)) -- (EXCEPT ('0000'H 'FFFE'H))
LAC
LAI
      ::=
               SEQUENCE {
       pLMN-Identity
                          PLMN-Identity,
       1AC
       iE-Extensions
                          ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
LimitedPowerIncrease ::= ENUMERATED {
   used,
   not-used
List-Of-PLMNs ::= SEQUENCE (SIZE (1..maxNrOfBroadcastPLMNs)) OF PLMN-Identity
L3-Information
                          ::= BIT STRING
Load-Value-IncrDecrThres ::= INTEGER(0..100)
```

```
Load-Value ::= INTEGER(0..100)
LoadValue ::= SEQUENCE {
       uplinkLoadValue
                            INTEGER(0..100),
        downlinkLoadValue
                            INTEGER(0..100)
LCRTDD-Uplink-Physical-Channel-Capability ::= SEQUENCE {
    maxTimeslotsPerSubFrame
                                        INTEGER(1..6),
    maxPhysChPerTimeslot
                                        ENUMERATED{ts1, ts2, ts3, ts4,...},
    iE-Extensions
                                        ProtocolExtensionContainer { { LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs} } OPTIONAL,
    . . .
LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- M
M1Report ::= CHOICE {
                        MDT-Report-Parameters,
    periodic
                        Event1F-Parameters,
    event1F
M2Report
         ::= CHOICE {
    periodic
                        MDT-Report-Parameters,
                        Event1I-Parameters,
    event1I
    . . .
MDT-Activation
                    ::= ENUMERATED {
                                     mdt-only,
                                     mdt-and-trace,
                                    ...}
MDTAreaScope
                    ::= CHOICE {
    cellbased
                        CellBased,
    labased
                        LABased,
    rabased
                        RABased,
    plmn-area-based
                        NULL,
MDT-Configuration ::= SEQUENCE {
        mdtActivation
                                        MDT-Activation,
        mdtAreaScope
                                        MDTAreaScope,
        m1report
                                        M1Report
                                                         OPTIONAL,
        m2report
                                        M2Report
                                                        OPTIONAL,
        m3report
                                                        OPTIONAL,
                            ProtocolExtensionContainer { { MDT-Configuration-ExtIEs} } OPTIONAL,
        iE-Extensions
```

```
MDT-Configuration-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
MDT-Report-Parameters ::= SEQUENCE {
                           ReportInterval,
    reportInterval
    reportAmount
                           ReportAmount,
MeasurementQuantity
                      ::= ENUMERATED {
        cpichEcNo,
       cpichRSCP,
       pathloss,
MaxNrOfUL-DPCHs
                           ::= INTEGER (1..6)
MAC-c-sh-SDU-Length
                           ::= INTEGER (1..5000)
MAC-c-sh-SDU-LengthList ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-SDU-Length
MAC-DTX-Cycle-2ms ::= ENUMERATED \{v1, v4, v5, v8, v10, v16, v20\}
MAC-DTX-Cycle-10ms ::= ENUMERATED {v5, v10, v20}
MAC-ehs-Reset-Timer ::= ENUMERATED {v1, v2, v3, v4,...}
MAC-Inactivity-Threshold ::= ENUMERATED {v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
MACdPDU-Size ::= INTEGER (1..5000,...)
    -- In case of E-DCH value 8 and values not multiple of 8 shall not be used
MAC-PDU-SizeExtended ::= INTEGER (1..1504,...,1505)
    -- In case of E-DCH value 1 shall not be used
MACdPDU-Size-IndexList ::= SEOUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID
                                        SID,
    mACdPDU-Size
                                        MACdPDU-Size,
    iE-Extensions
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } }
                                                                                                                        OPTIONAL,
MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
```

OPTIONAL,

```
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID
    mACdPDU-Size
                                        MACdPDU-Size.
    iE-Extensions
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } }
MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MACes-Guaranteed-Bitrate ::= INTEGER (0..16777215,...,16777216..256000000)
MACes-Maximum-Bitrate-LCR ::= INTEGER (0..256000000,...)
MACeReset-Indicator ::= ENUMERATED {mACeReset}
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..1000000000)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
MAC-hsWindowSize
                        ::= ENUMERATED \{v4, v6, v8, v12, v16, v24, v32, ..., v64, v128, v256\}
MAChsResetScheme ::= ENUMERATED {
    always,
    interNodeB-change
MaximumAllowedULTxPower
                           ::= INTEGER (-50..33)
Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(1..maxNrOfBits-MACe-PDU-non-scheduled)
MaxNrDLPhysicalchannels
                           ::= INTEGER (1..224)
-- 1.28Mcps TDD 97 - 224 are unused
MaxNrDLPhysicalchannels768 ::= INTEGER (1..448)
MaxNrDLPhysicalchannelsTS ::= INTEGER (1..16)
MaxNrDLPhysicalchannelsTS768
                               ::= INTEGER (1..32)
MaxNr-Retransmissions-EDCH ::= INTEGER (0..15)
MaxNrTimeslots
                           ::= INTEGER (1..14)
-- 1.28Mcps values 7-14 are unused
MaxNrULPhysicalchannels
                           ::= INTEGER (1..2)
Max-Set-E-DPDCHs ::= ENUMERATED {
    vN256, vN128, vN64, vN32, vN16, vN8, vN4, v2xN4, v2xN2, v2xN2plus2xN4,
    v2xM2plus2xM4
```

```
-- Values releated to TS 25.212 [9]
Max-UE-DTX-Cycle ::= ENUMERATED {
    v5, v10, v20, v40, v64, v80, v128, v160,
MBMS-Bearer-Service-Full-Address ::= SEOUENCE {
    accessPointName
                                        AccessPointName,
    iPMulticastAddress
                                           IPMulticastAddress,
                                       ProtocolExtensionContainer { { MBMS-Bearer-Service-Full-Address-ExtIEs } }
   iE-Extensions
                                                                                                                                     OPTIONAL,
    . . .
MBMS-Bearer-Service-Full-Address-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-List ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Bearer-ServiceItemFDD ::=SEQUENCE{
    tmai TMGI,
    transmissionMode TransmissionMode,
    iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-ExtIEs} } OPTIONAL,
MBMS-Bearer-ServiceItemFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-ServiceItemFDD-PFL ::=SEOUENCE{
    tmgi TMGI,
    transmissionMode
                         TransmissionMode
                                              OPTIONAL,
    preferredFrequencyLayer UARFCN
                                               OPTIONAL,
    iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs} } OPTIONAL,
    . . .
MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-ServiceItemTDD ::=SEOUENCE{
    tmgi TMGI,
    transmissionMode TransmissionMode,
   iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-ExtIEs} } OPTIONAL,
MBMS-Bearer-ServiceItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
MBMS-Bearer-ServiceItemTDD-PFL ::=SEQUENCE{
           TMGI,
    tmai
    transmissionMode
                                           OPTIONAL,
                     TransmissionMode
    preferredFrequencyLayer
                               UARECN
                                               OPTIONAL.
    iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs} } OPTIONAL,
MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMSChannelTypeInfo ::= SEQUENCE {
    tMGI
                       TMGI,
                       PTMCellList
    pTM-Cell-List
                                       OPTIONAL,
    pTP-Cell-List PTPCellList
                                       OPTIONAL,
    not-Provided-Cell-List NotProvidedCellList OPTIONAL,
                      ProtocolExtensionContainer { { MBMSChannelTypeInfo-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
MBMSChannelTypeInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMSChannelTypeCellList ::= SEQUENCE {
                                           C-ID,
                                       AffectedUEInformationForMBMS
    affectedUEInformationForMBMS
                                                                       OPTIONAL,
    iE-Extensions
                                       ProtocolExtensionContainer { { MBMSChannelTypeCellList-ExtIEs} } OPTIONAL,
MBMSChannelTypeCellList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-ExtendedAffectedUEInformationForMBMS
                                                 CRITICALITY ignore EXTENSION ExtendedAffectedUEInformationForMBMS PRESENCE optional },
MBMSPreferredFreqLayerInfo ::= SEQUENCE {
    preferredFrequencyLayerInfo
                                   PreferredFrequencyLayerInfo,
    iE-Extensions
                                   ProtocolExtensionContainer { { MBMSPreferredFreqLayerInfo-ExtIEs} } OPTIONAL,
MBMSPreferredFreqLayerInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Neighbouring-Cell-Information ::= SEQUENCE {
    mBMS-ConcatenatedServiceList
                                       MBMS-ConcatenatedServiceList,
   13-Information-1
                                       L3-Information OPTIONAL,
-- This IE contains MBMS COMMON P-T-M RB INFORMATION defined in TS 25.331 [16]
   13-Information-2
                                      L3-Information OPTIONAL,
```

```
-- This IE contains MBMS CURRENT CELL P-T-M RB INFORMATION defined in TS 25.331 [16]
   iE-Extensions
                                 ProtocolExtensionContainer { { MBMS-Neighbouring-Cell-Information-ExtIEs} } OPTIONAL,
MBMS-Neighbouring-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-ConcatenatedServiceList ::= SEQUENCE (SIZE (1..maxlengthMBMSconcatservlists)) OF TMGI
MBMS-RLC-Sequence-Number-Information ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-RLC-Sequence-Number-Information-List
MBMS-RLC-Sequence-Number-Information-List ::= SEQUENCE {
   mBMS-Bearer-Service-List-RLC
                                                        MBMS-Bearer-Service-List-RLC,
                                  ProtocolExtensionContainer { { MBMS-RLC-Sequence-Number-Information-List-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
MBMS-RLC-Sequence-Number-Information-List-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-List-RLC::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-Service-List-RLCinfo
MBMS-Bearer-Service-List-RLCinfo
                                ::= SEOUENCE {
                                 TMGI,
   tmqi
   time-Stamp
                                 Time-Stamp,
                                  iE-Extensions
                                                                                                                 OPTIONAL,
MBMS-Bearer-Service-List-RLCinfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBSFN-Cluster-Identity
                       ::= INTEGER (0..65535)
MCCH-Message-List ::= SEQUENCE (SIZE (1.. maxNrOfMCCHMessages)) OF L3-Information
MCCH-Configuration-Info ::= SEQUENCE {
    secondaryCCPCHSystemInformationMBMS
                                             Secondary-CCPCH-System-Information-MBMS,
                                             ProtocolExtensionContainer { {MCCH-Configuration-Info-ExtIEs } }
   ie-Extensions
                                                                                                             OPTIONAL,
MCCH-Configuration-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-System-Information-MBMS
                                              ::= BIT STRING
```

```
MBSFN-Scheduling-Transmission-Time-Interval-Info-List ::=
                                                                SEQUENCE (SIZE (1.. maxNrOfMBMSL3)) OF MBSFN-Scheduling-Transmission-Time-Interval-
MBSFN-Scheduling-Transmission-Time-Interval-Item
                                                    ::= SEOUENCE {
    mbsfnSchedulingTransmissionTimeInterval
                                                MbsfnSchedulingTransmissionTimeInterval,
                                                ProtocolExtensionContainer { { MBSFN-Scheduling-Transmission-Time-Interval-Item-ExtIEs } }
    ie-Extensions
    OPTIONAL,
    . . .
MBSFN-Scheduling-Transmission-Time-Interval-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MbsfnSchedulingTransmissionTimeInterval ::= ENUMERATED {tti4, tti8, tti16, tti32, tti64, tti128, tti256}
MeasurementFilterCoefficient ::= ENUMERATED (k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...)
-- Measurement Filter Coefficient to be used for measurement
MeasurementID
                            ::= INTEGER (0..1048575)
Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5
MinimumSpreadingFactor
                           ::= INTEGER (1..16)
MinimumSpreadingFactor768
                                ::= INTEGER (1..32)
MultipleURAsIndicator ::= ENUMERATED {
   multiple-URAs-exist,
    single-URA-exists
MaxAdjustmentStep
                            ::= INTEGER(1..10)
-- Unit Slot
MeasurementChangeTime
                            ::= INTEGER (1..6000,...)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10 ms
MeasurementHysteresisTime
                                ::= INTEGER (1..6000,...)
-- The MeasurementHysteresisTime gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms
MeasurementIncreaseDecreaseThreshold
                                            ::= CHOICE {
```

```
SIR-Value-IncrDecrThres,
   sir
   sir-error
                            SIR-Error-Value-IncrDecrThres.
   transmitted-code-power
                           Transmitted-Code-Power-Value-IncrDecrThres.
                           RSCP-Value-IncrDecrThres,
   round-trip-time
                           Round-Trip-Time-IncrDecrThres,
   extension-MeasurementIncreaseDecreaseThreshold
                                           Extension-MeasurementIncreaseDecreaseThreshold
Extension-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementIncreaseDecreaseThresholdIE }}
Extension-MeasurementIncreaseDecreaseThresholdIE RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory } |
   PRESENCE mandatory } |
    PRESENCE mandatory } |
    ID id-RT-Load-Value-IncrDecrThres CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres
                                                                          PRESENCE mandatory } |
    PRESENCE mandatory
} |
   { ID id-UpPTSInterferenceValue
                              CRITICALITY reject TYPE
                                                    UpPTSInterferenceValue
                                                                          PRESENCE mandatory }
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
MeasurementRecoverySupportIndicator ::= NULL
MeasurementThreshold
                        ::= CHOICE {
   sir
                            SIR-Value,
   sir-error
                            SIR-Error-Value,
                           Transmitted-Code-Power-Value,
   transmitted-code-power
                           RSCP-Value,
   rx-timing-deviation
                           Rx-Timing-Deviation-Value,
   round-trip-time
                           Round-Trip-Time-Value,
   extension-MeasurementThreshold Extension-MeasurementThreshold
Extension-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementThresholdIE }}
Extension-MeasurementThresholdIE RNSAP-PROTOCOL-IES ::= {
   ID id-TUTRANGPSMeasurementThresholdInformation
                                           CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation
                                                                                                   PRESENCE mandatory
   ID id-SFNSFNMeasurementThresholdInformation
                                           CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation
                                                                                                   PRESENCE mandatory
} |
   { ID id-Load-Value
                                           CRITICALITY reject TYPE Load-Value
                                                                                                   PRESENCE mandatory
} |
   { ID id-Transmitted-Carrier-Power-Value
                                           CRITICALITY reject TYPE Transmitted-Carrier-Power-Value
                                                                                                   PRESENCE mandatory
   { ID id-Received-Total-Wideband-Power-Value
                                           CRITICALITY reject TYPE Received-Total-Wideband-Power-Value
                                                                                                   PRESENCE mandatory
} |
```

```
{ ID id-UL-Timeslot-ISCP-Value
                                                         CRITICALITY reject TYPE UL-Timeslot-ISCP-Value
                                                                                                                                 PRESENCE mandatory
} |
     ID id-RT-Load-Value
                                                         CRITICALITY reject TYPE RT-Load-Value
                                                                                                                                 PRESENCE mandatory
     ID id-NRT-Load-Information-Value
                                                         CRITICALITY reject TYPE NRT-Load-Information-Value
                                                                                                                                 PRESENCE mandatory
} |
      ID id-Rx-Timing-Deviation-Value-LCR
                                                        CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR
                                                                                                                                 PRESENCE mandatory } |
     ID id-HS-SICH-Reception-Ouality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Ouality-Measurement-Value
                                                                                                                                 PRESENCE mandatory
} |
     ID id-UpPTSInterferenceValue
                                                         CRITICALITY reject TYPE UpPTSInterferenceValue
                                                                                                                                 PRESENCE mandatory
} |
    ID id-Rx-Timing-Deviation-Value-768
                                                         CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
                                                                                                                                 PRESENCE mandatory
} |
    { ID id-Rx-Timing-Deviation-Value-ext
                                                        CRITICALITY reject TYPE Rx-Timing-Deviation-Value-ext
                                                                                                                                 PRESENCE mandatory
} |
     ID id-Extended-Round-Trip-Time-Value
                                                        CRITICALITY reject TYPE Extended-Round-Trip-Time-Value
                                                                                                                                 PRESENCE mandatory
    { ID id-TUTRANGANSSMeasurementThresholdInformation CRITICALITY reject TYPE TUTRANGANSSMeasurementThresholdInformation
                                                                                                                                 PRESENCE mandatory
} |
     ID id-UE-transmission-power-headroom CRITICALITY reject TYPE UE-transmission-power-headroom-Value
                                                                                                                                 PRESENCE mandatory }
MidambleConfigurationBurstType1And3 ::=
                                            ENUMERATED {v4, v8, v16}
MidambleConfigurationBurstType2 ::=
                                        ENUMERATED {v3, v6}
MidambleConfigurationLCR ::=
                                ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
MidambleShiftAndBurstType ::=
                                    CHOICE {
    type1
                                        SEOUENCE
        midambleConfigurationBurstType1And3
                                                MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                            CHOICE
            defaultMidamble
                                                NULL,
            commonMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftLong,
    type2
                                        SEOUENCE
        midambleConfigurationBurstType2
                                            MidambleConfigurationBurstType2,
        midambleAllocationMode
                                            CHOICE
            defaultMidamble
                                                NULL,
            commonMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftShort,
                                        SEQUENCE
    type3
        midambleConfigurationBurstTypelAnd3 MidambleConfigurationBurstTypelAnd3,
        midambleAllocationMode
                                        CHOICE {
            defaultMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftLong,
```

```
MidambleShiftLong ::=
                                    INTEGER (0..15)
MidambleShiftShort ::=
                                    INTEGER (0..5)
MidambleShiftLCR ::= SEQUENCE {
   midambleAllocationMode
                                MidambleAllocationMode,
   midambleShift
                                MidambleShiftLong
                                                         OPTIONAL,
        -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    midambleConfigurationLCR
                                MidambleConfigurationLCR,
    iE-Extensions
                                ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
                                                                                                  OPTIONAL,
MidambleAllocationMode ::= ENUMERATED
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
MidambleShiftLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
MidambleShiftAndBurstType768 ::=
                                        CHOICE {
    type1
        midambleConfigurationBurstType1And3
                                                MidambleConfigurationBurstType1And3,
       midambleAllocationMode
                                            CHOICE {
            defaultMidamble
                                                NULL,
            commonMidamble
                                                NULL,
           ueSpecificMidamble
                                                MidambleShiftLong,
                                        SEQUENCE
        midambleConfigurationBurstType2-768
                                                MidambleConfigurationBurstType2-768,
       midambleAllocationMode
                                            CHOICE {
            defaultMidamble
                                                NULL,
            commonMidamble
           ueSpecificMidamble
                                                MidambleShiftShort768,
        },
                                        SEQUENCE
    type3
        midamble Configuration Burst Type 1 And 3 Midamble Configuration Burst Type 1 And 3,
```

```
CHOICE {
        midambleAllocationMode
            defaultMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftLong,
MidambleConfigurationBurstType2-768 ::=
                                            ENUMERATED {v4, v8}
MidambleShiftShort768 ::=
                                        INTEGER (0..7)
MIMO-ActivationIndicator
                            ::= NULL
MIMO-InformationResponse ::= SEQUENCE
    mIMO-PilotConfiguration
                                                MIMO-PilotConfiguration,
    mIMO-N-M-Ratio
                                                MIMO-N-M-Ratio,
                                                ProtocolExtensionContainer { { MIMO-InformationResponse-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
MIMO-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Additional-Associated-Secondary-CPICH CRITICALITY reject EXTENSION Additional-Associated-Secondary-CPICH
                                                                                                                                 PRESENCE optional },
    . . .
MIMO-Mode-Indicator ::= ENUMERATED {
    activate,
    deactivate
MIMO-N-M-Ratio ::= ENUMERATED \{v1-2, v2-3, v3-4, v4-5, v5-6, v6-7, v7-8, v8-9, v9-10, v1-1, \ldots\}
MIMO-PilotConfiguration ::= CHOICE {
    primary-and-secondary-CPICH
                                            MIMO-S-CPICH-Channelisation-Code,
    normal-and-diversity-primary-CPICH
                                            NULL,
    . . .
MIMO-S-CPICH-Channelisation-Code ::= INTEGER (0..255)
MIMO-withfourtransmitantennas-ActivationIndicator ::= NULL
MIMO-withfourtransmitantennas-ModeIndicator ::= ENUMERATED {
    activate,
    deactivate
DualStream-MIMO-withfourtransmitantennas-ActivationIndicator
DualStream-MIMO-withfourtransmitantennas-ModeIndicator ::= ENUMERATED
```

```
activate,
    deactivate
Additional-Associated-Secondary-CPICH ::= SEQUENCE (SIZE (1.. maxSCPICHCell-1)) OF Additional-Secondary-CPICH
Additional-Secondary-CPICH ::= SEQUENCE{
    additional-secondary-CPICH
                                            MIMO-S-CPICH-Channelisation-Code,
    additional-D-CPICH
                                            MIMO-S-CPICH-Channelisation-Code OPTIONAL,
                                            ProtocolExtensionContainer { { Additional-Secondary-CPICH-Item-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
Additional-Secondary-CPICH-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MinUL-ChannelisationCodeLength
                                    ::= ENUMERATED
    v4,
    v8.
    v16,
    v32,
    v64,
    v128,
    v256
MinimumReducedE-DPDCH-GainFactor ::= ENUMERATED {m8-15, m11-15, m15-15, m21-15, m30-15, m42-15, m60-15, m84-15,...}
ModifyPriorityQueue ::= CHOICE {
    addPriorityQueue
                                PriorityQueue-InfoItem-to-Add,
    modifyPriorityQueue
                                PriorityQueue-InfoItem-to-Modify,
    deletePriorityQueue
                                PriorityQueue-Id,
    . . .
Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
MulticellEDCH-Information
                                ::= ProtocolIE-Single-Container { {MulticellEDCH-InformationItem} }
MulticellEDCH-InformationItem RNSAP-PROTOCOL-IES ::= {
    { ID id-MulticellEDCH-Information CRITICALITY ignore TYPE MulticellEDCH-InformationItemIEs
                                                                                                          PRESENCE mandatory
MulticellEDCH-InformationItemIEs::= SEQUENCE {
    dL-PowerBalancing-Information
                                            DL-PowerBalancing-Information
                                                                                 OPTIONAL,
    minimumReducedE-DPDCH-GainFactor
                                            MinimumReducedE-DPDCH-GainFactor
                                                                                     OPTIONAL,
    secondary-UL-Frequency-Activation-State
                                                    Secondary-UL-Frequency-Activation-State
                                                                                                 OPTIONAL,
    f-DPCH-SlotFormat
                             F-DPCH-SlotFormat
                                                        OPTIONAL,
```

PRESENCE

```
common-DL-ReferencePowerInformation
                                            DL-Power
                                                           OPTIONAL,
   iE-Extensions
                      ProtocolExtensionContainer { { MulticellEDCH-InformationItemIEs-ExtIEs } } OPTIONAL,
   . . .
MulticellEDCH-InformationItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                    ::= ProtocolIE-Single-Container { {MulticellEDCH-RL-SpecificInformationItem} }
MulticellEDCH-RL-SpecificInformation
MulticellEDCH-RL-SpecificInformationItem RNSAP-PROTOCOL-IES ::= {
   mandatory }
MulticellEDCH-RL-SpecificInformationItemIEs::= SEQUENCE
                                 ExtendedPropagationDelay
   extendedPropagationDelay
                                                                  OPTIONAL,
   enhanced-PrimaryCPICH-EcNo
                                 Enhanced-PrimaryCPICH-EcNo
                                                                  OPTIONAL,
   dl-Reference-Power
                             DI-Power
                                                OPTIONAL,
   phase-Reference-Update-Indicator
                                        Phase-Reference-Update-Indicator
                                                                                 OPTIONAL,
   additional-e-DCH-DL-Control-Channel-Grant
                                                                                 OPTIONAL,
                                               NULL
                      ProtocolExtensionContainer { { MulticellEDCH-RL-SpecificInformationItemIEs-ExtIEs } } OPTIONAL,
   iE-Extensions
   . . .
MulticellEDCH-RL-SpecificInformationItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multicell-EDCH-Restriction ::= BOOLEAN
Multiple-PLMN-List ::= SEOUENCE {
   pLMN-Identity
                     PLMN-Identity,
   list-Of-PLMNs
                     List-Of-PLMNs
                                                                             OPTIONAL,
                      ProtocolExtensionContainer { { Multiple-PLMN-List-ExtIEs} } OPTIONAL,
   iE-Extensions
Multiple-PLMN-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MultiplexingPosition ::= ENUMERATED {
   fixed.
   flexible
MAChs-ResetIndicator ::= ENUMERATED{
   mAChs-NotReset
```

```
MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR ::= SEQUENCE (SIZE (1.. maxHSDPAFrequency-1)) OF MultipleFreq-HSPDSCH-InformationItem-
ResponseTDDLCR
--Includes the 2<sup>nd</sup> through the max number of frequency repetitions
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR ::= SEQUENCE{
    hSSCCH-TDD-Specific-InfoList-Response-LCR
                                                     HSSCCH-TDD-Specific-InfoList-Response-LCR
                                                                                                 OPTIONAL.
   hARO-MemoryPartitioning
                                                     HARO-MemoryPartitioning
                                                                                                 OPTIONAL,
    uARFCN
                                                     UARFCN,
    -- This is the UARFCN for the second and beyond Frequency repetition.
                                                     ProtocolExtensionContainer { { MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
MultipleFreg-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
MIMO-SFMode-For-HSPDSCHDualStream ::= ENUMERATED {
    sF1.
    sF1SF16
Multi-Carrier-EDCH-Info ::= SEQUENCE{
    multicarrier-EDCH-Transport-Bearer-Mode
                                                                     Multicarrier-EDCH-Transport-Bearer-Mode,
   multi-carrier-EDCH-Information
                                                                     Multi-Carrier-EDCH-Information,
   iE-Extensions
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Info-ExtIEs} } OPTIONAL,
Multi-Carrier-EDCH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multicarrier-EDCH-Transport-Bearer-Mode ::= ENUMERATED {
    separate-Iur-Transport-Bearer-Mode,
    shared-Iur-Transport-Bearer-Mode
Multi-Carrier-EDCH-Information ::= SEQUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-LCR-InformationItem
Multi-Carrier-EDCH-LCR-InformationItem ::=SEQUENCE{
    uARFCNforNt.
                                                     UARFCN,
    sNPL-carrier-group-indicator
                                                     SNPL-Carrier-Group-Indicator
                                                                                         OPTIONAL,
    pRxdesBase
                                                     E-PUCH-PRXdesBase,
    multi-Carrier-EDCH-MACdFlows-Information-TDD
                                                    Multi-Carrier-EDCH-MACdFlows-Information-TDD
                                                                                                                          OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-LCR-InformationItem-ExtIEs} } OPTIONAL,
    . . .
Multi-Carrier-EDCH-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
SNPL-Carrier-Group-Indicator ::= INTEGER (1..3)
-- for multi-carrier E-DCH operation 1.28Mcps TDD only
Multi-Carrier-EDCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1.. maxNrOfEDCHMACdFlows)) OF Multi-Carrier-EDCH-MACdFlows-Specific-Info
Multi-Carrier-EDCH-MACdFlows-Specific-Info ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
   bindingID
                                                    BindingID,
    transportLayerAddress
                                                    TransportLayerAddress,
                                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-MACdFlows-Specific-Info-ExtIEs} }
    iE-Extensions
           OPTIONAL,
    . . .
Multi-Carrier-EDCH-MACdFlows-Specific-Info-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
Multi-Carrier-EDCH-Reconfigure ::=SEQUENCE{
    continue-setup-change-Of-Multi-Carrier-EDCH
                                                                        Continue-Setup-Change-Multi-Carrier-EDCH,
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Reconfigure-ExtIEs} } OPTIONAL,
    iE-Extensions
Multi-Carrier-EDCH-Reconfigure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continue-Setup-Change-Multi-Carrier-EDCH ::= CHOICE {
    continue
                           NULL,
                           Multi-Carrier-EDCH-Info,
    setup
                           Multi-Carrier-EDCH-Change-Info,
    change
    . . .
Multi-Carrier-EDCH-Change-Info ::=SEQUENCE{
    multicarrier-EDCH-Transport-Bearer-Mode
                                                            Multicarrier-EDCH-Transport-Bearer-Mode
                                                                                                                 OPTIONAL,
   multi-carrier-EDCH-Information
                                                            Multi-Carrier-EDCH-Information
                                                                                                                 OPTIONAL,
    multi-Carrier-EDCH-Information-Removal-List
                                                            Multi-Carrier-EDCH-Information-Removal-List
                                                                                                                 OPTIONAL,
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Change-Info-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Multi-Carrier-EDCH-Change-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multi-Carrier-EDCH-Information-Removal-List ::= SEQUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs
Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs ::=SEOUENCE{
    uARFCNforNt
    iE-Extensions
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs-ExtIEs} } OPTIONAL,
    . . .
```

```
Multi-Carrier-EDCH-Information-Removal-Info-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multi-Carrier-EDCH-Information-Response ::= SEOUENCE (SIZE (1..maxNrOfULCarriersLCR-1)) OF Multi-Carrier-EDCH-LCR-Information-ResponseItem
Multi-Carrier-EDCH-LCR-Information-ResponseItem ::=SEQUENCE{
    uARFCNforNt
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                    E-DCH-TDD-MACdFlow-Specific-InformationResp
                                                                                                          OPTIONAL,
    e-AGCH-Specific-Information-Response-LCR-TDD E-AGCH-Specific-InformationRespList-LCR-TDD
                                                                                                          OPTIONAL,
                                                    E-HICH-Scheduled-InformationRespList-LCR-TDD
    e-HICH-Scheduled-InformationResp-LCR
                                                                                                          OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Multi-Carrier-EDCH-LCR-Information-ResponseItem-ExtIEs} } OPTIONAL.
Multi-Carrier-EDCH-LCR-Information-ResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Multiflow-Reconfiguration ::= CHOICE {
                                Multiflow-Information,
    configurationChange
                                Multiflow-Information-To-Modify,
    stop
                                Multiflow-Stop,
    . . .
Multiflow-Information ::= SEOUENCE {
    total-Number-of-HS-DSCH-Cells
                                            INTEGER (2..32,...),
    mode
                                            Multiflow-Mode,
                                            Multiflow-MIMO,
   mimo
                                            Multiflow-Timing
                                                                                     OPTIONAL,
    max-Number-of-HS-SCCH-Sets-per-NodeB
                                            INTEGER (1..16,...)
                                                                                     OPTIONAL,
   iE-Extensions
                                            ProtocolExtensionContainer { { Multiflow-Information-ExtIEs } }
                                                                                                                                 OPTIONAL,
Multiflow-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
Multiflow-Information-To-Modify ::= SEQUENCE {
    total-Number-of-HS-DSCH-Cells
                                            INTEGER (2..32,...)
                                                                                     OPTIONAL,
    mode
                                            Multiflow-Mode
                                                                                     OPTIONAL,
   mimo
                                            Multiflow-MIMO
                                                                                     OPTIONAL,
                                            Multiflow-Timing
                                                                                     OPTIONAL,
    max-Number-of-HS-SCCH-Sets-per-NodeB
                                            INTEGER (1..16,...)
                                                                                     OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Multiflow-Information-To-Modify-ExtIEs } } 
                                                                                                                                         OPTIONAL,
Multiflow-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
Multiflow-Stop ::= ENUMERATED {
    stop,
    . . .
Multiflow-Mode ::= ENUMERATED {
    primary,
    assisting,
Multiflow-MIMO ::= ENUMERATED {
    off,
    . . .
Multiflow-Timing ::= CHOICE {
    time-Reference
                                        NULL,
    non-Time-Reference
                                        INTEGER (0..30,...),
    -- Unit: chip, step size 256 chips
    -- example: 0 = 0chip, 1 = 256chips
Multiflow-OrdinalNumberOfFrequency ::= INTEGER (1..32,...)
MU-MIMO-InformationLCR ::= SEQUENCE {
    mU-MIMO-Operation
                                                 MU-MIMO-Operation,
    standalone-Midamble-Channel-Information
                                                 Standalone-Midamble-Channel-Information OPTIONAL,
    iE-Extensions
                                         ProtocolExtensionContainer { { MU-MIMO-InformationLCR-ExtIEs} } OPTIONAL,
MU-MIMO-Operation ::= ENUMERATED {
    mU-MIMO-Used,
    mU-MIMO-Not-Used,
    . . .
MU-MIMO-Usage-Indicator ::= ENUMERATED {
    ul-Only,
    dl-Only,
    ul-and-dl
Standalone-Midamble-Channel-Information ::= SEQUENCE {
    standalone-Midamble-Configuratnion Standalone-Midamble-Configuratnion,
    standalone-MidambleShift
                                        Standalone-MidambleShift,
    timeslotLCR
                                        TimeSlotLCR,
    repetitionPeriod
                                        Standalone-Midamble-RepetitionPeriod,
    offset
                                        Standalone-Midamble-Offset,
```

```
referenceBeta
                                        ReferenceBeta
                                                                         OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { Standalone-Midamble-Channel-Information-ExtIEs} } OPTIONAL,
Standalone-Midamble-Configuratnion::= ENUMERATED {
    v4,
    v6,
    v8,
    v10,
    v12,
    v14,
    v16,
    . . .
Standalone-MidambleShift ::= INTEGER (0..15)
Standalone-Midamble-RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
Standalone-Midamble-Offset ::= INTEGER (0..63)
ReferenceBeta ::= INTEGER (-15..16)
Standalone-Midamble-Channel-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MU-MIMO-InformationLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MU-MIMO-Indicator ::= SEQUENCE {
    mU-MIMO-Usage-Indicator
                                            MU-MIMO-Usage-Indicator,
    standalone-Midamble-Channel-Indicator Standalone-Midamble-Channel-Indicator,
    iE-Extensions
                                            ProtocolExtensionContainer { { MU-MIMO-Indicator-ExtIEs} } OPTIONAL,
MU-MIMO-Indicator-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
-- N
NACC-Related-Data ::= SEOUENCE
   qERAN-SI-Type
                             GERAN-SI-Type,
   iE-Extensions
                             ProtocolExtensionContainer { {NACC-Related-Data-ExtIEs} }
                                                                                       OPTIONAL.
NACC-Related-Data-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Nack-Power-Offset ::= INTEGER (0..8,..., 9..10)
-- According to mapping in TS 25.213 [21] subclause 4.2.1
NCC ::= BIT STRING (SIZE (3))
Neighbouring-UMTS-CellInformation ::= SEQUENCE (SIZE (1..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-
CellInformationItemIE }}
Neighbouring-UMTS-CellInformation-Ext ::= SEQUENCE (SIZE (1..maxNrOfExtendedNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-
CellInformationExtensionItemIE }}
Neighbouring-UMTS-CellInformationExtensionItemIE RNSAP-PROTOCOL-IES ::=
   PRESENCE
   mandatory }
Neighbouring-UMTS-CellInformationExtensionItem ::= SEQUENCE {
   rNC-ID
                                        RNC-ID.
   cN-PS-DomainIdentifier
                                        CN-PS-DomainIdentifier
                                                                            OPTIONAL,
   cN-CS-DomainIdentifier
                                        CN-CS-DomainIdentifier
                                                                            OPTIONAL,
   neighbouring-FDD-CellInformation
                                        Neighbouring-FDD-CellInformation
                                                                            OPTIONAL,
   neighbouring-TDD-CellInformation
                                        Neighbouring-TDD-CellInformation
                                                                            OPTIONAL,
   neighbouring-LCR-TDD-CellInformation
                                        Neighbouring-LCR-TDD-CellInformation
                                                                            OPTIONAL,
   extended-RNC-ID
                                        Extended-RNC-ID
                                                                            OPTIONAL,
                                        ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationExtensionItem-ExtIEs} } OPTIONAL,
   iE-Extensions
Neighbouring-UMTS-CellInformationExtensionItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Neighbouring-UMTS-CellInformationItemIE RNSAP-PROTOCOL-IES ::= {
     Neighbouring-UMTS-CellInformationItem
                                                                                                                           mandatory
Neighbouring-UMTS-CellInformationItem ::= SEQUENCE
   rNC-ID
                                        RNC-ID,
   cN-PS-DomainIdentifier
                                        CN-PS-DomainIdentifier
                                                                 OPTIONAL,
   cN-CS-DomainIdentifier
                                        CN-CS-DomainIdentifier
                                                                 OPTIONAL,
   neighbouring-FDD-CellInformation
                                        Neighbouring-FDD-CellInformation
                                                                        OPTIONAL,
```

```
neighbouring-TDD-CellInformation
                                            Neighbouring-TDD-CellInformation
                                                                                OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationItem-ExtIEs} } OPTIONAL,
Neighbouring-UMTS-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-neighbouring-LCR-TDD-CellInformation
                                                                                                Neighbouring-LCR-TDD-CellInformation
                                                            CRITICALITY ignore
                                                                                     EXTENSION
    PRESENCE optional } |
    { ID id-Extended-RNC-ID
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
                                            PRESENCE optional }.
Neighbouring-FDD-CellInformation ::= SEOUENCE ( SIZE (1...maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem
Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
    c-ID
                                        C-ID,
    uARFCNforNu
                                        UARFCN,
    uARFCNforNd
                                        UARFCN,
    frameOffset.
                                        FrameOffset
                                                            OPTIONAL.
    primaryScramblingCode
                                        PrimaryScramblingCode,
    primaryCPICH-Power
                                        PrimaryCPICH-Power
                                                                OPTIONAL,
    cellIndividualOffset
                                        CellIndividualOffset
                                                                OPTIONAL,
    txDiversitvIndicator
                                        TxDiversitvIndicator,
    sTTD-SupportIndicator
                                        STTD-SupportIndicator
                                                                OPTIONAL,
    closedLoopModel-SupportIndicator
                                        ClosedLoopModel-SupportIndicator
                                                                            OPTIONAL,
    not-used-closedLoopMode2-SupportIndicator NULL
                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs} } OPTIONAL,
Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-RestrictionStateIndicator
                                                CRITICALITY ignore
                                                                        EXTENSION RestrictionStateIndicator
                                                                                                                         PRESENCE optional }
      ID id-DPC-Mode-Change-SupportIndicator
                                                                                                                                PRESENCE optional } |
                                                CRITICALITY ignore
                                                                        EXTENSION DPC-Mode-Change-SupportIndicator
     ID id-CoverageIndicator
                                                CRITICALITY ignore
                                                                        EXTENSION CoverageIndicator
                                                                                                                                        PRESENCE
optional }|
     ID id-AntennaColocationIndicator
                                                CRITICALITY ignore
                                                                        EXTENSION AntennaColocationIndicator
                                                                                                                         PRESENCE optional }
     ID id-HCS-Prio
                                                CRITICALITY ignore
                                                                        EXTENSION HCS-Prio
                                                                                                                                        PRESENCE
optional }
     ID id-CellCapabilityContainer-FDD
                                                CRITICALITY ignore
                                                                        EXTENSION CellCapabilityContainer-FDD
                                                                                                                         PRESENCE optional }
     ID id-SNA-Information
                                                                        EXTENSION SNA-Information
                                                CRITICALITY ignore
                                                                                                                                        PRESENCE
optional }|
      ID id-FrequencyBandIndicator
                                                                                                                         PRESENCE optional } |
                                                CRITICALITY ignore
                                                                        EXTENSION FrequencyBandIndicator
     ID id-Max-UE-DTX-Cycle
                                                CRITICALITY ignore
                                                                        EXTENSION Max-UE-DTX-Cycle
conditional }
    -- This IE shall be present if the the fifteenth bit Continuous Packet Connectivity DTX-DRX Support Indicator in the Cell Capability Container
FDD IE is set to the value "1".
    { ID id-Multiple-PLMN-List
                                                CRITICALITY ignore
                                                                        EXTENSION Multiple-PLMN-List
                                                                                                                                        PRESENCE
optional }|
      ID id-Secondary-Serving-Cell-List
                                                CRITICALITY ignore
                                                                        EXTENSION Secondary-Serving-Cell-List
                                                                                                                 PRESENCE optional }
     ID id-Dual-Band-Secondary-Serving-Cell-List CRITICALITY ignore EXTENSION Secondary-Serving-Cell-List
                                                                                                                 PRESENCE optional }
-- This IE shall be present if the twenty-eighth bit Dual Band Support Indicator in the Cell Capability Container FDD IE is set to the value "1".
      ID id-CellCapabilityContainerExtension-FDD
                                                    CRITICALITY ignore
                                                                        EXTENSION CellCapabilityContainerExtension-FDD
                                                                                                                                PRESENCE optional }
     ID id-CellListValidityIndicator
                                                                        EXTENSION CellListValidityIndicator
                                                                                                                         PRESENCE optional },
                                                CRITICALITY ignore
```

```
NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
                                      UC-ID.
    uARFCN
                                      UARFCN,
   primaryScramblingCode
                                      PrimaryScramblingCode,
                                      ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
   iE-Extensions
NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }}
Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= {
    Neighbouring-GSM-CellInformationIEs PRESENCE
                                                                                                                           mandatory )
Neighbouring-GSM-CellInformationIEs ::= SEQUENCE ( SIZE (1..maxNrOfGSMNeighboursPerRNC,...)) OF Neighbouring-GSM-CellInformationItem
Neighbouring-GSM-CellInformationItem ::= SEQUENCE {
   cellIndividualOffset
                                      CellIndividualOffset
                                                              OPTIONAL,
   bstc
                                      BSIC,
    band-Indicator
                                      Band-Indicator,
   bcch-arfcn
                                      BCCH-ARFCN,
                                      ProtocolExtensionContainer { { Neighbouring-GSM-CellInformationItem-ExtIEs} } OPTIONAL,
   iE-Extensions
Neighbouring-GSM-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-CoverageIndicator
                                          CRITICALITY ignore
                                                                      EXTENSION CoverageIndicator
    PRESENCE optional } |
     ID id-AntennaColocationIndicator
                                          CRITICALITY ignore
                                                                      EXTENSION AntennaColocationIndicator
                                                                                                                           PRESENCE optional
    { ID id-HCS-Prio
                                          CRITICALITY ignore
                                                                      EXTENSION HCS-Prio
    PRESENCE optional } |
    { ID id-SNA-Information
                                          CRITICALITY ignore
                                                                      EXTENSION SNA-Information
    PRESENCE optional
    { ID id-GERAN-Cell-Capability
                                          CRITICALITY ignore
                                                                      EXTENSION GERAN-Cell-Capability
                                                                                                                                   PRESENCE
optional } |
    { ID id-GERAN-Classmark
                                          CRITICALITY ignore
                                                                      EXTENSION GERAN-Classmark
    PRESENCE optional
    { ID id-ExtendedGSMCellIndividualOffset CRITICALITY ignore
                                                                      EXTENSION ExtendedGSMCellIndividualOffset
                                                                                                                    PRESENCE optional
Neighbouring-TDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Neighbouring-TDD-CellInformationItem
Neighbouring-TDD-CellInformationItem ::= SEQUENCE {
                                  C-ID,
```

```
uARFCNforNt
                                   UARFCN,
    frameOffset
                                   FrameOffset
                                                       OPTIONAL.
    cellParameterID
                                   CellParameterID.
    syncCase
                                   SyncCase,
    timeSlot
                                   TimeSlot
                                                       OPTIONAL
    -- This IE shall be present if Sync Case = Case1 -- ,
    sCH-TimeSlot
                                   SCH-TimeSlot
                                                           OPTIONAL
    -- This IE shall be present if Sync Case = Case2 -- ,
    sCTD-Indicator SCTD-Indicator,
    cellIndividualOffset
                                   CellIndividualOffset
                                                           OPTIONAL,
                                   DPCHConstantValue OPTIONAL,
    dPCHConstantValue
    pCCPCH-Power
                                   PCCPCH-Power
                                                           OPTIONAL,
                                   ProtocolExtensionContainer { { Neighbouring-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-RestrictionStateIndicator
                                                   CRITICALITY ignore
                                                                               EXTENSION RestrictionStateIndicator
                                                                                                                               PRESENCE optional
    ID id-CoverageIndicator
                                                                                                                                      PRESENCE
                                           CRITICALITY ignore
                                                                       EXTENSION CoverageIndicator
optional }|
     ID id-AntennaColocationIndicator
                                                                                                                                             } |
                                           CRITICALITY ignore
                                                                       EXTENSION AntennaColocationIndicator
                                                                                                                       PRESENCE optional
    ID id-HCS-Prio
                                           CRITICALITY ignore
                                                                       EXTENSION HCS-Prio
                                                                                                                                      PRESENCE
optional }|
    { ID id-CellCapabilityContainer-TDD
                                                   CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD
                                                                                                                               PRESENCE optional } |
    { ID id-SNA-Information
                                                   CRITICALITY ignore EXTENSION SNA-Information
                                                                                                                                      PRESENCE
optional }
    { ID id-CellCapabilityContainer-TDD768
                                                       CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD768
                                                                                                                                      PRESENCE
optional }
    { ID id-Multiple-PLMN-List
                                           CRITICALITY ignore
                                                                       EXTENSION Multiple-PLMN-List
                                                                                                                                      PRESENCE
optional },
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-ID
                                       UC-ID,
    uARFCN
                                       UARFCN,
    cellParameterID
                                       CellParameterID,
    timeSlot
                                       TimeSlot
                                                                   OPTIONAL,
    midambleShiftAndBurstType
                                       MidambleShiftAndBurstType
                                                                   OPTIONAL,
                                       ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
NeighbouringTDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
    uC-ID
                                       UC-ID,
    uARFCN
                                       UARFCN,
    cellParameterID
                                       CellParameterID,
    timeSlotLCR
                                       TimeSlotLCR
                                                                   OPTIONAL,
    midambleShiftLCR
                                       MidambleShiftLCR
                                                                   OPTIONAL,
```

```
ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
   iE-Extensions
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation768 ::= SEQUENCE
   uC-ID
                                     UC-ID,
   11ARFCN
                                     UARFCN,
   cellParameterID
                                     CellParameterID,
   timeSlot
                                     TimeSlot
                                                                OPTIONAL,
                                     MidambleShiftAndBurstType768
   midambleShiftAndBurstType768
                                                                   OPTIONAL,
   iE-Extensions
                                     ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem768-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Neighbouring-LCR-TDD-CellInformation ::= SEQUENCE (SIZE (1.. maxNrOfLCRTDDNeighboursPerRNC,...)) OF Neighbouring-LCR-TDD-CellInformationItem
Neighbouring-LCR-TDD-CellInformationItem ::= SEQUENCE {
   C-TD
                                 C-ID,
   uARFCNforNt
                                 UARFCN,
   frameOffset
                                  FrameOffset
                                                    OPTIONAL,
   cellParameterID
                                 CellParameterID,
   sCTD-Indicator
                          SCTD-Indicator,
   cellIndividualOffset
                                 CellIndividualOffset
                                                        OPTIONAL,
   dPCHConstantValue
                                 DPCHConstantValue
                                                    OPTIONAL,
   pCCPCH-Power
                                 PCCPCH-Power
                                                        OPTIONAL,
   restrictionStateIndicator
                                 RestrictionStateIndicator
                                                                OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-CoverageIndicator
                                                                                                                        PRESENCE optional}
                                         CRITICALITY ignore EXTENSION CoverageIndicator
     ID id-AntennaColocationIndicator
                                         CRITICALITY ignore EXTENSION AntennaColocationIndicator
                                                                                                                        PRESENCE optional}
     ID id-HCS-Prio
                                         CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                        PRESENCE optional}
     ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR
                                                                                                                        PRESENCE optional}
                                                                                                                        PRESENCE optional }
     ID id-SNA-Information
                                         CRITICALITY ignore EXTENSION SNA-Information
     ID id-Multiple-PLMN-List
                                         CRITICALITY ignore EXTENSION Multiple-PLMN-List
                                                                                                                        PRESENCE optional }
     Neighbouring-E-UTRA-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfEUTRANeighboursPerRNC,...)) OF Neighbouring-E-UTRA-CellInformationItem
Neighbouring-E-UTRA-CellInformationItem ::= SEOUENCE {
```

```
eCGI
                                        ECGI,
    eARFCN-Information
                                        EARFCN-Information.
    iE-Extensions
                                        ProtocolExtensionContainer { { Neighbouring-E-UTRA-CellInformationItem-ExtIEs} } OPTIONAL,
Neighbouring-E-UTRA-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-PCI
                                    CRITICALITY ignore EXTENSION PCI
                                                                                         PRESENCE optional}
      TD id-TAC
                                    CRITICALITY ignore EXTENSION TAC
                                                                                        PRESENCE optional }
     ID id-PLMN-List
                                    CRITICALITY ignore EXTENSION PLMN-List
                                                                                         PRESENCE optional },
NonCellSpecificTxDiversity ::= ENUMERATED {
    txDiversity,
NotProvidedCellList ::= SEOUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
NrOfDLchannelisationcodes ::= INTEGER (1..8)
NrOfTransportBlocks
                            ::= INTEGER (0..512)
NRT-Load-Information-Value-IncrDecrThres ::= INTEGER(0..3)
NRT-Load-Information-Value ::= INTEGER(0..3)
NRTLoadInformationValue ::= SEQUENCE {
        uplinkNRTLoadInformationValue
                                            INTEGER(0..3),
        downlinkNRTLoadInformationValue
                                            INTEGER(0..3)
N-E-UCCH ::= INTEGER (1..12)
N-E-UCCH-LCR ::= INTEGER (1..8)
Number-Of-Supported-Carriers ::= ENUMERATED {
    one-one-carrier,
    one-three-carrier,
    three-three-carrier,
    one-six-carrier,
    three-six-carrier,
    six-six-carrier,
    . . . ,
    one-two-carrier-discontiguous,
    two-two-carrier-discontiguous,
    one-two-carrier-contiguous,
    two-two-carrier-contiguous
NumHS-SCCH-Codes ::= INTEGER (1..maxNrOfHSSCCHCodes)
NoOfTargetCellHS-SCCH-Order::= INTEGER (1..30)
```

```
Non-Serving-RL-Preconfig-Setup ::= SEQUENCE {
   new-non-serving-RL-selection New-non-serving-RL-setup-selection,
                          ProtocolExtensionContainer { {Non-Serving-RL-Preconfig-Setup-ExtIEs} } OPTIONAL,
    . . .
Non-Serving-RL-Preconfig-Setup-ExtIEs RNSAP-PROTOCOL-EXTENSION::= {
    Setup PRESENCE optional } |
    { ID id-FTPICH-Information
                                                                                                                 PRESENCE optional },
                                                    CRITICALITY ignore EXTENSION FTPICH-Information
. . .
Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup ::= NULL
New-non-serving-RL-setup-selection ::= CHOICE {
   new-Serving-RL-in-DRNS
                                         NULL,
   new-Serving-RL-Not-in-DRNS
                                         NULL,
   new-Serving-RL-in-or-Not-in-DRNS
                                         NULL,
Non-Serving-RL-Preconfig-Info ::= SEQUENCE {
   new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-A
                                                                EDCH-FDD-DL-ControlChannelInformation OPTIONAL.
   new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-B
                                                                EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
   new-non-serving-RL-E-DCH-FDD-DL-ControlChannelInformation-C
                                                                EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
                         ProtocolExtensionContainer { {Non-Serving-RL-Preconfig-Info-ExtIEs} } OPTIONAL,
   iE-Extensions
Non-Serving-RL-Preconfig-Info-ExtIEs
                                     RNSAP-PROTOCOL-EXTENSION
    {ID id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList
                                                                                                          EXTENSION Additional-E-DCH-New-non-
                                                                                  CRITICALITY ignore
serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList PRESENCE optional \| \|
    { ID id-FTPICH-Information-Response
                                               CRITICALITY ignore EXTENSION FTPICH-Information-Response
                                                                                                                 PRESENCE optional },
Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList ::= SEQUENCE(SIZE(1.. maxNrOfEDCH-1)) OF SEQUENCE {
   new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-A EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
   new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-B EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
   new-non-serving-RL-E-DCH-FDD-DL-Control-Channel-Information-C EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
                          ProtocolExtensionContainer { { Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList-ExtIEs} }
OPTIONAL,
Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList-ExtIEs
                                                                              RNSAP-PROTOCOL-EXTENSION ::=
}
NeedforIdleInterval ::= ENUMERATED {
   true,
```

```
false
OnModification ::= SEQUENCE {
    measurementThreshold
                           MeasurementThreshold,
    iE-Extensions
                            ProtocolExtensionContainer { {OnModification-ExtIEs} } OPTIONAL,
    . . .
OnModification-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
OnModificationInformation ::= SEQUENCE {
    informationThreshold InformationThreshold
                                                    OPTIONAL,
                            ProtocolExtensionContainer { {OnModificationInformation-ExtIEs} } OPTIONAL,
    iE-Extensions
OnModificationInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
OrdinalNumberOfFrequency ::= INTEGER (1..32,...)
Out-of-Sychronization-Window ::= ENUMERATED {
ms40,
ms80,
ms160,
ms320,
ms640,
-- P
PagingCause ::= ENUMERATED {
    terminating-conversational-call,
    terminating-streaming-call,
    terminating-interactive-call,
    terminating-background-call,
    terminating-low-priority-signalling,
    terminating-high-priority-signalling,
    terminating-cause-unknown
-- See in TS 25.331 [16]
PagingRecordType ::= ENUMERATED {
    imsi-gsm-map,
```

```
tmsi-gsm-map,
    p-tmsi-qsm-map,
    imsi-ds-41.
    tmsi-ds-41,
    . . .
-- See in TS 25.331 [16]
PartialReportingIndicator ::= ENUMERATED {
    partial-reporting-allowed
Pattern-Sequence-Identifier ::= INTEGER (1.. maxNrOfDCHMeasurementOccasionPatternSequence)
PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,
    crc-not-included
PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step 0.1dBm
PCH-InformationList ::= SEQUENCE (SIZE(0..1)) OF PCH-InformationItem
PCH-InformationItem ::= SEQUENCE {
    transportFormatSet
                                    TransportFormatSet,
                                    ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PC-Preamble ::= INTEGER(0..7,...)
PCI ::= INTEGER (0..503,...)
Periodic ::= SEQUENCE {
    reportPeriodicity
                            ReportPeriodicity,
   iE-Extensions
                            ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    . . .
Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PeriodicInformation ::= SEQUENCE {
    informationReportPeriodicity
                                        InformationReportPeriodicity,
                                        ProtocolExtensionContainer { {PeriodicInformation-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
PeriodicInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Permanent-NAS-UE-Identity ::= CHOICE {
    imsi
                IMSI,
    . . .
Phase-Reference-Update-Indicator ::= ENUMERATED {
    phase-reference-needs-to-be-changed
PLCCHsequenceNumber ::= INTEGER (0..14)
PLMN-Identity ::= OCTET STRING (SIZE(3))
PLMN-List ::= SEQUENCE (SIZE(0..maxNrOfBroadcastPLMNs)) OF PLMN-Identity
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
PowerOffset
                        ::= INTEGER (0..24)
PowerOffsetForSecondaryCPICHforMIMO ::= INTEGER (-6..0)
-- Unit dB, Range -10dB .. 5dB, Step +1dB
PowerOffsetForSecondaryCPICHforMIMORequestIndicator ::= NULL
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas ::= SEQUENCE (SIZE (1.. maxSCPICHCell)) OF Associated-Secondary-CPICH
Associated-Secondary-CPICH ::= SEQUENCE{
    associated-secondary-CPICH-channelId
                                            CommonPhysicalChannelID,
    associated-secondary-CPICH
                                            PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas
                                                                                                                          OPTIONAL,
    associated-D-CPICH-channelId
                                            CommonPhysicalChannelID
                                                                                                                          OPTIONAL,
    associated-D-CPICH
                                            PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas
                                                                                                                          OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Associated-Secondary-CPICH-Item-ExtIEs} }
                                                                                                                          OPTIONAL,
Associated-Secondary-CPICH-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CommonPhysicalChannelID ::= INTEGER (0..255)
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennasRequestIndicator ::= NULL
```

```
PowerOffsetForSCPICH-DCPICHforMIMOwithfourtransmitantennas ::= INTEGER (-12..0)
-- Unit dB, Range -10dB .. 5dB, Step +1dB
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters
PRCDeviation ::= ENUMERATED {
   prcd1,
   prcd2,
   prcd5,
    prcd10,
    . . .
Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
Precoder-Weight-Set-Restriction ::= BIT STRING (SIZE (64))
PredictedSFNSFNDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PreferredFrequencyLayerInfo ::= SEQUENCE {
    defaultPreferredFrequency
    additionalPreferredFrequency
                                    AdditionalPreferredFrequency
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { PreferredFrequencyLayerInfo-ExtIEs} } OPTIONAL,
PreferredFrequencyLayerInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PrimaryCPICH-Power
                           ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm
PrimaryCPICH-EcNo
                           ::= INTEGER (-30..30)
Primary-CPICH-Usage-For-Channel-Estimation ::= ENUMERATED {
   primary-CPICH-may-be-used,
   primary-CPICH-shall-not-be-used
PrimaryCCPCH-RSCP
                            ::= INTEGER (0..91)
```

```
-- Mapping of Non Negative values according to maping in TS 25.123 [24]
PrimaryCCPCH-RSCP-Delta
                            ::= INTEGER (-5..-1...)
-- Mapping of Negative values according to maping in TS 25.123 [24]
                                ::= INTEGER (0..511)
PrimaryScramblingCode
PriorityLevel
                           ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
PriorityQueue-Id ::= INTEGER (0..maxNrOfPrioQueues-1)
PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem
PriorityOueue-InfoItem ::= SEOUENCE {
    priorityOueue-Id
                                        PriorityOueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t1
                                        T1,
    discardTimer
                                        DiscardTimer
                                                                    OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize.
                                        MAChsGuaranteedBitRate
    mAChsGuaranteedBitRate
                                                                    OPTIONAL,
                                        MACdPDU-Size-IndexList,
    mACdPDU-Size-Index
    rLC-Mode
                                        RLC-Mode,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
PriorityOueue-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-MaximumMACdPDU-SizeExtended
                                                                                                                    PRESENCE optional } |
                                        CRITICALITY reject
                                                                EXTENSION MAC-PDU-SizeExtended
 ID id-DL-RLC-PDU-Size-Format
                                            CRITICALITY ignore
                                                                    EXTENSION DL-RLC-PDU-Size-Format
                                                                                                         PRESENCE optional |
{ ID id-UE-AggregateMaximumBitRate-Enforcement-Indicator
                                                                                    EXTENSION UE-AggregateMaximumBitRate-Enforcement-Indicator
                                                            CRITICALITY ignore
           PRESENCE optional },
    . . .
PriorityQueue-InfoList-EnhancedFACH-PCH ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-EnhancedFACH-PCH
PriorityQueue-InfoItem-EnhancedFACH-PCH ::= SEQUENCE {
    priorityOueue-Id
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
                                        т1.
    mAC-ehs-Reset-Timer
                                        MAC-ehs-Reset-Timer,
    discardTimer
                                        DiscardTimer
                                                                                OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    maximum-MACdPDU-Size
                                        MAC-PDU-SizeExtended,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-EnhancedFACH-PCH-ExtIEs } }
    OPTIONAL,
    . . .
PriorityQueue-InfoItem-EnhancedFACH-PCH-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
PriorityOueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPrioOueues)) OF ModifyPriorityOueue
PriorityOueue-InfoItem-to-Add ::= SEOUENCE {
    priorityOueue-Id
                                        PriorityOueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t.1
                                        т1.
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index
                                        MACdPDU-Size-IndexList,
   rLC-Mode
                                        RLC-Mode,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Add-ExtIEs } } 
                                                                                                                                  OPTIONAL,
PriorityOueue-InfoItem-to-Add-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
 ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                            MAC-PDU-SizeExtended
                                                                                                                      PRESENCE optional |
{ ID id-DL-RLC-PDU-Size-Format
                                                                                                          PRESENCE optional },
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 DL-RLC-PDU-Size-Format
PriorityOueue-InfoItem-to-Modify ::= SEOUENCE {
    priorityQueue-Id
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                 OPTIONAL.
    t.1
                                                                                 OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                 OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-IndexList-to-Modify
                                                                                             OPTIONAL,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs } } 
    iE-Extensions
                                                                                                                                         OPTIONAL,
    . . .
PriorityQueue-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                             MAC-PDU-SizeExtended
{ ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                 EXTENSION
                                                                                                                      PRESENCE optional |
                                        CRITICALITY ignore
                                                                                                           PRESENCE optional },
 ID id-DL-RLC-PDU-Size-Format
                                                                 EXTENSION
                                                                             DL-RLC-PDU-Size-Format
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (0..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityQueue-InfoItem-to-Modify-Unsynchronised ::= SEQUENCE {
    priorityOueueId
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                                      OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                                                      OPTIONAL,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs} }
    OPTIONAL,
PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
PropagationDelay
                           ::= INTEGER (0..255)
ProvidedInformation ::= SEQUENCE {
    mBMSChannelTypeInfo
                           MBMSChannelTypeInfo
                                                        OPTIONAL.
    mBMSPreferredFreqLayerInfo MBMSPreferredFreqLayerInfo
                                                                OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { ProvideInformation-ExtIEs} } OPTIONAL,
ProvideInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UpPCH-InformationList-LCRTDD
                                                                                                         PRESENCE optional | |
                                            CRITICALITY ignore EXTENSION UpPCH-InformationList-LCRTDD
    -- Applicable to 1.28Mcps TDD only
   { ID id-ANRReportIndication
                                            CRITICALITY ignore EXTENSION ANRReportIndication
                                                                                                         PRESENCE optional },
UppCH-InformationList-LCRTDD ::= SEQUENCE (SIZE (0.. maxFrequencyinCell)) OF ProtocolIE-Single-Container {{ UppCH-InformationItemIE-LCRTDD }}
UpPCH-InformationItemIE-LCRTDD RNSAP-PROTOCOL-IES ::= {
           id-UpPCH-InformationItem-LCRTDD CRITICALITY ignore TYPE UpPCH-InformationItem-LCRTDD
                                                                                                                    PRESENCE mandatory },
    . . .
UpPCH-InformationItem-LCRTDD ::= SEQUENCE {
    uARFCNforNt
                           UARFCN
                                                    OPTIONAL,
    uPPCHPositionLCR
                           UPPCHPositionLCR
                                                    OPTIONAL,
                           ProtocolExtensionContainer { { UpPCH-InformationItem-LCRTDD-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
    . . .
UpPCH-InformationItem-LCRTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PunctureLimit
                           ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100
-- 0 is not applicable for E-DPCH
PTMCellList ::= SEQUENCE (SIZE (1..maxNrofCells)) OF MBMSChannelTypeCellList
PTPCellList ::= SEOUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
-- O
QE-Selector ::= ENUMERATED {
    selected,
    non-selected
Process-Memory-Size ::= ENUMERATED {
```

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```
hms800, hms1600, hms2400, hms3200, hms4000,
                                        hms4800, hms5600, hms6400, hms7200, hms8000,
                                        hms8800, hms9600, hms10400, hms11200, hms12000,
                                        hms12800, hms13600, hms14400, hms15200, hms16000,
                                        hms17600, hms19200, hms20800, hms22400, hms24000,
                                        hms25600, hms27200, hms28800, hms30400, hms32000,
                                        hms36000, hms40000, hms44000, hms48000, hms52000,
                                        hms56000, hms60000, hms64000, hms68000, hms72000,
                                        hms76000, hms80000, hms88000, hms96000, hms104000,
                                        hms112000, hms120000, hms128000, hms136000, hms144000,
                                        hms152000, hms160000, hms176000, hms192000, hms208000,
                                        hms224000, hms240000, hms256000, hms272000, hms288000,
                                        hms304000,...}
-- R
RABased ::= SEQUENCE {
    raiList
                        RAI-List,
                        ProtocolExtensionContainer { {RABased-ExtIEs} } OPTIONAL,
    iE-Extensions
RABased-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RAI-List
            ::= SEQUENCE (SIZE (1..maxNrOfRAIs)) OF
    RAI
ReportInterval
                        ::= ENUMERATED {
                            ms250,
                            ms500,
                            ms1000,
                            ms2000,
                            ms3000,
                            ms4000,
                            ms6000,
                            ms12000,
                            ms16000,
                            ms20000,
                            ms24000,
                            ms32000,
                            ms64000,
                            ...}
ReportAmount
                        ::= ENUMERATED { n1, n2, n4, n8, n16, n32, n64, infinity, ... }
RAC
                    ::= OCTET STRING (SIZE(1))
RAI ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    lAC
                        LAC,
```

```
RAC
    rAC
RANAP-EnhancedRelocationInformationRequest
                                              ::= BIT STRING
RANAP-EnhancedRelocationInformationResponse
                                               ::= BIT STRING
RANAP-RelocationInformation
                              ::= BIT STRING
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
RateMatchingAttribute
                              ::= INTEGER (1..maxRateMatching)
RB-Identity
                               ::= INTEGER (0..31)
RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity
Received-Total-Wideband-Power-Value ::= Received-total-wide-band-power
Received-Total-Wideband-Power-Value-IncrDecrThres ::= INTEGER(0..620)
-- Unit dB Step 0.1dB
-- e.g. value 100 means 10dB
Reference-E-TFCI-Information ::= SEOUENCE (SIZE (1..maxNrOfRefETFCIs)) OF Reference-E-TFCI-Information-Item
Reference-E-TFCI-Information-Item ::= SEQUENCE {
    reference-E-TFCI
                                    E-TFCI,
    -- The following IE shall be ignored if id-Ext-Reference-E-TFCI-PO is present in Reference-E-TFCI-Information-Item-ExtIEs
                                   Reference-E-TFCI-PO,
    reference-E-TFCI-PO
                                   ProtocolExtensionContainer { { Reference-E-TFCI-Information-Item-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
Reference-E-TFCI-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the ref E-TFCI power offset to be signalled exceeds maxNrOfRefETFCI-PO-QUANTSTEPs
    { ID id-Ext-Reference-E-TFCI-PO
                                       CRITICALITY reject
                                                               EXTENSION Ext-Reference-E-TFCI-PO
                                                                                                                PRESENCE optional },
    . . .
Reference-E-TFCI-PO ::= INTEGER (0.. maxNrOfRefETFCI-PO-OUANTSTEPs)
RefTFCNumber ::= INTEGER (0..15)
Released-CN-Domain ::= CHOICE {
    pSDomain
    cSDomain
                           NULL,
    pS-CSDomain
                           NULL,
RepetitionLength
                           ::= INTEGER (1..63)
```

```
RepetitionPeriod ::= ENUMERATED {
    v1.
    v2.
    v4,
    v8.
    v16,
    v32.
    v64
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
ReportCharacteristics ::= CHOICE {
    onDemand
                        NULL,
    periodic
                        Periodic,
    eventA
                        EventA,
    eventB
                        EventB,
                        EventC,
    eventC
    eventD
                        EventD,
                        EventE,
    eventE
    eventF
                        EventF,
    extension-ReportCharacteristics
                                        Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE RNSAP-PROTOCOL-IES ::= {
                                                                         PRESENCE mandatory } |
     ID id-OnModification CRITICALITY reject TYPE OnModification
     ID id-EventH
                            CRITICALITY reject TYPE EventH
                                                                         PRESENCE mandatory }
ReportPeriodicity ::= CHOICE {
                            INTEGER (1..6000,...),
-- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
-- E.g. value 6000 means 60000ms (i.e. 1min)
-- Unit ms, Step 10ms
   min
                    INTEGER (1..60,...),
-- Unit min, Step 1min
RequestedDataValue ::= SEQUENCE {
    qA-AccessPointPositionwithAltitude
                                                 GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
    iPDLParameters
                                                 IPDLParameters
                                                                                             OPTIONAL,
    dGPSCorrections
                                                 DGPSCorrections
                                                                                             OPTIONAL,
    gPS-NavigationModel-and-TimeRecovery
                                                 GPS-NavigationModel-and-TimeRecovery
                                                                                             OPTIONAL,
    gPS-Ionospheric-Model
                                                 GPS-Ionospheric-Model
                                                                                             OPTIONAL,
    qPS-UTC-Model
                                                 GPS-UTC-Model
                                                                                             OPTIONAL,
    qPS-Almanac
                                                 GPS-Almanac
                                                                                             OPTIONAL,
    gPS-RealTime-Integrity
                                                 GPS-RealTime-Integrity
                                                                                             OPTIONAL,
                                                 GPS-RX-POS
    gPS-RX-POS
                                                                                             OPTIONAL,
```

```
sFNSFN-GA-AccessPointPosition
                                             GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }
                                                                                                                  OPTIONAL.
RequestedDataValue-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Cell-Capacity-Class-Value
                                                 CRITICALITY ignore EXTENSION Cell-Capacity-Class-Value
                                                                                                                          PRESENCE optional }
     ID id-NACC-Related-Data
                                                 CRITICALITY ignore EXTENSION NACC-Related-Data
                                                                                                                          PRESENCE optional }
     ID id-MBMS-Bearer-Service-Full-Address
                                                 CRITICALITY ignore EXTENSION MBMS-Bearer-Service-Full-Address
                                                                                                                          PRESENCE optional
     ID id-Inter-Frequency-Cell-Information
                                                 CRITICALITY ignore EXTENSION Inter-Frequency-Cell-Information
                                                                                                                          PRESENCE optional
     ID id-GANSS-Common-Data
                                                 CRITICALITY ignore EXTENSION GANSS-Common-Data
                                                                                                                          PRESENCE optional }
     ID id-GANSS-Generic-Data
                                                 CRITICALITY ignore EXTENSION GANSS-Generic-Data
                                                                                                                          PRESENCE optional
     ID id-Counting-Information
                                                 CRITICALITY ignore EXTENSION Counting-Information
                                                                                                                          PRESENCE optional
     ID id-Transmission-Mode-Information
                                                 CRITICALITY ignore EXTENSION Transmission-Mode-Information
                                                                                                                          PRESENCE optional
     ID id-MBMS-Neighbouring-Cell-Information
                                                 CRITICALITY ignore EXTENSION MBMS-Neighbouring-Cell-Information
                                                                                                                          PRESENCE optional } |
     ID id-RLC-Sequence-Number
                                                 CRITICALITY ignore EXTENSION RLC-Sequence-Number
                                                                                                                          PRESENCE optional }
                                                                    EXTENSION ANR-Cell-Information
     ID id-ANR-Cell-Information
                                                 CRITICALITY ignore
                                                                                                                          PRESENCE optional }
     ID id-Common-E-RGCH-Cell-Information
                                                 CRITICALITY ignore EXTENSION Common-E-RGCH-Cell-Information
                                                                                                                          PRESENCE optional },
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                              InformationAvailable,
    informationNotAvailable
                              InformationNotAvailable
RestrictionStateIndicator ::= ENUMERATED {
    cellNotResevedForOperatorUse,
    cellResevedForOperatorUse,
RI-TD
                       ::= INTEGER (0..31)
RL-Set-ID
                       ::= INTEGER (0..31)
RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item
RL-Specific-DCH-Info-Item ::= SEQUENCE {
   dCH-id
                          DCH-ID,
   bindingID
                          BindingID OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    transportLayerAddress TransportLayerAddress
                                                     OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
   iE-Extensions
                          ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} } OPTIONAL,
RL-Specific-DCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional
    }, -- FDD only
```

```
RL-Specific-EDCH-Information ::= SEQUENCE {
   rL-Specific-EDCH-Info RL-Specific-EDCH-Info,
   e-AGCH-PowerOffset
                         E-AGCH-PowerOffset
                                                                                                OPTIONAL.
   e-RGCH-PowerOffset
                         E-RGCH-PowerOffset
                                                                                                OPTIONAL,
   e-HICH-PowerOffset
                         E-HICH-PowerOffset
                                                                                                OPTIONAL.
                         ProtocolExtensionContainer { { RL-Specific-EDCH-Information-Item-ExtIEs} }
   iE-Extensions
                                                                                                 OPTIONAL,
    . . .
RL-Specific-EDCH-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Specific-EDCH-Info ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF RL-Specific-EDCH-InfoItem
RL-Specific-EDCH-InfoItem ::= SEQUENCE {
   eDCH-MACdFlow-ID
                                     EDCH-MACdFlow-ID,
   bindingID
                                     BindingID
                                                        OPTIONAL,
   -- Shall be ignored if bearer establishment with ALCAP.
    transportLayerAddress
                                     TransportLayerAddress
                                                               OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
                          ProtocolExtensionContainer { { RL-Specific-EDCH-Info-Item-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Specific-EDCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional
    }, -- FDD only
    . . .
          ::= ENUMERATED {
RLC-Mode
   rLC-AM,
   rLC-UM,
    . . .
DL-RLC-PDU-Size-Format ::= ENUMERATED {
   fixed-RLC-PDU-Size,
   flexible-RLC-PDU-Size,
    . . .
RLC-Sequence-Number
                      ::= INTEGER (0..127)
RNC-ID
                      ::= INTEGER (0..4095)
RNTI-Allocation-Indicator ::= ENUMERATED {
   true
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
```

```
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in TS 25.133 [23]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in TS 25.123 [24]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power
                                            ::= INTEGER (0..621)
-- According to mapping in TS 25.133 [23]
RT-Load-Value-IncrDecrThres ::= INTEGER(0..100)
RT-Load-Value ::= INTEGER(0..100)
RTLoadValue ::= SEOUENCE {
        uplinkRTLoadValue
                                INTEGER(0..100),
        downlinkRTLoadValue
                                INTEGER(0..100)
RxTimingDeviationForTA
                                   ::= INTEGER (0..127)
-- As specified in TS 25.435 [5], ch. 6.2.7.6
-- For 1.28Mcps TDD this IE must be set to 0.
RxTimingDeviationForTAext
                                        ::= INTEGER (0..511)
-- As specified in TS 25.435 [5] [3.84 Mcps TDD only]
RxTimingDeviationForTA768
                                        ::= INTEGER (0.. 1023)
-- As specified in TS 25.435 [5]
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
--According to mapping in TS 25.123 [24][3.84Mcps TDD only]
Rx-Timing-Deviation-Value-ext ::= INTEGER (0..32767)
--According to mapping in TS 25.123 [24][3.84Mcps TDD only]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
--According to mapping in TS 25.123 [24][1.28Mcps TDD only]
Rx-Timing-Deviation-Value-768 ::= INTEGER (0..65535)
--According to mapping in TS 25.123 [24][7.68Mcps TDD only]
RefBeta ::= INTEGER (-15..16)
-- S
SAC
                    ::= OCTET STRING (SIZE (2))
SAI ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    lAC
                        LAC,
    sAC
    iE-Extensions
                        ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
```

```
SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SAT-ID ::= INTEGER (0..63)
SCH-TimeSlot
                         ::= INTEGER (0..6)
ScaledAdjustmentRatio
                            ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
                            ::= ENUMERATED {
SchedulingInformation
   included,
   not-included
SDPCCH-PowerOffsetInformation ::= INTEGER (0..6,...)
SecondaryServingCells ::= SEOUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF SecondaryServingCellsItem
SecondaryServingCellsItem ::= SEQUENCE {
   secondaryC-ID
   numSecondarvHS-SCCH-Codes
                                NumHS-SCCH-Codes
   sixtyfourQAM-UsageAllowedIndicator
                                       SixtyfourQAM-UsageAllowedIndicator
                                                                           OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { SecondaryServingCellsItem-ExtIEs} }
   OPTIONAL,
   . . .
SecondaryServingCellsItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-ActivationIndicator
                                       CRITICALITY ignore EXTENSION MIMO-ActivationIndicator
                                                                                                                  PRESENCE optional }
{ID id-EDCH-Indicator
                                       CRITICALITY ignore EXTENSION NULL
                                                                                                                  PRESENCE optional }
ID id-power-offset-for-S-CPICH-for-MIMO-Request-Indicator CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMORequestIndicator
   PRESENCE optional } |
{ID id-OrdinalNumberOfFrequency
                                       CRITICALITY reject EXTENSION OrdinalNumberOfFrequency
                                                                                                                  PRESENCE optional |
PRESENCE optional } |
{ ID id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator CRITICALITY ignore EXTENSION DualStream-MIMO-withfourtransmitantennas-
ActivationIndicator
                     PRESENCE optional } |
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator
                                                                               CRITICALITY ignore
                                                                                                     EXTENSION
{\tt PowerOffsetForSecondaryCPICHforMIMOwithfour transmitant ennas Request Indicator}
                                                                       PRESENCE optional |
PRESENCE optional },
Secondary-CCPCH-Info-TDD::= SEQUENCE {
   dl-TFCS
                                       TFCS,
   tFCI-Coding
                                       TFCI-Coding,
   secondary-CCPCH-TDD-InformationList
                                       Secondary-CCPCH-TDD-InformationList,
   fACH-InformationList
                                       FACH-InformationList,
   pCH-InformationList
                                       PCH-InformationList,
   iE-Extensions
                                       ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs} } OPTIONAL,
```

```
Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CPICH-Information ::= SEQUENCE {
  dl-ScramblingCode
                                            DL-ScramblingCode,
  fDD-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
  iE-Extensions
                                            ProtocolExtensionContainer { { Secondary-CPICH-Information-ExtIEs} } OPTIONAL,
    . . .
Secondary-CPICH-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CPICH-Information-Change ::= CHOICE {
                                    Secondary-CPICH-Information,
new-secondary-CPICH
secondary-CPICH-shall-not-be-used NULL,
Secondary-LCR-CCPCH-Info-TDD::= SEQUENCE {
   dl-TFCS
    tFCI-Coding
                                            TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
    fACH-InformationList
                                            FACH-InformationList,
    pCH-InformationList
                                            PCH-InformationList,
                                            ProtocolExtensionContainer { Secondary-LCR-CCPCH-Info-TDD-ExtIEs} } OPTIONAL,
   iE-Extensions
Secondary-LCR-CCPCH-Info-TDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-Info-TDD768::= SEQUENCE {
   dl-TFCS
                                            TFCS,
    tFCI-Coding
                                            TFCI-Coding,
    secondary-CCPCH-TDD-InformationList768
                                                Secondary-CCPCH-TDD-InformationList768,
                                            FACH-InformationList,
    fACH-InformationList
    pCH-InformationList
                                            PCH-InformationList,
   iE-Extensions
                                            ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD768-ExtIEs} } OPTIONAL,
Secondary-CCPCH-Info-TDD768-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-InformationItem
```

```
Secondary-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlot
                                    TimeSlot.
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence.
    secondary-CCPCH-TDD-Code-Information
                                                        Secondary-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
    repetitionLength
                                    RepetitionLength,
    repetitionPeriod
                                    RepetitionPeriod,
    iE-Extensions
                                    ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
Secondary-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-LCR-CCPCH-TDD-InformationList ::= SEOUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem
Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                                TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    tFCI-Presence
                                                TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information
                                                Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionLength
                                                RepetitionLength,
    repetitionPeriod
                                                RepetitionPeriod,
    iE-Extensions
                                                ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    . . .
Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-InformationList768 ::= SEOUENCE (SIZE(0.. maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-InformationItem768
Secondary-CCPCH-TDD-InformationItem768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768,
    tFCI-Presence
                                    TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information768
                                                        Secondary-CCPCH-TDD-Code-Information768,
    tDD-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
                                    RepetitionLength,
    repetitionLength
    repetitionPeriod
                                    RepetitionPeriod,
    iE-Extensions
                                    ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem768-ExtIEs} } OPTIONAL,
Secondary-CCPCH-TDD-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-Code-InformationItem
```

```
Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode
                                   TDD-ChannelisationCode,
    iE-Extensions
                                    ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-LCR-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-Code-InformationItem
Secondary-LCR-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCodeLCR
                                    TDD-ChannelisationCodeLCR.
    s-CCPCH-TimeSlotFormat-LCR
                                    TDD-DL-DPCH-TimeSlotFormat-LCR,
   iE-Extensions
                                    ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    . . .
Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-Code-Information768 ::= SEOUENCE ( SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-Code-InformationItem768
Secondary-CCPCH-TDD-Code-InformationItem768 ::= SEQUENCE {
    tDD-ChannelisationCode768
                                        TDD-ChannelisationCode768,
    iE-Extensions
                                    ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs} } OPTIONAL,
    . . .
Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-Serving-Cell-List ::= SEQUENCE {
    possible-Secondary-Serving-Cell-List
                                                                Possible-Secondary-Serving-Cell-List,
                               ProtocolExtensionContainer { { Secondary-Serving-Cell-List-ExtIEs } }
    iE-Extensions
                                                                                                                 OPTIONAL,
    . . .
Secondary-Serving-Cell-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Multicell-EDCH-Restriction
                                                                    EXTENSION Multicell-EDCH-Restriction
                                                                                                                 PRESENCE optional },
                                            CRITICALITY ignore
    -- This IE shall never be included. If received it shall be ignored.
-- "maxNrOfHSDSCH-1" represents the maximum number of possible secondary serving cells for a Multi Cell/Dual-Band capable cell when it applies to
the range of "Possible-Secondary-Serving-Cell-List".
Possible-Secondary-Serving-Cell-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Possible-Secondary-Serving-Cell
Possible-Secondary-Serving-Cell ::= SEQUENCE {
```

```
c-ID
    iE-Extensions
                                ProtocolExtensionContainer { { Possible-Secondary-Serving-Cell-ExtIEs } }
                                                                                                                                OPTIONAL,
Possible-Secondary-Serving-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Multicell-EDCH-Restriction
                                            CRITICALITY ignore EXTENSION Multicell-EDCH-Restriction
                                                                                                         PRESENCE optional },
SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related.
Secondary-UL-Frequency-Activation-State ::= ENUMERATED {
    activated,
    deactivated,
        . . .
S-E-DPCCH-PowerOffset ::= INTEGER(0..17,...)
Seed ::= INTEGER (0..63)
Service-ID ::= OCTET STRING (SIZE (3))
S-E-ROCH-Release-Indicator ::= ENUMERATED {s-E-ROCHreleased}
SetsOfHS-SCCH-Codes ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH)) OF SetsOfHS-SCCH-CodesItem
SetsOfHS-SCCH-CodesItem ::= SEQUENCE
   hS-SCCH-PreconfiguredCodes
                                    HS-SCCH-PreconfiguredCodes,
   hSDSCH-RNTI
                       HSDSCH-RNTI,
   hSPDSCH-and-HSSCCH-ScramblingCode
                                            DL-ScramblingCode,
    sixtyfourQAM-DL-SupportIndicator
                                            SixtyfourQAM-DL-SupportIndicator
                                                                                    OPTIONAL,
    sixtyfourOAM-DL-UsageIndicator
                                        SixtyfourOAM-DL-UsageIndicator
                                                                            OPTIONAL,
    hSDSCH-TBSizeTableIndicator
                                    HSDSCH-TBSizeTableIndicator
                                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { SetsOfHS-SCCH-CodesItem-ExtIEs} } OPTIONAL,
SetsOfHS-SCCH-CodesItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-MIMO-InformationResponse
                                                    CRITICALITY ignore EXTENSION MIMO-InformationResponse
                                                                                                                                PRESENCE optional }
{ID id-power-offset-for-S-CPICH-for-MIMO
                                                    CRITICALITY ignore EXTENSION PowerOffsetForSecondaryCPICHforMIMO
                                                                                                                                PRESENCE optional}
{ID id-Measurement-Power-Offset
                                                    CRITICALITY ignore EXTENSION Measurement-Power-Offset
                                                                                                                                PRESENCE optional }
{ ID id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas CRITICALITY ignore EXTENSION
PowerOffsetForSecondaryCPICHforMIMOwithfourtransmitantennas
                                                                PRESENCE optional },
Setup-Or-ConfigurationChange-Or-Removal-Of-EDCH-On-secondary-UL-Frequency::= CHOICE {
                            Additional-EDCH-Setup-Info,
    setup
```

```
configurationChange
                           Additional-EDCH-Cell-Information-ConfigurationChange-List,
   removal
                          Additional-EDCH-Cell-Information-Removal-List.
    . . .
Setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD ::= CHOICE {
                          UL-CLTD-Information,
   setup
   configurationChange
                          UL-CLTD-Information-To-Modify,
   removal
                          UL-CLTD-Information-Removal,
    . . .
Setup-Or-ConfigurationChange-Or-Removal-Of-FTPICH-Information ::= CHOICE {
   setup
                           FTPICH-Information,
   configurationChange
                           FTPICH-Information-To-Modify,
   removal
                           FTPICH-Information-Removal,
    . . .
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER(0..614399)
SFNSFN-TDD ::= INTEGER(0..40961)
SFNSFN-TDD768 ::= INTEGER(0..81923)
GA-AccessPointPositionwithOptionalAltitude ::= SEOUENCE
   geographicalCoordinate
                                              GeographicalCoordinate,
   altitudeAndDirection
                                              GA-AltitudeAndDirection OPTIONAL,
   iE-Extensions
                                              ProtocolExtensionContainer { { GA-AccessPointPositionwithOptionalAltitude-ExtIEs} } OPTIONAL,
GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s
SFNSFNDriftRateOuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s
SFNSFNMeasurementThresholdInformation::= SEQUENCE {
   sFNSFNChangeLimit
                                      SFNSFNChangeLimit
                                                                         OPTIONAL.
   predictedSFNSFNDeviationLimit
                                      PredictedSFNSFNDeviationLimit
                                                                         OPTIONAL,
                                  iE-Extensions
                                                                                                                           OPTIONAL,
    . . .
```

```
SFNSFNMeasurementThresholdInformation-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
SFNSFNMeasurementValueInformation ::= SEOUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                        SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
       SEQUENCE {
           uC-ID
                        UC-ID.
           sFNSFNValue
                                        SFNSFNValue,
           sFNSFNQuality
                                        SFNSFNQuality
                                                                        OPTIONAL.
           sFNSFNDriftRate
                                        SFNSFNDriftRate,
                                        SFNSFNDriftRateOuality
                                                                    OPTIONAL,
           sFNSFNDriftRateQuality
           sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
           iE-Extensions
                                        ProtocolExtensionContainer { {
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs} }
                                                                                                OPTIONAL,
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation
                                                                                        SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEOUENCE {
           uC-ID
                        UC-ID.
           iE-Extensions
                                ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs } }
               OPTIONAL.
    iE-Extensions
                       ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }
                                                                                                                 OPTIONAL,
SFNSFNMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
SFNSFNOuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
SFNSFNTimeStampInformation ::= CHOICE {
    sFNSFNTimeStamp-FDD
                            SFN,
    sFNSFNTimeStamp-TDD
                            SFNSFNTimeStamp-TDD,
```

```
SFNSFNTimeStamp-TDD::= SEQUENCE {
                        SFN.
    timeSlot
                        TimeSlot,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs}} OPTIONAL,
SFNSFNTimeStamp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SFNSFNValue ::= CHOICE {
    sFNSFN-FDD
                    SFNSFN-FDD,
    sFNSFN-TDD
                    SFNSFN-TDD,
                                    -- LCR & HCR TDD
    sFNSFN-TDD768
                        SFNSFN-TDD768
SID ::= INTEGER (0..maxNrOfPDUIndexes-1)
Single-Stream-MIMO-ActivationIndicator ::= NULL
Single-Stream-MIMO-Mode-Indicator ::= ENUMERATED {
    activate,
    deactivate
SIR-Error-Value
                       ::= INTEGER (0..125)
SIR-Error-Value-IncrDecrThres
                                        ::= INTEGER (0..124)
SIR-Value
                        ::= INTEGER (0..63)
-- According to mapping in TS 25.215 [11]/TS 25.225 [14]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SixteenQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
SixtyfourQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
SixtyfourQAM-UsageAllowedIndicator ::= ENUMERATED {
    allowed,
    not-allowed
```

```
SixtyfourQAM-DL-SupportIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-supported,
    sixtyfourOAM-DL-not-supported
SixtyfourQAM-DL-UsageIndicator ::= ENUMERATED {
    sixtyfourOAM-DL-used,
    sixtyfourQAM-DL-not-used
SignatureSequenceGroupIndex ::= INTEGER (0..19)
SNA-Information ::= SEQUENCE {
   pLMN-Identity PLMN-Identity,
  listOfSNAs
                       ListOfSNAs
  iE-Extensions
                       ProtocolExtensionContainer { { SNA-Information-ExtIEs} } OPTIONAL,
SNA-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
ListOfSNAs ::= SEQUENCE (SIZE (1.. maxNrOfSNAs)) OF SNACode
SNACode ::= INTEGER (0..65535)
SourceID ::= SAI
SpecialBurstScheduling ::= INTEGER (1..256)
SpeechVersion::= BIT STRING (SIZE (4))
S-RNTI
                       ::= INTEGER (0..1048575)
-- From 0 to 2^20-1
                        ::= SEQUENCE {
S-RNTI-Group
    sRNTI
                            S-RNTI,
    sRNTI-BitMaskIndex
                            ENUMERATED {
       bl,
       b2,
       b3,
        b4,
        b5,
        b6,
        b7,
        b8,
        b9,
       b10,
       b11,
       b12,
```

```
b13,
       b14,
       b15.
       b16,
       b17,
       b18,
       b19,...
SRB-Delay ::= INTEGER(0..7,...)
SSDT-SupportIndicator ::= ENUMERATED {
    not-Used-sSDT-supported,
    sSDT-not-supported
Standalone-Midamble-Channel-Indicator ::= ENUMERATED {
    used,
    not-used
Status-Flag ::= ENUMERATED {
    activate,
    deactivate
STTD-SupportIndicator ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
Support-8PSK ::= ENUMERATED {
    v8PSK-Supported
Support-PLCCH ::= ENUMERATED {
    vPLCCH-Supported
Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order ::= ENUMERATED
    supported,
    not-supported
SyncCase ::= INTEGER (1..2,...)
SynchronisationConfiguration ::= SEQUENCE {
   n-INSYNC-IND
                           INTEGER (1..256),
   n-OUTSYNC-IND
                           INTEGER (1..256),
    t-RLFAILURE
                           INTEGER (0..255),
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
```

```
ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs} }
                                                                                                             OPTIONAL,
    iE-Extensions
SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SYNC-UL-ProcParameters ::= SEQUENCE {
    maxSYNC-UL-transmissions
                                     ENUMERATED {v1, v2, v4, v8, ...},
                                     INTEGER (0..3, ...),
    powerRampStep
    . . .
-- T
T1 ::= ENUMERATED {v10, v20, v30, v40, v50, v60, v70, v80, v90, v100, v120, v140, v160, v200, v300, v400, ...}
TAC ::= OCTET STRING (SIZE (2))
TargetID ::= CGI
TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB
TDD-ChannelisationCode
                                 ::= ENUMERATED {
    chCodeldiv1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCodel6div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6.
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
```

```
chCode16div14,
    chCode16div15,
    chCode16div16,
TDD-ChannelisationCode768
                                      ::= ENUMERATED
    chCodeldiv1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2.
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCodel6div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    chCode32div1,
    chCode32div2,
    chCode32div3,
    chCode32div4,
    chCode32div5,
    chCode32div6,
    chCode32div7,
    chCode32div8,
    chCode32div9.
    chCode32div10,
    chCode32div11,
    chCode32div12,
    chCode32div13,
    chCode32div14,
    chCode32div15,
    chCode32div16,
```

```
chCode32div17,
    chCode32div18.
    chCode32div19.
    chCode32div20,
    chCode32div21.
    chCode32div22,
    chCode32div23,
    chCode32div24,
    chCode32div25,
    chCode32div26,
    chCode32div27,
    chCode32div28,
    chCode32div29,
    chCode32div30,
    chCode32div31,
    chCode32div32,
TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
    modulation
                                    Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD or 7.68Mcps TDD
TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifyItem
TDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode
                                        UL-FP-Mode OPTIONAL,
    toAWS
                                        ToAWS
                                                     OPTIONAL,
    toAWE
                                        ToAWE
                                                     OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                        TDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions
                                        ProtocolExtensionContainer { {TDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    . . .
TDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlOos
                                        CRITICALITY
                                                         ignore
                                                                     EXTENSION
                                                                                 TnlOos PRESENCE optional
    . . .
TDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifySpecificItem
TDD-DCHs-to-ModifySpecificItem ::= SEOUENCE {
    dCH-ID
                                     DCH-ID,
    ul-CCTrCH-ID
                                     CCTrCH-ID
                                                     OPTIONAL,
    dl-CCTrCH-ID
                                    CCTrCH-ID
                                                     OPTIONAL,
    ul-TransportformatSet
                                     TransportFormatSet OPTIONAL,
    dl-TransportformatSet
                                     TransportFormatSet OPTIONAL,
    allocationRetentionPriority
                                    AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                     FrameHandlingPriority OPTIONAL,
    iE-Extensions
                                     ProtocolExtensionContainer { {TDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
    . . .
```

```
TDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     PRESENCE optional
   { ID id-TrafficClass
                         CRITICALITY ignore EXTENSION TrafficClass
                                                                           PRESENCE optional },
   . . .
TDD-DL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem
TDD-DL-Code-InformationItem ::= SEQUENCE {
                                 DPCH-ID,
                                 TDD-ChannelisationCode,
   tDD-ChannelisationCode
   iE-Extensions
                                 ProtocolExtensionContainer { {TDD-DL-Code-InformationItem-ExtIEs} } OPTIONAL.
TDD-DL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEOUENCE {
   dPCH-ID
                                         DPCH-ID,
   tdd-ChannelisationCodeLCR
                                         TDD-ChannelisationCodeLCR.
   tdd-DL-DPCH-TimeSlotFormat-LCR
                                         TDD-DL-DPCH-TimeSlotFormat-LCR,
   iE-Extensions
                                         ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                        OPTIONAL,
TDD-DL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-InformationItem768
TDD-DL-Code-InformationItem768 ::= SEQUENCE {
   dPCH-ID
   tDD-ChannelisationCode768
                                 TDD-ChannelisationCode768,
                                 ProtocolExtensionContainer { {TDD-DL-Code-InformationItem768-ExtIEs} } OPTIONAL,
   iE-Extensions
TDD-DL-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
   qPSK
                              QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
   eightPSK
                              EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
```

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```
QPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
TDD-DPCHOffset ::= CHOICE {
    initialOffset
                    INTEGER (0..255),
   noinitialOffset
                       INTEGER (0..63)
TDD-PhysicalChannelOffset
                               ::= INTEGER (0..63)
TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-sizel.
    step-size2,
    step-size3,
TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {
    step-sizel,
    step-size2,
    step-size3,
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} } OPTIONAL,
   iE-Extensions
TDD-UL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-LCR-Information ::= SEOUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
   dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-UL-DPCH-TimeSlotFormat-LCR
                                            TDD-UL-DPCH-TimeSlotFormat-LCR,
   iE-Extensions
                                            ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} }
                                                                                                                                OPTIONAL,
TDD-UL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-UL-Code-InformationItem768
```

```
TDD-UL-Code-InformationItem768 ::= SEQUENCE {
    dPCH-ID
                                    DPCH-ID.
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768.
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-UL-Code-InformationItem768-ExtIEs} } OPTIONAL,
TDD-UL-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
                                QPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
                                EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
OPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..69,...)
EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    . . .
TFCI-Presence ::= ENUMERATED {
    present,
    not-present
TFCI-SignallingMode ::= ENUMERATED {
   normal,
   not-Used-split
-- The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.
                    ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
TGPRC
                    ::= INTEGER (0..511)
-- 0 = infinity
TGPSID
                   ::= INTEGER (1.. maxTGPS)
TGSN
                    ::= INTEGER (0..14)
TimeSlot
                       ::= INTEGER (0..14)
TimeSlotLCR ::= INTEGER (0..6)
```

```
Time-Stamp ::= INTEGER (0..9999)
-- Unit: 10ms
TimingAdvanceApplied ::= ENUMERATED {
   yes,
    no
SynchronisationIndicator ::= ENUMERATED {
    timingMaintainedSynchronisation,
TMGI ::= SEQUENCE
    plmn-id
               PLMN-Identity,
    service-id Service-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { { TMGI-ExtIEs} }
                                                                                        OPTIONAL,
TMGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TnlOos ::= CHOICE {
                                DsField,
    dsField
    genericTrafficCategory
                               GenericTrafficCategory,
TOAWE
                       ::= INTEGER (0..2559)
ToAWS
                       ::= INTEGER (0..1279)
TraceDepth
                               ::= ENUMERATED {
   minimum,
   medium,
    maximum,
    . . .
TraceRecordingSessionReference ::= INTEGER (0..65535)
TraceReference
                                ::= OCTET STRING (SIZE (2..3))
TrafficClass ::= ENUMERATED {
    conversational,
    streaming,
    interactive,
    background,
```

```
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
   SEOUENCE {
       tGPSID
                      TGPSID,
       t.GSN
                      TGSN,
       tGL1
                      GapLength,
       t.GL2
                      GapLength OPTIONAL,
       tGD
                      TGD,
       +GPI-1
                      GapDuration,
       not-to-be-used-1
                                 GapDuration OPTIONAL,
           -- This IE shall never be included in the SEQUENCE. If received it shall be ignored
       uL-DL-mode
                      UL-DL-mode,
       downlink-Compressed-Mode-Method
                                         Downlink-Compressed-Mode-Method
                                                                           OPTIONAL,
           -- This IE shall be present if the value of the UL/DL mode IE is "DL only" or "UL/DL"
       uplink-Compressed-Mode-Method
                                         Uplink-Compressed-Mode-Method
                                                                          OPTIONAL,
           -- This IE shall be present if the value of the \mathit{UL/DL} mode IE is "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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
Transmission-Gap-Pattern-Sequence-ScramblingCode-Information
                                                           ::= ENUMERATED{
  code-change,
  nocode-change
Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
   SEOUENCE {
       tGPSID
                      TGPSID,
       tGPRC
                      TGPRC,
       tGCFN
                      CFN,
       iE-Extensions
                          ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   Affected-HSDSCH-Serving-Cell-List ::= SEQUENCE (SIZE (0.. maxNrofHSDSCH)) OF C-ID
                  ::=ENUMERATED {
TransmissionMode
   p-t-p,
   p-t-m,
   not-provided,
```

```
Transmission-Mode-Information::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Transmission-Mode-Information-List
Transmission-Mode-Information-List ::= SEQUENCE {
    c-ID
    transmissionMode
                                        TransmissionMode,
    iE-Extensions
                                        ProtocolExtensionContainer { { Transmission-Mode-Information-List-ExtIEs} } OPTIONAL,
    . . .
Transmission-Mode-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
   msec-20,
   msec-40,
    msec-80,
    . . .
TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
   msec-10.
   msec-20,
   msec-40,
   msec-80,
    dynamic,
    . . .
TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- according to mapping in TS 25.133 [23] and TS 25.123 [24]
Transmitted-Carrier-Power-Value-IncrDecrThres ::= INTEGER(0..100)
-- according to mapping in TS 25.133 [23] and TS 25.123 [24]
Transport-Block-Size-Index ::= INTEGER(1..maxNrOfHS-DSCHTBSs)
TUTRANGANSS ::= SEOUENCE {
    mS
                    INTEGER(0..16383),
    1S
                    INTEGER(0..4294967295)
TUTRANGANSSAccuracyClass ::= ENUMERATED {
    ganssAccuracy-class-A,
    ganssAccuracy-class-B,
```

```
ganssAccuracy-class-C,
TUTRANGANSSMeasurementThresholdInformation ::= SEOUENCE
    tUTRANGANSSChangeLimit
                                          INTEGER(1..256)
   OPTIONAL,
   predictedTUTRANGANSSDeviationLimit
                                          INTEGER(1..256)
    OPTIONAL,
                          ProtocolExtensionContainer { { TUTRANGANSSMeasurementThresholdInformation-ExtIEs } }
    ie-Extensions
                                                                                                              OPTIONAL,
TUTRANGANSSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TUTRANGANSSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGANSS
                                  TUTRANGANSS,
    tUTRANGANSSOuality
                                  INTEGER(0..255)
    OPTIONAL,
    tUTRANGANSSDriftRate
                                  INTEGER(-50..50),
    tUTRANGANSSDriftRateQuality
                                  INTEGER(0..50)
    OPTIONAL,
                                  ie-Extensions
                                                                                                                   OPTIONAL,
    . . .
TUTRANGANSSMeasurementValueInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Time-ID
                                  CRITICALITY ignore
                                                         EXTENSION GANSS-Time-ID
                                                                                    PRESENCE
                                                                                                               optional},
    . . .
TUTRANGPS ::= SEQUENCE {
               INTEGER (0..16383),
   ms-part
   ls-part
               INTEGER (0..4294967295)
TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s
TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s
TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
```

```
TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit
                                            TUTRANGPSChangeLimit
                                                                                    OPTIONAL.
    predictedTUTRANGPSDeviationLimit
                                            PredictedTUTRANGPSDeviationLimit
                                                                                    OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }
                                                                                                                                OPTIONAL,
TUTRANGPSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
        tUTRANGPS
                                       TUTRANGPS,
       tUTRANGPSQuality
                                       TUTRANGPSQuality
                                                                        OPTIONAL,
        tUTRANGPSDriftRate
                                       TUTRANGPSDriftRate,
       tUTRANGPSDriftRateQuality
                                       TUTRANGPSDriftRateQuality
                                                                        OPTIONAL,
       iEe-Extensions
                                        ProtocolExtensionContainer { { TUTRANGPSMeasurementValueInformationItem-ExtIEs} }
                                                                                                                                       OPTIONAL.
TUTRANGPSMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip
TransportBearerID
                      ::= INTEGER (0..4095)
TransportBearerRequestIndicator
                                  ::= ENUMERATED {
    bearer-requested,
    bearer-not-requested,
TransportBearerNotRequestedIndicator
                                           ::= ENUMERATED {
    transport-bearer-shall-not-be-established,
    transport-bearer-may-not-be-established
TransportBearerNotSetupIndicator
                                        ::= ENUMERATED {
    transport-bearer-not-setup
TransportBlockSize
                           ::= INTEGER (0..5000)
-- Unit is bits
TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors
                          SEQUENCE {
```

```
betaC
                                BetaCD,
       betaD
                                BetaCD,
       refTFCNumber
                                RefTFCNumber
                                                OPTIONAL.
       iE-Extensions
                                ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs} } OPTIONAL,
   refTFCNumber
                           RefTFCNumber.
SignalledGainFactors-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS ::= SEOUENCE {
   tFCSvalues
                        CHOICE {
       no-Split-in-TFCI
                                    TFCS-TFCSList,
       not-Used-split-in-TFCI
                                    NULL,
       -- This choice shall never be made by the SRNC and the DRNC shall consider the procedure as failed if it is received.
                        ProtocolExtensionContainer { { TFCS-ExtIEs} }
    iE-Extensions
                                                                            OPTIONAL,
TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEOUENCE {
       cTFC
                           TFCS-CTFC,
                       TransportFormatCombination-Beta
                                                            OPTIONAL,
       -- The IE shall be present if the TFCS concerns a UL DPCH [FDD - or PRACH channel in FDD]
                           ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }
    . . .
TFCS-TFCSList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS-CTFC ::= CHOICE {
   ctfc2bit
                                        INTEGER (0..3),
   ctfc4bit
                                        INTEGER (0..15),
   ctfc6bit
                                        INTEGER (0..63),
   ctfc8bit
                                        INTEGER (0..255),
   ctfc12bit
                                        INTEGER (0..4095),
    ctfc16bit
                                        INTEGER (0..65535),
    ctfcmaxbit
                                        INTEGER (0..maxCTFC)
TransportFormatSet ::= SEQUENCE {
    dynamicParts
                           TransportFormatSet-DynamicPartList,
```

```
semi-staticPart
                            TransportFormatSet-Semi-staticPart,
    iE-Extensions
                            ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
       nrOfTransportBlocks
                               NrOfTransportBlocks,
       transportBlockSize
                               TransportBlockSize
                                                        OPTIONAL
        -- This IE shall be present if nrOfTransportBlocks is greater than 0 --,
                           TransportFormatSet-ModeDP,
       iE-Extensions
                                ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-ExtIEs} } OPTIONAL,
        . . .
TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-ModeDP ::= CHOICE {
                       TDD-TransportFormatSet-ModeDP,
    notApplicable
                       NULL,
TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
    transmissionTimeIntervalInformation
                                            TransmissionTimeIntervalInformation
    -- This IE shall be present if the "Transmission Time Interval" of the "Semi-static Transport Format Information" is "dynamic". Otherwise it is
absent.
                                            ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
    iE-Extensions
TDD-TransportFormatSet-ModeDP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
    SEQUENCE {
       transmissionTimeInterval
                                   TransmissionTimeIntervalDynamic,
       iE-Extensions
                                ProtocolExtensionContainer { {TransmissionTimeIntervalInformation-ExtIEs} } OPTIONAL,
TransmissionTimeIntervalInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in TS 25.215 [11]/TS 25.225 [14]
```

```
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
TransportFormatManagement ::= ENUMERATED {
    cell-based.
    ue-based,
    . . .
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime
                            TransmissionTimeIntervalSemiStatic,
    channelCoding
                            ChannelCodingType,
    codingRate
                                                OPTIONAL
                        CodingRate
    -- This IE shall be present if channelCoding is 'convolutional' or 'turbo' --,
    rateMatcingAttribute
                                RateMatchingAttribute,
    cRC-Size
                        CRC-Size,
    mode
                        TransportFormatSet-ModeSSP,
                            ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs} } OPTIONAL,
    iE-Extensions
TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransportFormatSet-ModeSSP ::= CHOICE {
                    SecondInterleavingMode,
    notApplicable
                            NULL,
TransportLayerAddress
                                ::= BIT STRING (SIZE(1..160, ...))
TrCH-SrcStatisticsDescr
                           ::= ENUMERATED {
    speech.
    rRC,
    unknown,
TSN-Length ::= ENUMERATED {
    tsn-6bits,
    tsn-9bits
TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
TSTD-Support-Indicator ::= ENUMERATED {
    tSTD-supported,
    tSTD-not-supported
```

```
TxDiversityIndicator
                        ::= ENUMERATED {
    true,
    false
TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    . . .
-- U
UARFCN
                        ::= INTEGER (0..16383,...)
-- Corresponds to: 0.0Hz..3276.6Mhz. See TS 25.105 [7], TS 25.101 [43]
UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
    over8,
    . . .
UDREGrowthRate ::=
                                     ENUMERATED {
                                         growth-1-point-5,
                                         growth-2,
                                        growth-4,
                                        growth-6,
                                        growth-8,
                                         growth-10,
                                         growth-12,
                                        growth-16
UDREValidityTime
                                     ENUMERATED {
                    ::=
                                         val-20sec,
                                         val-40sec,
                                         val-80sec,
                                         val-160sec,
                                         val-320sec,
                                         val-640sec,
                                         val-1280sec,
                                         val-2560sec }
UE-AggregateMaximumBitRate ::= SEQUENCE {
    uE-AggregateMaximumBitRateDownlink
                                             UE-AggregateMaximumBitRateDownlink OPTIONAL,
    uE-AggregateMaximumBitRateUplink
                                             UE-AggregateMaximumBitRateUplink
                                                                                  OPTIONAL,
    . . .
UE-AggregateMaximumBitRateDownlink
                                             ::= INTEGER (1..100000000)
-- Unit is bits per sec
```

p,

```
UE-AggregateMaximumBitRateUplink
                                            ::= INTEGER (1..100000000)
-- Unit is bits per sec
UE-AggregateMaximumBitRate-Enforcement-Indicator ::= NULL
UE-Capabilities-Info ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64....).
                                        ProtocolExtensionContainer { { UE-Capabilities-Info-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
UE-Capabilities-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-LCRTDD-uplink-Physical-Channel-Capability
                                                        CRITICALITY ignore EXTENSION LCRTDD-Uplink-Physical-Channel-Capability
                                                                                                                                         PRESENCE
optional}
    {ID id-number-Of-Supported-Carriers
                                                         CRITICALITY reject EXTENSION Number-Of-Supported-Carriers
                                                                                                                                 PRESENCE optional}
    {ID id-MIMO-SFMode-Supported-For-HSPDSCHDualStream
                                                       CRITICALITY ignore EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
                                                                                                                                 PRESENCE optional }
    ID id-MultiCarrier-HSDSCH-Physical-Layer-Category CRITICALITY ignore EXTENSION LCRTDD-HSDSCH-Physical-Layer-Category
                                                                                                                                 PRESENCE optional}
    {ID id-UE-TS0-CapabilityLCR
                                                         CRITICALITY ignore EXTENSION UE-TSO-CapabilityLCR
                                                                                                                                 PRESENCE optional }
    {ID id-UE-RF-Band-CapabilityLCR
                                                         CRITICALITY ignore EXTENSION UE-RF-Band-CapabilityLCR
                                                                                                                                 PRESENCE
conditional },
    . . .
UE-TSO-CapabilityLCR ::= ENUMERATED {
    tS0-Capable,
    tS0-Not-Capable
UE-RF-Band-CapabilityLCR ::= SEOUENCE (SIZE (1.. maxFreqBandsTDD)) OF Radio-Frequency-BandItem
Radio-Frequency-BandItem ::= SEQUENCE {
    radio-Frequency-Band
                                            Radio-Frequency-Band,
    iE-Extensions
                                            ProtocolExtensionContainer { { Radio-Frequency-BandItem-ExtIEs } }
                                                                                                                                 OPTIONAL,
    . . .
Radio-Frequency-Band ::= ENUMERATED {
    a,
    b,
    C,
    d,
    e.
    f,
    g,
    h,
    i,
    j,
    k,
    1.
    m,
    n,
    ο,
```

```
Radio-Frequency-BandItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
LCRTDD-HSDSCH-Physical-Layer-Category ::= INTEGER (1..64)
UE-DPCCH-burst1 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DPCCH-burst2 ::= ENUMERATED {v1, v2, v5}
    -- Unit subframe
UE-DRX-Cycle ::= ENUMERATED {v4, v5, v8, v10, v16, v20}
    -- Unit subframe
UE-DRX-Grant-Monitoring ::= BOOLEAN
    -- true: applied, false: not applied
UE-DTX-Cycle1-2ms ::= ENUMERATED \{v1, v4, v5, v8, v10, v16, v20\}
    -- Unit subframe
UE-DTX-Cycle1-10ms ::= ENUMERATED {v1, v5, v10, v20}
    -- Unit subframe
UE-DTX-Cycle2-2ms ::= ENUMERATED {v4, v5, v8, v10, v16, v20, v32, v40, v64, v80, v128, v160}
    -- Unit subframe
UE-DTX-Cycle2-10ms ::= ENUMERATED {v5, v10, v20, v40, v80, v160}
    -- Unit subframe
UE-DTX-DRX-Offset ::= INTEGER (0..159)
    -- Unit subframe
UE-DTX-Long-Preamble ::= ENUMERATED {v2, v4, v15}
    -- Units of slots
UEIdentity
                            ::= CHOICE {
    imsi
                IMSI,
    imei
                IMEI,
    imeisv
                IMEISV,
    . . .
UEMeasurementHysteresisTime ::= INTEGER (0..15)
    -- Unit dB
    -- Range 0..7.5 dB
    -- Step 0.5 dB
UEMeasurementParameterModAllow ::= ENUMERATED {
    parameterModificationAllowed,
```

```
UEMeasurementReportCharacteristics ::= CHOICE {
   periodic
                        UEMeasurementReportCharacteristicsPeriodic,
                        UEMeasurementReportCharacteristicsEvent1h,
    event1h
    event1i
                        UEMeasurementReportCharacteristicsEventli,
    event6a
                        UEMeasurementReportCharacteristicsEvent6a,
                        UEMeasurementReportCharacteristicsEvent6b,
    event6b
    event6c
                        UEMeasurementReportCharacteristicsEvent6c,
    event6d
                        UEMeasurementReportCharacteristicsEvent6d,
    extension-ReportCharacteristics
                                        UEMeasurementReportCharacteristics-Extension
UEMeasurementReportCharacteristicsEvent1h ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent1h-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UEMeasurementReportCharacteristicsEvent1h-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEventli ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEventli-ExtIEs} } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEventli-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6a ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6a-ExtIEs} } OPTIONAL,
    iE-Extensions
UEMeasurementReportCharacteristicsEvent6a-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6b ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6b-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
UEMeasurementReportCharacteristicsEvent6b-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6c ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6c-ExtIEs} } OPTIONAL,
    iE-Extensions
UEMeasurementReportCharacteristicsEvent6c-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6d ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6d-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UEMeasurementReportCharacteristicsEvent6d-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsPeriodic ::= SEQUENCE
                            UEMeasurementReportCharacteristicsPeriodicAmountofReporting,
    amountofReporting
    reportingInterval
                            UEMeasurementReportCharacteristicsPeriodicReportingInterval,
                            ProtocolExtensionContainer { {UEMeasurementReportCharacteristicsPeriodic-ExtIEs} } OPTIONAL,
   iE-Extensions
UEMeasurementReportCharacteristicsPeriodicAmountofReporting::= ENUMERATED {
    r1,
    r2,
    r4,
    r8,
   r16,
   r32,
   r64,
    rInfinity
UEMeasurementReportCharacteristicsPeriodicReportingInterval::= ENUMERATED {
   r250,
   r500,
   r1000,
   r2000,
   r3000,
   r4000,
   r6000,
    r8000,
```

```
r12000,
   r16000,
   r20000,
   r24000,
   r28000,
   r32000,
   r64000
UEMeasurementReportCharacteristicsPeriodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristics-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementReportCharacteristics-ExtensionIE }}
UEMeasurementReportCharacteristics-ExtensionIE RNSAP-PROTOCOL-IES ::= {
                               ::= CHOICE {
UEMeasurementThreshold
    timeslotISCP
                                    UEMeasurementThresholdDLTimeslotISCP,
    uETransmitPower
                                   UEMeasurementThresholdUETransmitPower,
    extension-UEMeasurementThreshold
                                       UEMeasurementThreshold-Extension
UEMeasurementThresholdDLTimeslotISCP ::=
                                            INTEGER(-115..-25)
UEMeasurementThresholdUETransmitPower ::= INTEGER(-50..33)
UEMeasurementThreshold-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementThreshold-ExtensionIE }}
UEMeasurementThreshold-ExtensionIE RNSAP-PROTOCOL-IES ::= {
UEMeasurementTimeslotInfoHCR::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfoHCR-IEs
UEMeasurementTimeslotInfoHCR-IEs ::= SEQUENCE {
    timeSlot
                                   TimeSlot,
                                   UEMeasurementTimeslotInfoHCRBurstType,
    burstType
                                   ProtocolExtensionContainer { { UEMeasurementTimeslotInfoHCR-IEs-ExtIEs} }
   iE-Extensions
                                                                                                                        OPTIONAL,
UEMeasurementTimeslotInfoHCRBurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
UEMeasurementTimeslotInfoHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
UEMeasurementTimeslotInfoLCR::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementTimeslotInfoLCR-IEs
UEMeasurementTimeslotInfoLCR-IEs ::= SEOUENCE {
    timeSlot
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfoLCR-IEs-ExtIEs} }
                                                                                                                          OPTIONAL,
UEMeasurementTimeslotInfoLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementTimeslotInfo768::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfo768-IEs
UEMeasurementTimeslotInfo768-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    burstType
                                    UEMeasurementTimeslotInfo768BurstType,
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfo768-IEs-ExtIEs} }
                                                                                                                          OPTIONAL,
UEMeasurementTimeslotInfo768BurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
    . . .
UEMeasurementTimeslotInfo768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementTimeToTrigger ::= ENUMERATED {
    r10,
    r20,
    r40,
    r60,
    r80,
    r100,
    r120,
    r160,
    r200,
    r240,
   r320,
    r640,
   r1280,
    r2560,
    r5000
```

```
UEMeasurementType ::= ENUMERATED {
    primary-CCPCH-RSCP,
    dL-Timeslot-ISCP.
    uE-Transmitted-power,
    . . .
UEMeasurementValue ::= CHOICE {
    uE-Transmitted-Power
                                UE-MeasurementValue-UE-Transmitted-Power,
    primary-CCPCH-RSCP
                                UE-MeasurementValue-Primary-CCPCH-RSCP,
    dL-Timeslot-ISCP
                               UE-MeasurementValue-DL-Timeslot-ISCP,
    extension-UEMeasurementValue
                                        UEMeasurementValue-Extension
UE-MeasurementValue-UE-Transmitted-Power ::= SEOUENCE {
                                             UEMeasurementValueTransmittedPowerListHCR OPTIONAL,
    uEMeasurementTransmittedPowerListHCR
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
    uEMeasurementTransmittedPowerListLCR
                                          UEMeasurementValueTransmittedPowerListLCR
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD or 7.68Mcps TDD
    iE-Extensions
                                                ProtocolExtensionContainer { { UE-MeasurementValue-UE-Transmitted-Power-ExtIEs} }
    OPTIONAL,
    . . .
UE-MeasurementValue-UE-Transmitted-Power-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UEMeasurementValueTransmittedPowerList768
                                                                CRITICALITY ignore EXTENSION UEMeasurementValueTransmittedPowerList768
       PRESENCE optional },
    . . .
UEMeasurementValueTransmittedPowerListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerListHCR-IEs
UEMeasurementValueTransmittedPowerListHCR-IEs ::= SEQUENCE {
   timeSlot
                                    TimeSlot,
    uETransmitPower
                                    INTEGER(0..104),
    -- mapping according to TS 25.123 [24], values 0..20 not used
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs} }
    iE-Extensions
   OPTIONAL,
    . . .
UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementValueTransmittedPowerListLCR ::= SEOUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTransmittedPowerListLCR-IEs
UEMeasurementValueTransmittedPowerListLCR-IEs ::= SEQUENCE {
    timeSlotLCR
                                    TimeSlotLCR,
    uETransmitPower
                                    INTEGER(0..104),
    -- mapping according to TS 25.123 [24], values 0..20 not used
    iE-Extensions
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs} }
    OPTIONAL,
```

```
UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTransmittedPowerList768 ::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerList768-IEs
UEMeasurementValueTransmittedPowerList768-IEs ::= SEOUENCE {
   timeSlot
                                  TimeSlot,
   uETransmitPower
                                  INTEGER(0..104),
   -- mapping according to TS 25.123 [24], values 0..20 not used
   iE-Extensions
                                              ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs} }
   OPTIONAL,
    . . .
UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UE-MeasurementValue-Primary-CCPCH-RSCP::= SEQUENCE {
   primaryCCPCH-RSCP
                                      PrimaryCCPCH-RSCP
                                                                     OPTIONAL,
   primaryCCPCH-RSCP-Delta
                                      PrimaryCCPCH-RSCP-Delta
                                                                     OPTIONAL,
   iE-Extensions
                                      ProtocolExtensionContainer { { UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs} }
                                                                                                                          OPTIONAL,
UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UE-MeasurementValue-DL-Timeslot-ISCP ::= SEOUENCE {
   uEMeasurementTimeslotISCPListHCR
                                         UEMeasurementValueTimeslotISCPListHCR OPTIONAL,
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
    OPTIONAL,
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD or 7.68Mcps TDD
   iE-Extensions
                                              ProtocolExtensionContainer { { UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs} }
                                                                                                                                  OPTIONAL,
    . . .
UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UEMeasurementValueTimeslotISCPList768
                                                    CRITICALITY ignore EXTENSION UEMeasurementValueTimeslotISCPList768
   PRESENCE optional },
    . . .
UEMeasurementValueTimeslotISCPListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPListHCR-IES
UEMeasurementValueTimeslotISCPListHCR-IEs ::= SEOUENCE {
   timeSlot
                                  TimeSlot,
   dL-TimeslotISCP
                                  DL-TimeslotISCP,
```

```
ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs} }
    iE-Extensions
                                                                                                                                OPTIONAL,
UEMeasurementValueTimeslotISCPListHCR-IES-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTimeslotISCPListLCR ::= SEOUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTimeslotISCPListLCR-IEs
UEMeasurementValueTimeslotISCPListLCR-IEs ::= SEOUENCE {
    timeSlotLCR
                                   TimeSlotLCR,
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs} }
   iE-Extensions
                                                                                                                                OPTIONAL,
    . . .
UEMeasurementValueTimeslotISCPListLCR-IES-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTimeslotISCPList768 ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPList768-IES
UEMeasurementValueTimeslotISCPList768-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   dL-TimeslotISCP
                                    DL-TimeslotISCP,
   iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPList768-IEs-ExtIEs} }
                                                                                                                                OPTIONAL,
UEMeasurementValueTimeslotISCPList768-IES-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementValue-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementValue-ExtensionIE }}
UEMeasurementValue-ExtensionIE RNSAP-PROTOCOL-IES ::= {
UEMeasurementValueInformation ::= CHOICE {
    measurementAvailable
                                UEMeasurementValueInformationAvailable,
    measurementnotAvailable
                                UEMeasurementValueInformationnotAvailable
UEMeasurementValueInformationAvailable::= SEQUENCE {
    uEmeasurementValue
                                UEMeasurementValue,
   ie-Extensions
                                ProtocolExtensionContainer { { UEMeasurementValueInformationAvailableItem-ExtIEs} }
                                                                                                                                OPTIONAL,
UEMeasurementValueInformationAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
UEMeasurementValueInformationnotAvailable ::= NULL
UE-SupportIndicatorExtension ::= BIT STRING (SIZE (32))
-- First bit: Different HS-SCCH In Consecutive TTIs Support Indicator
-- Second bit: HS-SCCH orders in HS-SCCH-less Operation Support Indicator
-- Third bit: RRC Rel-9 (onwards) handling of DL secondary HS-DSCH (de)activation state Support Indicator
-- Fourth bit: UE DTX/DRX related HS-SCCH orders uniform behavior indicator
-- Fifth bit: UE longer HARO processing time for Multiflow and MIMO indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
UE-State ::= CHOICE {
    cell-fach-pch
                                                                Cell-Fach-Pch-State,
    ura-pch
                                                                Ura-Pch-State,
    . . .
UE-transmission-power-headroom-Value ::= INTEGER (0..31)
Cell-Fach-Pch-State ::= SEOUENCE {
    d-RNTI
                                    D-RNTI,
    iE-Extensions
                                    ProtocolExtensionContainer { { Cell-Fach-Pch-State-ExtIEs} }
                                                                                                          OPTIONAL,
Cell-Fach-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Ura-Pch-State ::= SEOUENCE {
    srnc-id
                                    RNC-ID,
    ura-id
                                    URA-ID,
    iE-Extensions
                                    ProtocolExtensionContainer { { Ura-Pch-State-ExtIEs} }
                                                                                                 OPTIONAL,
Ura-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-SRNC-ID
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                                                         PRESENCE optional
                                                                                                                                                },
    . . .
UL-Delta-T2TP ::= INTEGER (0..6,...)
UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
UL-DPDCHIndicatorEDCH ::= ENUMERATED
    uL-DPDCH-present,
    uL-DPDCH-not-present}
UL-Timeslot-Information::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem
```

```
UL-Timeslot-InformationItem ::= SEQUENCE {
   timeSlot
                                  TimeSlot.
   midambleShiftAndBurstType
                                  MidambleShiftAndBurstType,
   tFCI-Presence
                                  TFCI-Presence,
   uL-Code-Information
                                   TDD-UL-Code-Information.
                                   ProtocolExtensionContainer { {UL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEOUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   tFCI-Presence
                                          TFCI-Presence,
   uL-Code-LCR-InformationList
                                      TDD-UL-Code-LCR-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
                                                                                                                            OPTIONAL,
UL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    EXTENSION PLCCHinformation
                                                                                                             PRESENCE optional },
PLCCHinformation ::= SEQUENCE {
   tDD-ChannelisationCode
                                          TDD-ChannelisationCode,
   timeSlotLCR
                                          TimeSlotLCR,
   midambleShiftLCR
                                          MidambleShiftLCR,
   sequenceNumber
                                          PLCCHsequenceNumber,
                                          ProtocolExtensionContainer { { PLCCHinformation-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
PLCCHinformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-Information768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem768
UL-Timeslot-InformationItem768 ::= SEQUENCE {
   timeSlot
                                  TimeSlot,
   midambleShiftAndBurstType768
                                      MidambleShiftAndBurstType768,
   tFCI-Presence
                                  TFCI-Presence,
   uL-Code-Information768
                                      TDD-UL-Code-Information768,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-Timeslot-InformationItem768-ExtIEs} } OPTIONAL,
UL-Timeslot-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
```

```
UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-TimeSlot-ISCP-InfoItem
UL-TimeSlot-ISCP-InfoItem ::= SEOUENCE {
    timeSlot
    uL-TimeslotISCP
                               UL-TimeslotISCP.
                               ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeSlot-ISCP-LCR-InfoItem
UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR
                                   TimeSlotLCR,
    iSCP
                                   UL-Timeslot-ISCP-Value,
    iE-Extensions
                                   ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} }
                                                                                                                        OPTIONAL,
UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-ISCP-Value ::= UL-TimeslotISCP
UL-Timeslot-ISCP-Value-IncrDecrThres ::= INTEGER(0..126)
-- Unit dB. Step 0.5dB
-- e.g. Value 100 means 50dB
UL-TimingAdvanceCtrl-LCR ::= SEQUENCE {
    sync-UL-codes-bitmap
                                                BIT STRING (SIZE(8)),
    fPACH-info
                                                FPACH-Information,
                                                INTEGER (-120 .. -58, ...),
    prxUpPCHdes
                                                SYNC-UL-ProcParameters,
    syncUL-procParameter
    mMax
                                                INTEGER (1..32),
    . . .
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
UL-SIR
                       ::= INTEGER (-82..173)
-- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
-- E.g. Value 173 means 17.3 dB
-- Unit dB. Step 0.1 dB.
```

```
UC-ID ::= SEQUENCE {
    rNC-ID
                        RNC-ID,
    c-ID
    iE-Extensions
                            ProtocolExtensionContainer { {UC-ID-ExtIEs} } OPTIONAL,
UC-ID-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-RNC-ID
                                CRITICALITY reject
                                                         EXTENSION
                                                                     Extended-RNC-ID PRESENCE optional } ,
    . . .
UL-DPCCH-SlotFormat
                            ::= INTEGER (0..5,...)
UL-FP-Mode ::= ENUMERATED {
   normal,
    silent,
UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
UL-ScramblingCode ::= SEQUENCE {
    ul-ScramblingCodeNumber
                                UL-ScramblingCodeNumber,
    ul-ScramblingCodeLength
                                UL-ScramblingCodeLength,
    iE-Extensions
                            ProtocolExtensionContainer { {UL-ScramblingCode-ExtIEs} } OPTIONAL
UL-ScramblingCode-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
UL-ScramblingCodeNumber
                                ::= INTEGER (0..16777215)
UL-Synchronisation-Parameters-LCR ::= SEQUENCE {
    uL-Synchronisation-StepSize
                                        UL-Synchronisation-StepSize,
    uL-Synchronisation-Frequency
                                            UL-Synchronisation-Frequency,
                                    ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
UL-Synchronisation-Parameters-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Synchronisation-StepSize ::= INTEGER (1..8)
```

```
UL-Synchronisation-Frequency ::= INTEGER (1..8)
UL-TimeslotISCP
                       ::= INTEGER (0..127)
-- According to mapping in TS 25.225 [14]
UPPCHPositionLCR ::= INTEGER (0..127)
UpPTSInterferenceValue ::= INTEGER (0..127,...)
Unidirectional-DCH-Indicator ::= ENUMERATED {
    downlink-DCH-only,
    uplink-DCH-only
URA-ID
                       ::= INTEGER (0..65535)
URA-Information ::= SEQUENCE {
    uRA-ID
                                        URA-ID,
    multipleURAsIndicator
                                        MultipleURAsIndicator,
    rNCsWithCellsInTheAccessedURA-List RNCsWithCellsInTheAccessedURA-List OPTIONAL,
                                        ProtocolExtensionContainer { {URA-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
URA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Extended-RNC-ID
                                                CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                                                PRESENCE optional },
RNCsWithCellsInTheAccessedURA-List ::= SEOUENCE (SIZE (1..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item
RNCsWithCellsInTheAccessedURA-Item ::= SEQUENCE {
    rNC-ID
                                    ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
RNCsWithCellsInTheAccessedURA-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-ID
                      ::= INTEGER (0..255)
USCH-Information ::= SEQUENCE (SIZE (1..maxNoOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
    uSCH-ID
                                        USCH-ID,
    ul-CCTrCH-ID
                                        CCTrCH-ID.
    trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr,
    transportFormatSet
                                        TransportFormatSet,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    rb-Info
                                        RB-Info,
```

```
ProtocolExtensionContainer { {USCH-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
USCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass
                                                                                                   PRESENCE mandatory } |
    { ID id-BindingID
                                            CRITICALITY ignore EXTENSION BindingID
                                                                                                   PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                            CRITICALITY ignore EXTENSION TransportLayerAddress
                                                                                                  PRESENCE optional |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlQos
                                                                                                   PRESENCE optional },
                                            CRITICALITY ignore EXTENSION TnlQos
    . . .
Usefulness-Of-Battery-Optimization ::= ENUMERATED {can-benefit, cannot-benefit}
User-Plane-Congestion-Fields-Inclusion
                                            ::= ENUMERATED { shall-be-included
Uu-ActivationState ::= ENUMERATED {
    activated,
    de-activated,
    . . .
UMTS-Cells-Info-List ::= SEQUENCE (SIZE (0..maxNrOfCells)) OF ProtocolIE-Single-Container { (UMTS-Cells-Info-IEs} }
UMTS-Cells-Info-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UMTS-Cells-Info CRITICALITY ignore TYPE UMTS-Cell-Info
                                                                         PRESENCE optional }
UMTS-Cell-Info ::= SEQUENCE{
    c-ID
                                        C-ID,
    iE-Extensions
                                        ProtocolExtensionContainer { { UMTS-Cell-Info-ExtIEs} } OPTIONAL,
UMTS-Cell-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-CLTD-Information ::= SEQUENCE {
    sDPCCH-PowerOffsetInformation
                                        SDPCCH-PowerOffsetInformation.
                                        C-ID
    c-ID
                                                                         OPTIONAL,
-- The IE shall be present only if there is no serving E-DCH RL or HS-DSCH RL configuration in the concerned UE Context.
    uL-CLTD-Activation-Information
                                        UL-CLTD-Activation-Information OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { UL-CLTD-Info-ExtIEs } }
                                                                                                                  OPTIONAL,
    . . .
UL-CLTD-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-CLTD-Information-Reconf
                                ::=SEOUENCE{
```

```
setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD
                                                                     Setup-Or-ConfigurationChange-Or-Removal-Of-UL-CLTD,
    iE-Extensions
                                                                     ProtocolExtensionContainer { { UL-CLTD-Information-Reconf-ExtIEs} } OPTIONAL,
UL-CLTD-Information-Reconf-ExtIEs
                                    RNSAP-PROTOCOL-EXTENSION ::= {
UL-CLTD-Information-To-Modify ::= SEQUENCE {
    sDPCCH-PowerOffsetInformation
                                        SDPCCH-PowerOffsetInformation
                                                                                      OPTIONAL,
                                        C-TD
                                                                                      OPTIONAL,
    uL-CLTD-Activation-Information
                                        UL-CLTD-Activation-Information
                                                                                      OPTIONAL,
    iE-Extensions
                                             ProtocolExtensionContainer { { UL-CLTD-Information-To-Modify-ExtIEs } }
                                                                                                                                  OPTIONAL,
UL-CLTD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-CLTD-Information-Removal ::= ENUMERATED {
    remove,
    . . .
UL-CLTD-State-Update-Information ::= ENUMERATED {
    activate,
    de-activate,
UL-CLTD-Activation-Information ::= ENUMERATED {
    activated,
    de-activated,
UL-MIMO-Information ::= SEQUENCE {
    e-roch-power-offset
                                E-ROCH-PowerOffset
                                                                 OPTIONAL,
    s-e-dpcch-power-offset
                                S-E-DPCCH-PowerOffset,
    interstream-compensation
                                InterStream-Interference-Compensation,
    minimum-E-TFCI-rank2
                                INTEGER(0..127),
                                ProtocolExtensionContainer { { UL-MIMO-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
    . . .
UL-MIMO-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-MIMO-Information-To-Modify ::= SEQUENCE {
    e-roch-power-offset
                                E-ROCH-PowerOffset
                                                                         OPTIONAL,
                                S-E-DPCCH-PowerOffset
    s-e-dpcch-power-offset
                                                                         OPTIONAL,
```

```
interstream-compensation
                                InterStream-Interference-Compensation
                                                                         OPTIONAL,
    minimum-E-TFCI-rank2
                                INTEGER(0..127)
                                                                         OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { UL-MIMO-Information-To-Modify-ExtIEs } } OPTIONAL,
UL-MIMO-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-MIMO-Reconfiguration ::= CHOICE {
                            UL-MIMO-Information,
    configurationChange
                           UL-MIMO-Information-To-Modify,
    removal
                           UL-MIMO-Removal
UL-MIMO-Removal ::= ENUMERATED {
    remove,
    . . .
UL-MIMO-DL-Control-Channel-Information ::= SEQUENCE {
    e-roch-channelization-code
                                    FDD-DL-ChannelisationCodeNumber,
    s-e-rnti
                                    E-RNTI,
    s-signature-sequence
                                    ERGCH-SignatureSequence,
    s-e-roch-release-indicator
                                    S-E-ROCH-Release-Indicator
                                                                         OPTIONAL,
                                    ProtocolExtensionContainer { { UL-MIMO-DL-Control-Channel-Information-ExtIEs } } OPTIONAL,
    iE-Extensions
UL-MIMO-DL-Control-Channel-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- X
-- 7.
END
```

## 9.3.5 Common Definitions

```
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
     *****************
-- Extension constants
*****************
maxPrivateIEs
                                         INTEGER ::= 65535
maxProtocolExtensions
                                         INTEGER ::= 65535
maxProtocolIEs
                                         INTEGER ::= 65535
-- Common Data Types
__ **********************
             ::= ENUMERATED { reject, ignore, notify }
Criticality
Presence
             ::= ENUMERATED { optional, conditional, mandatory }
PrivateIE-ID ::= CHOICE {
   local
                   INTEGER (0.. maxPrivateIEs),
   qlobal
                    OBJECT IDENTIFIER
ProcedureCode
               ::= INTEGER (0..255)
ProcedureID ::= SEQUENCE {
                        ProcedureCode,
   procedureCode
   ddMode
                    ENUMERATED { tdd, fdd, common, ... }
              ::= INTEGER (0..maxProtocolIEs)
ProtocolIE-ID
TransactionID
              ::= CHOICE {
   shortTransActionId INTEGER (0..127),
   longTransActionId INTEGER (0..32767)
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }
END
```

## 9.3.6 Constant Definitions

```
RNSAP-Constants
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
IMPORTS
   ProcedureCode,
   ProtocolIE-ID
FROM RNSAP-CommonDataTypes;
  *****************
  Elementary Procedures
  **************
id-commonTransportChannelResourcesInitialisation
                                                          ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease
                                                          ProcedureCode ::= 1
id-compressedModeCommand
                                                          ProcedureCode ::= 2
id-downlinkPowerControl
                                                          ProcedureCode ::= 3
id-downlinkPowerTimeslotControl
                                                          ProcedureCode ::= 4
                                                          ProcedureCode ::= 5
id-downlinkSignallingTransfer
id-errorIndication
                                                          ProcedureCode ::= 6
id-dedicatedMeasurementFailure
                                                          ProcedureCode ::= 7
id-dedicatedMeasurementInitiation
                                                          ProcedureCode ::= 8
                                                          ProcedureCode ::= 9
id-dedicatedMeasurementReporting
id-dedicatedMeasurementTermination
                                                          ProcedureCode ::= 10
                                                          ProcedureCode ::= 11
id-paging
id-physicalChannelReconfiguration
                                                          ProcedureCode ::= 12
                                                          ProcedureCode ::= 13
id-privateMessage
id-radioLinkAddition
                                                          ProcedureCode ::= 14
id-radioLinkCongestion
                                                          ProcedureCode ::= 34
id-radioLinkDeletion
                                                          ProcedureCode ::= 15
id-radioLinkFailure
                                                          ProcedureCode ::= 16
id-radioLinkPreemption
                                                          ProcedureCode ::= 17
id-radioLinkRestoration
                                                          ProcedureCode ::= 18
id-radioLinkSetup
                                                          ProcedureCode ::= 19
id-relocationCommit
                                                          ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation
                                                          ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit
                                                          ProcedureCode ::= 22
\verb|id-synchronisedRadioLinkReconfigurationPreparation|\\
                                                          ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration
                                                          ProcedureCode ::= 24
id-uplinkSignallingTransfer
                                                          ProcedureCode ::= 25
id-commonMeasurementFailure
                                                          ProcedureCode ::= 26
id-commonMeasurementInitiation
                                                          ProcedureCode ::= 27
id-commonMeasurementReporting
                                                          ProcedureCode ::= 28
id-commonMeasurementTermination
                                                          ProcedureCode ::= 29
id-informationExchangeFailure
                                                          ProcedureCode ::= 30
```

```
id-informationExchangeInitiation
                                                           ProcedureCode ::= 31
id-informationReporting
                                                           ProcedureCode ::= 32
                                                           ProcedureCode ::= 33
id-informationExchangeTermination
id-reset
                                                           ProcedureCode ::= 35
id-radioLinkActivation
                                                           ProcedureCode ::= 36
id-gERANuplinkSignallingTransfer
                                                           ProcedureCode ::= 37
id-radioLinkParameterUpdate
                                                           ProcedureCode ::= 38
id-uEMeasurementFailure
                                                           ProcedureCode ::= 39
id-uEMeasurementInitiation
                                                           ProcedureCode ::= 40
id-uEMeasurementReporting
                                                           ProcedureCode ::= 41
id-uEMeasurementTermination
                                                           ProcedureCode ::= 42
                                                           ProcedureCode ::= 43
id-iurDeactivateTrace
id-iurInvokeTrace
                                                           ProcedureCode ::= 44
id-mBMSAttach
                                                           ProcedureCode ::= 45
id-mBMSDetach
                                                           ProcedureCode ::= 46
id-directInformationTransfer
                                                           ProcedureCode ::= 48
id-enhancedRelocation
                                                           ProcedureCode ::= 49
                                                           ProcedureCode ::= 50
id-enhancedRelocationCancel
id-enhancedRelocationSignallingTransfer
                                                           ProcedureCode ::= 51
id-enhancedRelocationRelease
                                                           ProcedureCode ::= 52
id-mBSFNMCCHInformation
                                                           ProcedureCode ::= 53
id-secondaryULFrequencyReporting
                                                           ProcedureCode ::= 54
id-secondaryULFrequencyUpdate
                                                           ProcedureCode ::= 55
id-informationTransferControl
                                                           ProcedureCode ::= 56
id-enhancedRelocationResourceAllocation
                                                           ProcedureCode ::= 60
id-enhancedRelocationResourceRelease
                                                           ProcedureCode ::= 61
-- Lists
__ *********************
maxCellSIB110rSIB12
                                       INTEGER ::= 32
                                       INTEGER ::= 8
maxCellsMeas
                                       INTEGER ::= 256
maxRateMatching
maxNoOfDSCHs
                                       INTEGER ::= 10
maxNoOfDSCHsLCR
                                       INTEGER ::= 10
maxNoOfRB
                                       INTEGER ::= 32
maxNoOfUSCHs
                                       INTEGER ::= 10
maxNoOfUSCHsLCR
                                       INTEGER ::= 10
maxNrOfTFCs
                                       INTEGER ::= 1024
maxNrOfTFs
                                       INTEGER ::= 32
maxNrOfCCTrCHs
                                       INTEGER ::= 16
maxNrOfCCTrCHsLCR
                                       INTEGER ::= 16
maxNrOfDCHs
                                       INTEGER ::= 128
maxNrOfDL-Codes
                                       INTEGER ::= 8
maxNrOfDPCHs
                                       INTEGER ::= 240
maxNrOfDPCHsPerRL-1
                                       INTEGER ::= 239 -- maxNrofCCTrCH*maxNrOfULTs-1
maxNrOfDPCHsLCR
                                       INTEGER ::= 240
                                       INTEGER ::= 95 -- maxNrofCCTrCH*maxNrOfULTsLCR-1
maxNrOfDPCHsLCRPerRL-1
maxNrOfDPCHs768
                                       INTEGER ::= 480
maxNrOfDPCHs768PerRL-1
                                       INTEGER ::= 479
                                       INTEGER ::= 256
maxNrOfErrors
```

```
maxNrOfMACcshSDU-Length
                                        INTEGER ::= 16
maxNrOfMBMSServices
                                        INTEGER ::= 128
maxNrOfActiveMBMSServices
                                        INTEGER ::= 256
maxNrOfPoints
                                        INTEGER ::= 15
maxNrOfRLs
                                        INTEGER ::= 16
maxNrOfRLSets
                                        INTEGER ::= maxNrOfRLs
maxNrOfRLSets-1
                                        INTEGER ::= 15 -- maxNrOfRLSets - 1
maxNrOfRLs-1
                                        INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2
                                        INTEGER ::= 14 -- maxNrOfRLs - 2
                                        INTEGER ::= 4096
maxNrOfUEs
maxNrOfULTs
                                        INTEGER ::= 15
maxNrOfULTsLCR
                                        INTEGER ::= 6
maxNrOfDLTs
                                        INTEGER ::= 15
maxNrOfDLTsLCR
                                        INTEGER ::= 6
maxRNCinURA-1
                                        INTEGER ::= 15
maxTTI-Count.
                                        INTEGER ::= 4
                                        INTEGER ::= 16777215
maxCTFC
maxNrOfNeighbouringRNCs
                                        INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC
                                        INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC
                                        INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC
                                        INTEGER ::= 256
maxNrOfFACHs
                                        INTEGER ::= 8
maxNrOfLCRTDDNeighboursPerRNC
                                        INTEGER ::= 256
maxIBSEG
                                        INTEGER ::= 16
maxNrOfSCCPCHs
                                        INTEGER ::= 8
maxNrOfSCCPCHs768
                                        INTEGER ::= 16
maxTGPS
                                        INTEGER ::= 6
maxNrOfTS
                                        INTEGER ::= 15
maxNrOfLevels
                                        INTEGER ::= 256
maxNrOfTsLCR
                                        INTEGER ::= 6
maxNoSat
                                        INTEGER ::= 16
                                        INTEGER ::= 8
maxNoGPSTypes
maxNrOfMeasNCell
                                        INTEGER ::= 96
maxNrOfMeasNCell-1
                                        INTEGER ::= 95
                                                        -- maxNrOfMeasNCell - 1
maxResetContext
                                        INTEGER ::= 250
maxResetContextGroup
                                        INTEGER ::= 32
maxNrOfHARQProc
                                        INTEGER ::= 8
maxNrOfHSSCCHCodes
                                        INTEGER ::= 4
maxNrOfHSSICHs
                                        INTEGER ::= 4
maxNrOfHSSICHs-1
                                        INTEGER ::= 3
maxNrOfMACdFlows
                                        INTEGER ::= 8
                                        INTEGER ::= 7
maxNrOfMACdFlows-1
                                                         -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUSize
                                        INTEGER ::= 32
maxNrOfPDUIndexes
                                        INTEGER ::= 8
                                                         -- maxNrOfPDUIndexes - 1
maxNrOfPDUIndexes-1
                                        INTEGER ::= 7
maxNrOfPrioOueues
                                        INTEGER ::= 8
maxNrOfPrioOueues-1
                                        INTEGER ::= 7
                                                        -- maxNrOfPrioOueues - 1
maxNrOfSNAs
                                         INTEGER ::= 65536
maxNrOfSatAlmanac-maxNoSat
                                        INTEGER ::= 16
maxNrOfGERANSI
                                        INTEGER ::= 8
maxNrOfInterfaces
                                        INTEGER ::= 16
maxNrofSiqSeqERGHICH-1
                                        INTEGER ::= 39
maxNrOfCells
                                        INTEGER ::= 65536
maxNrOfAddFreq
                                        INTEGER ::= 8
```

```
maxNrOfCellsPerFreq
                                        INTEGER ::= 65536
maxNrOfEDCHMACdFlows-1
                                        INTEGER ::= 7
maxNrOfEDCH-HARO-PO-OUANTSTEPs
                                        INTEGER ::= 6
maxNrOfEDPCCH-PO-OUANTSTEPs
                                        INTEGER ::= 8
maxNrOfEDCHHAROProcesses2msEDCH
                                        INTEGER ::= 8
                                        INTEGER ::= 19982
maxNrOfBits-MACe-PDU-non-scheduled
maxNrOfRefETFCIs
                                        INTEGER ::= 8
maxNrOfRefETFCI-PO-OUANTSTEPs
                                        INTEGER ::= 29
maxNrOfEDCHMACdFlows
                                        INTEGER ::= 8
maxNoOfLogicalChannels
                                                       -- only maximum 15 can be used
                                        INTEGER ::= 16
maxNrOfRefBetas
                                        INTEGER ::= 8
maxNrOfEAGCHCodes
                                        INTEGER ::= 4
                                        INTEGER ::= 90
maxNrOfHS-DSCHTBSs
maxNrOfHS-DSCHTBSs-HS-SCCHless
                                        INTEGER ::= 4
maxHS-PDSCHCodeNrComp-1
                                        INTEGER ::= 15
maxNrOfEHICHCodes
                                        INTEGER ::= 4
                                        INTEGER ::= 64
maxGANSSSat
maxNoGANSS
                                        INTEGER ::= 8
maxSqnType
                                        INTEGER ::= 8
maxNrOfBroadcastPLMNs
                                        INTEGER ::= 5
maxHSDPAFrequency
                                        INTEGER ::= 8
maxHSDPAFrequency-1
                                        INTEGER ::= 7
maxFrequencyinCell
                                        INTEGER ::= 12
maxFrequencvinCell-1
                                        INTEGER ::= 11
maxGANSSSatAlmanac
                                        INTEGER ::= 36
maxGANSSClockMod
                                        INTEGER ::= 4
maxNrOfEDCHRLs
                                        INTEGER ::= 4
maxEARFCN
                                        INTEGER ::= 65535
                                        INTEGER ::= 262143
maxEARFCN-Extended
                                        INTEGER ::= 256
maxNrOfEUTRANeighboursPerRNC
maxNrOfMCCHMessages
                                        INTEGER ::= 5
maxNrOfMBMSL3
                                        INTEGER ::= 64
maxNrOfEDCHMACdFlowsLCR
                                        INTEGER ::= 256
maxNrOfEDCHMACdFlowsLCR-1
                                        INTEGER ::= 255
maxNrOfPreconfiguredNeighbours
                                        INTEGER ::= 256
maxNrOfHSDSCH-1
                                        INTEGER ::= 32
maxNrOfHSDSCH
                                        INTEGER ::= 33
                                        INTEGER ::= 7
maxGANSS-1
maxlengthMBMSconcatservlists
                                        INTEGER ::= 96
maxNoOfTBSs-Mapping-HS-DSCH-SPS
                                        INTEGER ::= 4
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1
                                        INTEGER ::= 3
                                        INTEGER ::= 64
maxNoOfHS-DSCH-TBSsLCR
maxNoOfRepetition-Period-LCR
                                        INTEGER ::= 4
maxNoOfRepetitionPeriod-SPS-LCR-1
                                        INTEGER ::= 3
maxNoOf-HS-SICH-SPS
                                        INTEGER ::= 4
maxNoOf-HS-SICH-SPS-1
                                        INTEGER ::= 3
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH
                                        INTEGER ::= 4
maxNrOfEDCH-1
                                        INTEGER ::= 32
maxNrOfDCHMeasurementOccasionPatternSequence
                                                INTEGER ::= 6
maxNrOfULCarriersLCR-1
                                        INTEGER ::= 5
maxNrOfCellIds
                                        INTEGER ::= 32
maxNrOfRAIs
                                        INTEGER ::= 8
maxNrOfLAIs
                                        INTEGER ::= 8
maxNrOfExtendedNeighbouringRNCs
                                        INTEGER ::= 64
```

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```
maxNoOfGsmCell
                                       INTEGER ::= 128
maxNrOfANRCells
                                       INTEGER ::= 256
maxFreqBandsTDD
                                       INTEGER ::= 16
maxSCPICHCell
                                       INTEGER ::= 32
maxSCPICHCell-1
                                       INTEGER ::= 31
maxNoOfCommonRGCells
                                       INTEGER ::= 256
__ *********************
-- TES
*****************
id-AllowedOueuingTime
                                                                          ProtocolIE-ID ::= 4
id-Allowed-Rate-Information
                                                                          ProtocolIE-ID ::= 42
id-AntennaColocationIndicator
                                                                          ProtocolIE-ID ::= 309
id-BindingID
                                                                          ProtocolIE-ID ::= 5
id-C-ID
                                                                          ProtocolIE-ID ::= 6
id-C-RNTI
                                                                          ProtocolIE-ID ::= 7
id-Cell-Capacity-Class-Value
                                                                          ProtocolIE-ID ::= 303
id-CFN
                                                                          ProtocolTE-TD ::= 8
id-CN-CS-DomainIdentifier
                                                                          ProtocolIE-ID ::= 9
id-CN-PS-DomainIdentifier
                                                                          ProtocolIE-ID ::= 10
id-Cause
                                                                          ProtocolIE-ID ::= 11
id-CoverageIndicator
                                                                          ProtocolIE-ID ::= 310
id-CriticalityDiagnostics
                                                                          ProtocolIE-ID ::= 20
id-ContextInfoItem-Reset
                                                                          ProtocolIE-ID ::= 211
id-ContextGroupInfoItem-Reset
                                                                          ProtocolIE-ID ::= 515
id-D-RNTI
                                                                          ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication
                                                                          ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD
                                                                          ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD
                                                                          ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD
                                                                          ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD
                                                                          ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRgstFDD
                                                                          ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRgstTDD
                                                                          ProtocolIE-ID ::= 33
id-DCH-FDD-Information
                                                                          ProtocolIE-ID ::= 34
id-DCH-TDD-Information
                                                                          ProtocolIE-ID ::= 35
id-FDD-DCHs-to-Modify
                                                                          ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify
                                                                          ProtocolIE-ID ::= 40
id-DCH-InformationResponse
                                                                          ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd
                                                                          ProtocolIE-ID ::= 38
\verb|id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD|\\
                                                                          ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD
                                                                          ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
                                                                          ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                          ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhvChReconfRgstTDD
                                                                          ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD
                                                                          ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD
                                                                          ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                                          ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                                          ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                                          ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation
                                                                          ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                                          ProtocolIE-ID ::= 59
```

id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 64
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 278
id-DLReferencePower	ProtocolIE-ID ::= 67
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	ProtocolIE-ID ::= 69
id-DPC-Mode	ProtocolIE-ID ::= 12
id-DRXCycleLengthCoefficient	ProtocolIE-ID ::= 70
id-DedicatedMeasurementObjectType-DM-Fail-Ind	ProtocolIE-ID ::= 470
id-DedicatedMeasurementObjectType-DM-Fail	ProtocolIE-ID ::= 471
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 73
id-DedicatedMeasurementType	ProtocolIE-ID ::= 74
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD	ProtocolIE-ID ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD	ProtocolIE-ID ::= 83
id-Guaranteed-Rate-Information	ProtocolIE-ID ::= 41
id-IMSI	ProtocolIE-ID ::= 84
id-HCS-Prio	ProtocolIE-ID ::= 311
id-L3-Information	ProtocolIE-ID ::= 85
id-AdjustmentPeriod	ProtocolIE-ID ::= 90
id-MaxAdjustmentStep	ProtocolIE-ID ::= 91
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 92
id-MessageStructure	ProtocolIE-ID ::= 57
id-MeasurementID	ProtocolIE-ID ::= 93
id-Neighbouring-GSM-CellInformation	ProtocolIE-ID ::= 13
id-Neighbouring-UMTS-CellInformationItem	ProtocolIE-ID ::= 95
id-NRT-Load-Information-Value	ProtocolIE-ID ::= 305
id-NRT-Load-Information-Value-IncrDecrThres	ProtocolIE-ID ::= 306
id-PagingArea-PagingRqst	ProtocolIE-ID ::= 102
id-FACH-FlowControlInformation	ProtocolIE-ID ::= 103
id-PartialReportingIndicator	ProtocolIE-ID ::= 472
id-Permanent-NAS-UE-Identity	ProtocolIE-ID ::= 17
id-PowerAdjustmentType	ProtocolIE-ID ::= 107
id-RANAP-RelocationInformation	ProtocolIE-ID ::= 109
id-RL-Information-PhyChReconfRqstFDD	ProtocolIE-ID ::= 110
id-RL-Information-PhyChReconfRqstTDD	ProtocolIE-ID ::= 111
id-RL-Information-RL-AdditionRqstFDD	ProtocolIE-ID ::= 112
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 113
id-RL-Information-RL-DeletionRqst	ProtocolIE-ID ::= 114
id-RL-Information-RL-FailureInd	ProtocolIE-ID ::= 115
id-RL-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 116
id-RL-Information-RL-RestoreInd	ProtocolIE-ID ::= 117
id-RL-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 118
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 119
id-RL-InformationItem-RL-CongestInd	ProtocolIE-ID ::= 55
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 120
id-RL-InformationItem-DM-Rost	ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRgstFDD	ProtocolIE-ID ::= 123

id-RL-InformationList-RL-CongestInd	ProtocolIE-ID ::= 56
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 124
id-RL-InformationList-RL-DeletionRqst	ProtocolIE-ID ::= 125
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 1
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	ProtocolIE-ID ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	ProtocolIE-ID ::= 131
id-RL-InformationResponseItem-RL-ReconfRspFDD	ProtocolIE-ID ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	ProtocolIE-ID ::= 135
id-RL-InformationResponseList-RL-ReconfRspFDD	ProtocolIE-ID ::= 136
id-RL-InformationResponse-RL-ReconfRspTDD	ProtocolIE-ID ::= 28
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 137
id-RL-ReconfigurationFailure-RL-ReconfFail	ProtocolIE-ID ::= 141
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 143
id-RL-Set-InformationItem-DM-Rqst	ProtocolIE-ID ::= 144
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 145
id-RL-Set-Information-RL-FailureInd	ProtocolIE-ID ::= 146
id-RL-Set-Information-RL-RestoreInd	ProtocolIE-ID ::= 147
id-RL-Set-Successful-InformationItem-DM-Fail	ProtocolIE-ID ::= 473
id-RL-Set-Unsuccessful-InformationItem-DM-Fail	ProtocolIE-ID ::= 474
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind	ProtocolIE-ID ::= 475
id-RL-Successful-InformationItem-DM-Fail	ProtocolIE-ID ::= 476
id-RL-Unsuccessful-InformationItem-DM-Fail	ProtocolIE-ID ::= 477
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind	ProtocolIE-ID ::= 478
id-ReportCharacteristics	ProtocolIE-ID ::= 152
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 153
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 154
id-RT-Load-Value	ProtocolIE-ID ::= 307
id-RT-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 308
id-S-RNTI	ProtocolIE-ID ::= 155
id-ResetIndicator	ProtocolIE-ID ::= 244
id-RNC-ID	ProtocolIE-ID ::= 245
id-SAI	ProtocolIE-ID ::= 156
id-SRNC-ID	ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 160
id-TransportBearerID	ProtocolIE-ID ::= 163
id-TransportBearerRequestIndicator	ProtocolIE-ID ::= 164
id-TransportLayerAddress	ProtocolIE-ID ::= 165
id-TypeOfError	ProtocoliE-ID ::= 140
id-UC-ID	ProtocoliE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD	ProtocoliE-ID ::= 167
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD	ProtocoliE-ID ::= 167 ProtocoliE-ID ::= 169
<del>-</del>	
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 171 ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocoliE-ID ::= 172 ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	ProtocollE-ID ::= 1/3 ProtocollE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	
<pre>id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD</pre>	ProtocolIE-ID ::= 175 ProtocolIE-ID ::= 176
TO-OH-COLLOU-THIOTHIGCTOHINISCIE-KH-SECOPERSPINA	brococotte-ip ··= 1/0

id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 183
id-UL-SIRTarget	ProtocolIE-ID ::= 184
id-URA-Information	ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 193
id-AdjustmentRatio	ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 212
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 214
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 215
id-Unused-ProtocolIE-ID-216	ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 217
id-Unused-ProtocolIE-ID-218	ProtocolIE-ID ::= 218
id-Unused-ProtocolIE-ID-219	ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 219
id-DSCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 221
id-DSCH-TDD-Information	ProtocolIE-ID ::= 222
id-Unused-ProtocolIE-ID-223	ProtocolIE-ID ::= 223
id-Unused-ProtocolIE-ID-226	ProtocoliE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD	ProtocoliE-ID := 226 ProtocoliE-ID := 227
id-Unused-ProtocolIE-ID-228	ProtocoliE-ID := 227 ProtocoliE-ID := 228
id-Unused-ProtocolIE-ID-324	ProtocoliE-ID ::= 324
id-Unused-ProtocolIE-ID-324 id-Unused-ProtocolIE-ID-229	ProtocoliE-ID ::= 324 ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 230
id-Unused-ProtocolIE-ID-29 id-Unused-ProtocolIE-ID-225	ProtocolIE-ID ::= 29
	ProtocolIE-ID ::= 225
id-GA-Cell	ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes	ProtocolIE-ID ::= 3
id-Unused-ProtocolIE-ID-246	ProtocolIE-ID ::= 246
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 257
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 260

${ t id-UL-CCTrCH-Information Modify List-RL-ReconfRqstTDD}$	ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 263
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD	ProtocolIE-ID ::= 266
id-USCHs-to-Add	ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 269
id-USCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 270
id-USCH-Information	ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 275
id-ClosedLoopModel-SupportIndicator	ProtocolIE-ID ::= 276
id-Unused-ProtocolIE-ID-277	ProtocolIE-ID ::= 277
id-STTD-SupportIndicator	ProtocolIE-ID ::= 279
id-CFNReportingIndicator	ProtocolIE-ID ::= 14
id-CNOriginatedPage-PagingRqst	ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 24
id-PropagationDelay	ProtocolIE-ID ::= 25
id-RxTimingDeviationForTA	ProtocolIE-ID ::= 36
id-timeSlot-ISCP	ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 16
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 283
id-CommonMeasurementType	ProtocolIE-ID ::= 284
id-CongestionCause	ProtocolIE-ID ::= 18
id-SFN	ProtocolIE-ID ::= 285
id-SFNReportingIndicator	ProtocolIE-ID ::= 286
id-InformationExchangeID	ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 290
id-InformationReportCharacteristics	ProtocolIE-ID ::= 291
id-InformationType	ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation	ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 75
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 81
id-RL-LCR-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 86
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 87
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 88
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 89

id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 94
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 96
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 97
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 98
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 100
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 101
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 104
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD	ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRqstTDD	ProtocolIE-ID ::= 139
id-RestrictionStateIndicator	ProtocolIE-ID ::= 142
id-Load-Value	ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 234
id-OnModification	ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value	ProtocolIE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 237
${\tt id} extsf{-SFNMeasurementThresholdInformation}$	ProtocolIE-ID ::= 238
id-Transmitted-Carrier-Power-Value	ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 240
${ t id extsf{-}TUTRANGPS}$ Measurement Threshold Information	ProtocolIE-ID ::= 241
id-UL-Timeslot-ISCP-Value	ProtocolIE-ID ::= 242
id-UL-Timeslot-ISCP-Value-IncrDecrThres	ProtocolIE-ID ::= 243
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 293
id-DPC-Mode-Change-SupportIndicator	ProtocolIE-ID ::= 19
id-Unused-ProtocolIE-ID-247	ProtocolIE-ID ::= 247
id-Unused-ProtocolIE-ID-295	ProtocolIE-ID ::= 295
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD	ProtocolIE-ID ::= 202
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD	ProtocolIE-ID ::= 203
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 204
id-DSCH-RNTI	ProtocolIE-ID ::= 249
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 296
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 297
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 298
id-DL-ReferencePowerInformation	ProtocolIE-ID ::= 299
id-Enhanced-PrimaryCPICH-EcNo	ProtocolIE-ID ::= 224
id-IPDL-TDD-ParametersLCR	ProtocolIE-ID ::= 252
id-CellCapabilityContainer-FDD	ProtocolIE-ID ::= 300
id-CellCapabilityContainer-TDD	ProtocolIE-ID ::= 301
id-CellCapabilityContainer-TDD-LCR	ProtocolIE-ID ::= 302
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 317
id-RL-ReconfigurationRequestFDD-RL-InformationList	ProtocolIE-ID ::= 318
id-RL-ReconfigurationRequestFDD-RL-Information-IEs	ProtocolIE-ID ::= 319
id-RL-ReconfigurationRequestTDD-RL-Information	ProtocolIE-ID ::= 321
${ t id extsf{-}CommonTransportChannelResourcesInitialisationNotRequired}$	ProtocolIE-ID ::= 250
id-DelayedActivation	ProtocolIE-ID ::= 312
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 313
${ t id-DelayedActivationInformation-RL-ActivationCmdFDD}$	ProtocolIE-ID ::= 314
${ t id ext{-}DelayedActivationList ext{-}RL ext{-}ActivationCmdTDD}$	ProtocolIE-ID ::= 315
${ t id ext{-}DelayedActivationInformation ext{-}RL ext{-}ActivationCmdTDD}$	ProtocolIE-ID ::= 316
${ t id} ext{-neighbouringTDDCellMeasurementInformationLCR}$	ProtocolIE-ID ::= 251
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 150
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 151
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 451

id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 452
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 453
id-HSDSCH-FDD-Update-Information	ProtocolIE-ID ::= 466
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 456
${ t id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd}$	ProtocolIE-ID ::= 516
${ t id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd}$	ProtocolIE-ID ::= 517
id-HSDSCH-RNTI	ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Update-Information	ProtocolIE-ID ::= 467
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 463
id-HSDSCH-MACdFlows-to-Add	ProtocolIE-ID ::= 531
id-HSDSCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 532
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 148
id-TrafficClass	ProtocolIE-ID ::= 158
id-Unused-ProtocolIE-ID-248	ProtocolIE-ID ::= 248
id-Unused-ProtocolIE-ID-253	ProtocolIE-ID ::= 253
id-PDSCH-RL-ID	ProtocolIE-ID ::= 323
id-TimeSlot-RL-SetupRspTDD	ProtocolIE-ID ::= 325
id-GERAN-Cell-Capability	ProtocolIE-ID ::= 468
id-GERAN-Classmark	ProtocolIE-ID ::= 469
id-DSCH-InitialWindowSize	ProtocolIE-ID ::= 480
id-UL-Synchronisation-Parameters-LCR	ProtocolIE-ID ::= 464
id-SNA-Information	ProtocolIE-ID ::= 479
id-MAChs-ResetIndicator	ProtocolIE-ID ::= 465
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD	ProtocolIE-ID ::= 481
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD	ProtocolIE-ID ::= 482
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD	ProtocolIE-ID ::= 483
id-UL-CCTrCH-InformationList-RL-AdditionRgstTDD	ProtocolIE-ID ::= 484
id-UL-CCTrCH-InformationItem-RL-AdditionRgstTDD	ProtocolIE-ID ::= 485
id-DL-CCTrCH-InformationList-RL-AdditionRgstTDD	ProtocolIE-ID ::= 486
id-DL-CCTrCH-InformationItem-RL-AdditionRgstTDD	ProtocolIE-ID ::= 487
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 488
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 489
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 490
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 491
id-UL-TimingAdvanceCtrl-LCR	ProtocolIE-ID ::= 492
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD	ProtocolIE-ID ::= 493
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD	ProtocolIE-ID ::= 494
id-HS-SICH-Reception-Quality	ProtocoliE-ID ::= 495
id-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 496
id-HSSICH-Info-DM-Rprt	ProtocolIE-ID ::= 497
id-HSSICH-Info-DM-Rqst	ProtocolIE-ID ::= 497
id-HSSICH-Info-DM	ProtocoliE-ID ::= 498 ProtocoliE-ID ::= 499
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD	ProtocoliE-ID ::= 499 ProtocoliE-ID ::= 500
	ProtocolIE-ID ::= 501
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD	
±	ProtocolIE-ID ::= 502
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 503
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 504
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 505
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 506
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 507
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD	ProtocolIE-ID ::= 508
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD	ProtocolIE-ID ::= 509

id-Maximum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 510
id-Minimum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 511
id-TDD-Support-8PSK	ProtocolIE-ID ::= 512
id-TDD-maxNrDLPhysicalchannels	ProtocolIE-ID ::= 513
id-ExtendedGSMCellIndividualOffset	ProtocolIE-ID ::= 514
id-RL-ParameterUpdateIndicationFDD-RL-InformationList	ProtocolIE-ID ::= 518
id-Primary-CPICH-Usage-For-Channel-Estimation	ProtocolIE-ID ::= 519
id-Secondary-CPICH-Information	ProtocolIE-ID ::= 520
id-Secondary-CPICH-Information-Change	ProtocolIE-ID ::= 521
id-Unused-ProtocolIE-ID-522	ProtocolIE-ID ::= 522
id-Unused-ProtocolIE-ID-523	ProtocolIE-ID ::= 523
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item	ProtocolIE-ID ::= 524
id-Phase-Reference-Update-Indicator	ProtocolIE-ID ::= 525
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 526
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 527
id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD	ProtocolIE-ID ::= 528
id-RL-ReconfigurationResponseTDD-RL-Information	ProtocolIE-ID ::= 529
id-Satellite-Almanac-Information-ExtItem	ProtocolIE-ID ::= 530
id-HSDSCH-Information-to-Modify-Unsynchronised	ProtocolIE-ID ::= 533
id-TnlQos	ProtocolIE-ID ::= 534
id-RTLoadValue	ProtocolIE-ID ::= 535
id-NRTLoadInformationValue	ProtocolIE-ID ::= 536
id-CellPortionID	ProtocolIE-ID ::= 537
id-UpPTSInterferenceValue	ProtocolIE-ID ::= 538
id-PrimaryCCPCH-RSCP-Delta	ProtocolIE-ID ::= 539
id-UEMeasurementType	ProtocolIE-ID ::= 540
id-UEMeasurementTimeslotInfoHCR	ProtocolIE-ID ::= 541
id-UEMeasurementTimeslotInfoLCR	ProtocolIE-ID ::= 542
id-UEMeasurementReportCharacteristics	ProtocolIE-ID ::= 543
id-UEMeasurementParameterModAllow	ProtocolIE-ID ::= 544
id-UEMeasurementValueInformation	ProtocolIE-ID ::= 545
id-InterfacesToTraceItem	ProtocolIE-ID ::= 546
id-ListOfInterfacesToTrace	ProtocolIE-ID ::= 547
id-TraceDepth	ProtocoliE-ID ::= 548
id-TraceRecordingSessionReference	ProtocoliE-ID ::= 549
id-TraceReference	ProtocoliE-ID ::= 550
id-UEIdentity	ProtocoliE-ID ::= 551
id-NACC-Related-Data	ProtocolIE-ID ::= 552
id-GSM-Cell-InfEx-Rgst	ProtocoliE-ID ::= 552 ProtocoliE-ID ::= 553
id-MeasurementRecoveryBehavior	ProtocoliE-ID ::= 554
	ProtocoliE-ID ::= 554 ProtocolIE-ID ::= 555
id-MeasurementRecoveryReportingIndicator	ProtocoliE-ID ::= 556
id-MeasurementRecoverySupportIndicator	
id-DL-DPCH-Power-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 557
id-F-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 558
id-F-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 559
id-MBMS-Bearer-Service-List	ProtocolIE-ID ::= 560
id-MBMS-Bearer-Service-List-InfEx-Rsp	ProtocolIE-ID ::= 561
id-Active-MBMS-Bearer-ServiceFDD	ProtocolIE-ID ::= 562
id-Active-MBMS-Bearer-ServiceTDD	ProtocolIE-ID ::= 563
id-Old-URA-ID	ProtocolIE-ID ::= 564
id-UE-State	ProtocolIE-ID ::= 568
id-URA-ID	ProtocolIE-ID ::= 569
id-HARQ-Preamble-Mode	ProtocolIE-ID ::= 571
id-SynchronisationIndicator	ProtocolIE-ID ::= 572

id-UL-DPDCHIndicatorEDCH	ProtocolIE-ID ::= 573
id-EDPCH-Information	ProtocolIE-ID ::= 574
id-RL-Specific-EDCH-Information	ProtocolIE-ID ::= 575
id-EDCH-RL-Indication	ProtocolIE-ID ::= 576
id-EDCH-FDD-Information	ProtocolIE-ID ::= 577
id-EDCH-RLSet-Id	ProtocolIE-ID ::= 578
id-Serving-EDCHRL-Id	ProtocolIE-ID ::= 579
id-EDCH-FDD-DL-ControlChannelInformation	ProtocolIE-ID ::= 580
id-EDCH-FDD-InformationResponse	ProtocolIE-ID ::= 581
id-EDCH-MACdFlows-To-Add	ProtocolIE-ID ::= 582
id-EDCH-FDD-Information-To-Modify	ProtocolIE-ID ::= 583
id-EDCH-MACdFlows-To-Delete	ProtocolIE-ID ::= 584
id-EDPCH-Information-RLReconfRequest-FDD	ProtocolIE-ID ::= 585
id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 586
${ t id-EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd}$	ProtocolIE-ID ::= 587
id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd	ProtocolIE-ID ::= 588
id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd	ProtocolIE-ID ::= 589
id-MBMS-Bearer-Service-Full-Address	ProtocolIE-ID ::= 590
id-Initial-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 591
id-Initial-DL-DPCH-TimingAdjustment-Allowed	ProtocolIE-ID ::= 592
id-User-Plane-Congestion-Fields-Inclusion	ProtocolIE-ID ::= 593
id-HARQ-Preamble-Mode-Activation-Indicator	ProtocolIE-ID ::= 594
id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 595
id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp	ProtocolIE-ID ::= 596
id-ProvidedInformation	ProtocolIE-ID ::= 597
id-Active-MBMS-Bearer-ServiceFDD-PFL	ProtocolIE-ID ::= 598
id-Active-MBMS-Bearer-ServiceTDD-PFL	ProtocolIE-ID ::= 599
id-FrequencyBandIndicator	ProtocolIE-ID ::= 600
id-Serving-cell-change-CFN	ProtocolIE-ID ::= 601
id-HS-DSCH-serving-cell-change-information	ProtocolIE-ID ::= 602
id-HS-DSCH-serving-cell-change-informationResponse	ProtocolIE-ID ::= 603
id-E-DCH-Serving-cell-change-informationResponse	ProtocolIE-ID ::= 604
id-secondary-LCR-CCPCH-Info-TDD	ProtocolIE-ID ::= 605
id-E-DCH-FDD-Update-Information	ProtocolIE-ID ::= 606
id-Inter-Frequency-Cell-List	ProtocolIE-ID ::= 607
id-Inter-Frequency-Cell-Information	ProtocolIE-ID ::= 608
id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp	ProtocolIE-ID ::= 609
id-TDD-Support-PLCCH	ProtocolIE-ID ::= 610
id-PLCCH-Information-UL-TimeslotLCR-Info	ProtocolIE-ID ::= 611
id-PLCCH-Information-PhyChReconfRqstTDD	ProtocolIE-ID ::= 612
id-TDD768-maxNrDLPhysicalchannelsTS	ProtocolIE-ID ::= 613
id-RL-InformationResponse-RL-AdditionRspTDD768	ProtocolIE-ID ::= 614
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD768	ProtocolIE-ID ::= 615
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD768	ProtocolIE-ID ::= 616
id-UL-DPCH-InformationItem-RL-AdditionRspTDD768	ProtocolIE-ID ::= 617
id-DL-DPCH-InformationItem-RL-AdditionRspTDD768	ProtocolIE-ID ::= 618
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768	ProtocolIE-ID ::= 619
id-UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768	ProtocolIE-ID ::= 620
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768	ProtocolIE-ID ::= 621
id-DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768	ProtocolIE-ID ::= 622
id-secondary-CCPCH-Info-RL-ReconfReadyTDD768	ProtocolIE-ID ::= 623
id-hSSCCH-TDD-Specific-InfoList-Response768	ProtocolIE-ID ::= 624
id-hSPDSCH-TDD-Specific-InfoList-Response768	ProtocolIE-ID ::= 625
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD768	ProtocolIE-ID ::= 625 ProtocolIE-ID ::= 626
TA NOT DOC! THEORIGE THEORIGING FINGE FINGE CONTINUES TO THE CONTINUES TO	11000001111-110 020

id-UL-Timeslot-InformationList-PhyChReconfRqstTDD768	ProtocolIE-ID ::= 627
id-DL-Timeslot-InformationList-PhyChReconfRqstTDD768	ProtocolIE-ID ::= 628
id-CellCapabilityContainer-TDD768	ProtocolIE-ID ::= 629
id-multiple-DedicatedMeasurementValueList-TDD768-DM-Rsp	ProtocolIE-ID ::= 630
id-neighbouringTDDCellMeasurementInformation768	ProtocolIE-ID ::= 631
id-UEMeasurementTimeslotInfo768	ProtocolIE-ID ::= 632
id-Rx-Timing-Deviation-Value-768	ProtocolIE-ID ::= 633
id-UEMeasurementValueTransmittedPowerList768	ProtocolIE-ID ::= 634
id-UEMeasurementValueTimeslotISCPList768	ProtocolIE-ID ::= 635
id-RL-InformationResponse-RL-SetupRspTDD768	ProtocolIE-ID ::= 636
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD768	ProtocolIE-ID ::= 637
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD768	ProtocolIE-ID ::= 638
id-UL-DPCH-InformationItem-RL-SetupRspTDD768	ProtocolIE-ID ::= 639
id-DL-DPCH-InformationItem-RL-SetupRspTDD768	ProtocolIE-ID ::= 640
id-TDD768-minimumSpreadingFactor-UL	ProtocolIE-ID ::= 641
id-TDD768-minimumSpreadingFactor-DL	ProtocolIE-ID ::= 642
id-TDD768-maxNrDLPhysicalchannels	ProtocolIE-ID ::= 643
id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD	ProtocolIE-ID ::= 644
id-DPCH-ID768-DM-Rsp	ProtocolIE-ID ::= 645
id-DPCH-ID768-DM-Rqst	ProtocolIE-ID ::= 646
id-DPCH-ID768-DM-Rprt	ProtocolIE-ID ::= 647
id-EDPCH-Information-RLAdditionReg-FDD	ProtocolIE-ID ::= 648
id-HSDSCH-Configured-Indicator	ProtocolIE-ID ::= 649
id-RxTimingDeviationForTAext	ProtocolIE-ID ::= 650
id-RxTimingDeviationForTA768	ProtocolIE-ID ::= 651
id-Rx-Timing-Deviation-Value-ext	ProtocolIE-ID ::= 652
id-E-DCH-PowerOffset-for-SchedulingInfo	ProtocolIE-ID ::= 653
id-TrCH-SrcStatisticsDescr	ProtocolIE-ID ::= 654
id-E-DCH-Information	ProtocolIE-ID ::= 655
id-E-DCH-Serving-RL-ID	ProtocolIE-ID ::= 656
id-E-DCH-Information-Reconfig	ProtocolIE-ID ::= 657
id-E-DCH-Information-Response	ProtocoliE-ID ::= 658
id-E-DCH-768-Information	ProtocolIE-ID ::= 659
id-E-DCH-768-Information-Reconfig	ProtocoliE-ID ::= 660
id-E-DCH-768-Information-Response	ProtocoliE-ID ::= 661
id-ExtendedPropagationDelay	ProtocolIE-ID ::= 662
	ProtocoliE-ID ::= 663
id-Extended-Round-Trip-Time-Value	
id-AlternativeFormatReportingIndicator	ProtocolIE-ID ::= 664
id-DCH-Indicator-For-E-DCH-HSDPA-Operation	ProtocolIE-ID ::= 665
id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator	ProtocolIE-ID ::= 666
id-E-DCH-Minimum-Set-E-TFCIValidityIndicator	ProtocolIE-ID ::= 667
id-Fast-Reconfiguration-Mode	ProtocolIE-ID ::= 668
id-Fast-Reconfiguration-Permission	ProtocolIE-ID ::= 669
id-Continuous-Packet-Connectivity-DTX-DRX-Information	ProtocolIE-ID ::= 670
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information	ProtocolIE-ID ::= 671
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response	ProtocolIE-ID ::= 672
id-CPC-Information	ProtocolIE-ID ::= 673
id-MIMO-InformationResponse	ProtocolIE-ID ::= 675
id-E-DCH-LCR-Information	ProtocolIE-ID ::= 677
id-E-DCH-LCR-Information-Reconfig	ProtocolIE-ID ::= 678
id-E-DCH-LCR-Information-Response	ProtocolIE-ID ::= 679
id-HS-PDSCH-Code-Change-Grant	ProtocolIE-ID ::= 680
id-HS-PDSCH-Code-Change-Indicator	ProtocolIE-ID ::= 681
id-Extended-SRNC-ID	ProtocolIE-ID ::= 682

id-Extended-RNC-ID	ProtocolIE-ID ::= 683
id-SixtyfourQAM-DL-SupportIndicator	ProtocolIE-ID ::= 684
id-Enhanced-FACH-Support-Indicator	ProtocolIE-ID ::= 685
id-Enhanced-FACH-Information-ResponseFDD	ProtocolIE-ID ::= 686
id-HSDSCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 690
id-MaximumMACdPDU-SizeExtended	ProtocolIE-ID ::= 691
id-F-DPCH-SlotFormat	ProtocolIE-ID ::= 692
id-F-DPCH-SlotFormatSupportRequest	ProtocolIE-ID ::= 693
id-eDCH-MACdFlow-Retransmission-Timer-LCR	ProtocolIE-ID ::= 694
id-Max-UE-DTX-Cycle	ProtocolIE-ID ::= 695
id-GANSS-Common-Data	ProtocolIE-ID ::= 699
id-GANSS-Information	ProtocolIE-ID ::= 700
id-GANSS-Generic-Data	ProtocolIE-ID ::= 701
${ t id} extsf{-TUTRANGANSSMeasurementThresholdInformation}$	ProtocolIE-ID ::= 702
id-TUTRANGANSSMeasurementValueInformation	ProtocolIE-ID ::= 703
id-Ext-Reference-E-TFCI-PO	ProtocolIE-ID ::= 705
id-Ext-Max-Bits-MACe-PDU-non-scheduled	ProtocolIE-ID ::= 706
id-HARQ-MemoryPartitioningInfoExtForMIMO	ProtocolIE-ID ::= 707
id-MIMO-ActivationIndicator	ProtocolIE-ID ::= 708
id-MIMO-Mode-Indicator	ProtocolIE-ID ::= 709
id-MIMO-N-M-Ratio	ProtocolIE-ID ::= 710
id-TransportBearerNotSetupIndicator	ProtocolIE-ID ::= 711
id-TransportBearerNotRequestedIndicator	ProtocolIE-ID ::= 712
id-PowerControlGAP	ProtocolIE-ID ::= 713
id-UARFCNforNt	ProtocolIE-ID ::= 714
id-LCRTDD-uplink-Physical-Channel-Capability	ProtocolIE-ID ::= 715
id-number-Of-Supported-Carriers	ProtocolIE-ID ::= 716
id-HSSICH-SIRTarget	ProtocolIE-ID ::= 717
id-HSSICH-TPC-StepSize	ProtocolIE-ID ::= 718
id-tSN-Length	ProtocolIE-ID ::= 719
id-HS-SICH-ID-Extension	ProtocolIE-ID ::= 720
id-HSSICH-Info-DM-Rqst-Extension	ProtocolIE-ID ::= 721
id-multipleFreq-HSPDSCH-InformationList-ResponseTDDLCR	ProtocolIE-ID ::= 722
id-multicarrier-number	ProtocolIE-ID ::= 723
id-UPPCHPositionLCR	ProtocolIE-ID ::= 724
id-UpPCH-InformationList-LCRTDD	ProtocolIE-ID ::= 725
id-UpPCH-InformationItem-LCRTDD	ProtocolIE-ID ::= 726
id-Multiple-PLMN-List	ProtocolIE-ID ::= 727
id-UE-Capabilities-Info	ProtocolIE-ID ::= 728
id-FrameOffset	ProtocolIE-ID ::= 729
id-ChipOffset	ProtocolIE-ID ::= 730
id-Enhanced-PCH-Capability	ProtocolIE-ID ::= 731
id-SixteenQAM-UL-Operation-Indicator	ProtocolIE-ID ::= 732
id-E-TFCI-Boost-Information	ProtocolIE-ID ::= 733
id-SixtyfourOAM-UsageAllowedIndicator	ProtocolIE-ID ::= 734
id-SixtyfourQAM-DL-UsageIndicator	ProtocolIE-ID ::= 735
id-Default-Serving-Grant-in-DTX-Cycle2	ProtocolIE-ID ::= 736
id-E-DPDCH-PowerInterpolation	ProtocolIE-ID ::= 737
id-Extended-E-DCH-LCRTDD-PhysicalLayerCategory	ProtocolIE-ID ::= 738
id-E-DCH-MACdPDUSizeFormat	ProtocolIE-ID ::= 739
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator	ProtocolIE-ID ::= 740
id-E-DCH-DL-Control-Channel-Change-Information	ProtocoliE-ID ::= 741
id-E-DCH-DL-Control-Channel-Grant-Information	ProtocoliE-ID ::= 741 ProtocolIE-ID ::= 742
id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD	ProtocoliE-ID ::= 743
1	1100000111 12 1- 713

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id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD
                                                                             ProtocolIE-ID ::= 744
id-E-PUCH-PowerControlGAP
                                                                             ProtocolIE-ID ::= 745
id-HSDSCH-TBSizeTableIndicator
                                                                             ProtocolIE-ID ::= 746
id-UE-with-enhanced-HS-SCCH-support-indicator
                                                                            ProtocolIE-ID ::= 747
id-DGANSS-Corrections-Reg
                                                                             ProtocolIE-ID ::= 748
id-E-AGCH-Table-Choice
                                                                            ProtocolIE-ID ::= 749
id-RANAP-EnhancedRelocationInformationRequest
                                                                             ProtocolIE-ID ::= 750
id-RANAP-EnhancedRelocationInformationResponse
                                                                            ProtocolIE-ID ::= 751
id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD
                                                                            ProtocolIE-ID ::= 752
id-Common-EDCH-Support-Indicator
                                                                             ProtocolIE-ID ::= 753
id-E-RNTT
                                                                            ProtocolIE-ID ::= 754
id-Released-CN-Domain
                                                                             ProtocolIE-ID ::= 755
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                                            ProtocolIE-ID ::= 756
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp
                                                                             ProtocolIE-ID ::= 757
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt
                                                                            ProtocolIE-ID ::= 758
id-MBMS-Cell-InfEx-Rgst
                                                                             ProtocolIE-ID ::= 759
id-MBMS-Cell-InfEx-Rsp
                                                                             ProtocolIE-ID ::= 760
id-MBMS-Cell-InfEx-Rprt
                                                                             ProtocolIE-ID ::= 761
id-Counting-Information
                                                                             ProtocolIE-ID ::= 762
id-Transmission-Mode-Information
                                                                             ProtocolIE-ID ::= 763
id-MBMS-Neighbouring-Cell-Information
                                                                             ProtocolIE-ID ::= 764
id-MBMS-RLC-Sequence-Number-Information
                                                                            ProtocolIE-ID ::= 765
id-RLC-Sequence-Number
                                                                             ProtocolIE-ID ::= 766
id-Neighbouring-E-UTRA-CellInformation
                                                                             ProtocolIE-ID ::= 767
id-MBSFN-Cluster-Identity
                                                                             ProtocolIE-ID ::= 769
id-MCCH-Configuration-Info
                                                                             ProtocolIE-ID ::= 770
id-MCCH-Message-List
                                                                             ProtocolIE-ID ::= 771
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List
                                                                             ProtocolIE-ID ::= 772
id-GANSS-Time-ID
                                                                             ProtocolIE-ID ::= 773
id-GANSS-AddIonoModelReg
                                                                             ProtocolIE-ID ::= 774
id-GANSS-EarthOrientParaReg
                                                                             ProtocolIE-ID ::= 775
id-GANSS-AddNavigationModelsReg
                                                                             ProtocolIE-ID ::= 776
id-GANSS-AddUTCModelsReq
                                                                            ProtocolIE-ID ::= 777
id-GANSS-AuxInfoReg
                                                                             ProtocolIE-ID ::= 778
id-GANSS-SBAS-ID
                                                                             ProtocolIE-ID ::= 779
id-GANSS-ID
                                                                             ProtocolIE-ID ::= 780
                                                                            ProtocolIE-ID ::= 781
id-GANSS-Additional-Ionospheric-Model
id-GANSS-Earth-Orientation-Parameters
                                                                             ProtocolIE-ID ::= 782
id-GANSS-Additional-Time-Models
                                                                             ProtocolIE-ID ::= 783
id-GANSS-Additional-Navigation-Models
                                                                            ProtocolIE-ID ::= 784
id-GANSS-Additional-UTC-Models
                                                                             ProtocolIE-ID ::= 785
id-GANSS-Auxiliary-Information
                                                                             ProtocolIE-ID ::= 786
id-MinimumReducedE-DPDCH-GainFactor
                                                                             ProtocolIE-ID ::= 787
id-Enhanced-FACH-Information-ResponseLCR
                                                                             ProtocolIE-ID ::= 788
id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR
                                                                             ProtocolIE-ID ::= 789
id-HSDSCH-PreconfigurationSetup
                                                                             ProtocolIE-ID ::= 790
id-HSDSCH-PreconfigurationInfo
                                                                            ProtocolIE-ID ::= 791
id-NoOfTargetCellHS-SCCH-Order
                                                                             ProtocolIE-ID ::= 792
                                                                             ProtocolIE-ID ::= 793
id-EnhancedHSServingCC-Abort
id-Additional-HS-Cell-Information-RL-Setup
                                                                             ProtocolIE-ID ::= 794
id-Additional-HS-Cell-Information-Response
                                                                            ProtocolIE-ID ::= 795
id-Additional-HS-Cell-Information-RL-Addition
                                                                             ProtocolIE-ID ::= 796
id-Additional-HS-Cell-Change-Information-Response
                                                                             ProtocolIE-ID ::= 797
id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                                            ProtocolIE-ID ::= 798
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id-Additional-HS-Cell-Information-RL-Reconf-Req	ProtocolIE-ID ::= 799
id-Additional-HS-Cell-RL-Reconf-Response	ProtocolIE-ID ::= 800
id-Additional-HS-Cell-Information-RL-Param-Upd	ProtocolIE-ID ::= 801
id-Secondary-Serving-Cell-List	ProtocolIE-ID ::= 802
id-MultiCarrier-HSDSCH-Physical-Layer-Category	ProtocolIE-ID ::= 803
id-IdleIntervalInformation	ProtocolIE-ID ::= 804
id-NeedforIdleInterval	ProtocolIE-ID ::= 805
id-IdleIntervalConfigurationIndicator	ProtocolIE-ID ::= 806
id-ContinuousPacketConnectivity-DRX-InformationLCR	ProtocolIE-ID ::= 807
id-ContinuousPacketConnectivity-DRX-Information-ResponseLCR	ProtocolIE-ID ::= 808
id-E-AGCH-UE-Inactivity-Monitor-Threshold	ProtocolIE-ID ::= 809
id-CPC-InformationLCR	ProtocolIE-ID ::= 810
id-E-DCH-Semi-PersistentScheduling-Information-LCR	ProtocolIE-ID ::= 811
id-HS-DSCH-Semi-PersistentScheduling-Information-LCR	ProtocolIE-ID ::= 812
id-HS-DSCH-Semi-PersistentScheduling-Information-ResponseLCR	ProtocolIE-ID ::= 813
id-E-DCH-Semi-PersistentScheduling-Information-ResponseLCR	ProtocolIE-ID ::= 814
id-MIMO-SFMode-For-HSPDSCHDualStream	ProtocolIE-ID ::= 815
id-MIMO-SFMode-Supported-For-HSPDSCHDualStream	ProtocolIE-ID ::= 816
id-MIMO-ReferenceSignal-InformationListLCR	ProtocolIE-ID ::= 817
id-GANSS-alm-keplerianNAVAlmanac	ProtocolIE-ID ::= 818
id-GANSS-alm-keplerianReducedAlmanac	ProtocolIE-ID ::= 819
id-GANSS-alm-keplerianMidiAlmanac	ProtocolIE-ID ::= 820
id-GANSS-alm-keplerianGLONASS	ProtocolIE-ID ::= 821
id-GANSS-alm-ecefSBASAlmanac	ProtocolIE-ID ::= 822
id-DL-RLC-PDU-Size-Format	ProtocolIE-ID ::= 823
id-MACes-Maximum-Bitrate-LCR	ProtocolIE-ID ::= 824
id-Single-Stream-MIMO-ActivationIndicator	ProtocolIE-ID ::= 825
id-Single-Stream-MIMO-Mode-Indicator	ProtocolIE-ID ::= 826
id-Dual-Band-Secondary-Serving-Cell-List	ProtocolIE-ID ::= 827
id-UE-AggregateMaximumBitRate	ProtocolIE-ID ::= 828
id-power-offset-for-S-CPICH-for-MIMO	ProtocolIE-ID ::= 829
id_power-offset-for-S-CPICH-for-MIMO-Request-Indicator	ProtocolIE-ID ::= 830
id-UE-SupportIndicatorExtension	ProtocolIE-ID ::= 831
id-ActivationInformation	ProtocolIE-ID ::= 835
id-CellPortionLCRID	ProtocolIE-ID ::= 836
id-Additional-EDCH-Cell-Information-RL-Setup-Req	ProtocolIE-ID ::= 837
id-Additional-EDCH-Cell-Information-Response	ProtocolIE-ID ::= 838
id-Additional-EDCH-Cell-Information-RL-Add-Req	ProtocolIE-ID ::= 839
id-Additional-EDCH-Cell-Information-Response-RLAdd	ProtocolIE-ID ::= 840
id-Additional-EDCH-Cell-Information-RL-Reconf-Prep	ProtocolIE-ID ::= 841
id-Additional-EDCH-Cell-Information-RL-Reconf-Req	ProtocoliE-ID ::= 842
id-Additional-EDCH-Cell-Information-RL-Param-Upd	ProtocolIE-ID ::= 843
id-Additional-EDCH-Preconfiguration-Information	ProtocolIE-ID ::= 844
id-MulticellEDCH-Information	ProtocolIE-ID ::= 845
id-Additional-EDCH-Cell-Information-ResponseRLReconf	ProtocolIE-ID ::= 854
id-EDCH-Indicator	ProtocolIE-ID ::= 855
id-DiversityMode	ProtocoliE-ID ::= 856
id-DiversityMode id-TransmitDiversityIndicator	ProtocoliE-ID ::= 857
id-NonCellSpecificTxDiversity	ProtocolIE-ID ::= 858
id-CellCapabilityContainerExtension-FDD	ProtocolIE-ID ::= 859
id-HSDSCH-Physical-Layer-Category	ProtocolIE-ID ::= 860
id-E-RNTI-For-FACH	ProtocolIE-ID ::= 861
id-H-RNTI-For-FACH	ProtocolIE-ID ::= 862
id-RNTI-Allocation-Indicator	ProtocolIE-ID ::= 863

id-UE-AggregateMaximumBitRate-Enforcement-Indicator	ProtocolIE-ID ::=	
id-DCH-MeasurementOccasion-Information	ProtocolIE-ID ::=	
id-DCH-MeasurementType-Indicator	ProtocolIE-ID ::=	
id-Out-of-Sychronization-Window	ProtocolIE-ID ::=	
id-MulticellEDCH-RL-SpecificInformation	ProtocolIE-ID ::=	
id-DGNSS-ValidityPeriod	ProtocolIE-ID ::=	
id-TSO-HS-PDSCH-Indication-LCR	ProtocolIE-ID ::=	
id-UE-TS0-CapabilityLCR	ProtocolIE-ID ::=	
id-Non-Serving-RL-Preconfig-Info	ProtocolIE-ID ::=	
id-Non-Serving-RL-Preconfig-Setup	ProtocolIE-ID ::=	
id-Non-Serving-RL-Preconfig-Removal	ProtocolIE-ID ::=	874
id-Additional-E-DCH-Non-Serving-RL-Preconfiguration-Setup	ProtocolIE-ID ::=	875
id-Additional-E-DCH-New-non-serving-RL-E-DCH-FDD-DL-Control-Channel-InfoList	ProtocolIE-ID	::= 876
id-CellListValidityIndicator	ProtocolIE-ID ::=	877
id-completeAlmanacProvided	ProtocolIE-ID ::=	878
id-ganss-Delta-T	ProtocolIE-ID ::=	879
id-OrdinalNumberOfFrequency	ProtocolIE-ID ::=	880
id-Multicell-EDCH-Restriction	ProtocolIE-ID ::=	882
id-CellCapabilityContainerExtension-TDD-LCR	ProtocolIE-ID ::=	883
id-Multi-Carrier-EDCH-Setup	ProtocolIE-ID ::=	884
id-Multi-Carrier-EDCH-Reconfigure	ProtocolIE-ID ::=	885
id-Multi-Carrier-EDCH-Response	ProtocolIE-ID ::=	886
id-SNPL-Carrier-Group-Indicator	ProtocolIE-ID ::=	887
id-MU-MIMO-InformationLCR	ProtocolIE-ID ::=	888
id-MU-MIMO-Indicator	ProtocolIE-ID ::=	889
id-HS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR-Ext	ProtocolIE-ID ::=	890
id-Usefulness-Of-Battery-Optimization	ProtocolIE-ID ::=	
id-Multi-Carrier-E-DCH-LCRTDD-PhysicalLayerCategory	ProtocolIE-ID ::=	892
id-Measurement-Power-Offset	ProtocolIE-ID ::=	
id-MDT-Configuration	ProtocolIE-ID ::=	
id-Neighbouring-UMTS-CellInformation-Ext	ProtocolIE-ID ::=	
id-Neighbouring-UMTS-CellInformationExtensionItem	ProtocolIE-ID ::=	
id-Control-Type-InformationTransferControlReq	ProtocolIE-ID ::=	
id-UMTS-Cells-Info	ProtocolIE-ID ::=	
id-ANRReportIndication	ProtocolIE-ID ::=	
id-ANR-Cell-InfEx-Rgst	ProtocolIE-ID ::=	
id-ANR-Cell-InfEx-Rsp	ProtocolIE-ID ::=	
id-ANR-Cell-Information	ProtocolIE-ID ::=	
id-Trace-Collection-Entity-IP-Address	ProtocolIE-ID ::=	
id-Affected-HSDSCH-Serving-Cell-List	ProtocolIE-ID ::=	
id-UL-CLTD-Information	ProtocolIE-ID ::=	
id-UL-CLTD-Information-Reconf	ProtocolIE-ID ::=	
id-UL-CLTD-State-Update-Information	ProtocoliE-ID ::=	
id-Support-of-Dynamic-DTXDRX-Related-HS-SCCH-Order	ProtocoliE-ID ::=	
id-CPC-RecoveryReport	ProtocoliE-ID ::=	
id-FTPICH-Information	ProtocolIE-ID ::=	
id-FTPICH-Information-Reconf	ProtocoliE-ID ::=	
	ProtocolIE-ID ::=	
id-UE-RF-Band-CapabilityLCR id-Extended-S-RNTI	ProtocoliE-ID ::=	
id-Extended-5-RN11 id-ExtendedAffectedUEInformationForMBMS	ProtocoliE-ID ::=	
id-Extended-S-RNTI-Group	ProtocolIE-ID ::=	
id-FTPICH-Information-Response	ProtocolIE-ID ::=	
id-FTPICH-Reconfiguration-Information	ProtocolIE-ID ::=	
id-MIMO-withfourtransmitantennas-ActivationIndicator	ProtocolIE-ID ::=	919

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id-MIMO-withfourtransmitantennas-ModeIndicator
                                                                             ProtocolIE-ID ::= 920
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas
                                                                            ProtocolIE-ID ::= 921
id-power-offset-for-S-CPICH-for-MIMO-withfourtransmitantennas-Request-Indicator ProtocolIE-ID ::= 922
id-DualStream-MIMO-withfourtransmitantennas-ActivationIndicator
                                                                            ProtocolIE-ID ::= 923
id-DualStream-MIMO-withfourtransmitantennas-ModeIndicator
                                                                             ProtocolIE-ID ::= 924
id-Additional-Associated-Secondary-CPICH
                                                                            ProtocolIE-ID ::= 925
id-UE-transmission-power-headroom
                                                                             ProtocolIE-ID ::= 926
id-Multiflow-Information
                                                                            ProtocolIE-ID ::= 927
id-Multiflow-Reconfiguration
                                                                            ProtocolIE-ID ::= 928
id-Multiflow-OrdinalNumberOfFrequency
                                                                             ProtocolIE-ID ::= 929
id-UL-MIMO-Information
                                                                            ProtocolIE-ID ::= 930
id-UL-MIMO-Reconfiguration
                                                                            ProtocolIE-ID ::= 931
id-UL-MIMO-DL-Control-Channel-Information
                                                                            ProtocolIE-ID ::= 932
id-SixtyfourOAM-UL-Operation-Indicator
                                                                            ProtocolIE-ID ::= 933
id-Common-E-RGCH-Cell-InfEx-Rgst
                                                                            ProtocolIE-ID ::= 935
id-Common-E-RGCH-Cell-InfEx-Rsp
                                                                            ProtocolIE-ID ::= 936
id-Common-E-RGCH-Cell-InfEx-Rprt
                                                                             ProtocolIE-ID ::= 937
id-Common-E-RGCH-Cell-Information
                                                                            ProtocolIE-ID ::= 938
id-PCI
                                                                             ProtocolIE-ID ::= 939
id-TAC
                                                                            ProtocolIE-ID ::= 940
id-PLMN-List
                                                                             ProtocolIE-ID ::= 941
id-PrecoderWeightSetRestriction
                                                                            ProtocolIE-ID ::= 942
id-EARFCN-FDD-Extended
                                                                             ProtocolIE-ID ::= 943
id-EARFCN-TDD-Extended
                                                                             ProtocolIE-ID ::= 944
id-SpeechVersion
                                                                             ProtocolIE-ID ::= 2048
id-SourceID
                                                                             ProtocolIE-ID ::= 2049
id-TargetID
                                                                             ProtocolIE-ID ::= 2050
id-ClassmarkInformation2
                                                                             ProtocolIE-ID ::= 2051
id-ClassmarkInformation3
                                                                            ProtocolIE-ID ::= 2052
id-GSM-Cell-CM-Rast
                                                                             ProtocolIE-ID ::= 2053
id-Extension-CommonMeasurementObjectType-CM-Rprt
                                                                             ProtocolIE-ID ::= 2054
id-Extension-CommonMeasurementObjectType-CM-Rqst
                                                                            ProtocolIE-ID ::= 2055
id-Extension-CommonMeasurementObjectType-CM-Rsp
                                                                            ProtocolIE-ID ::= 2056
id-Extension-FailureIndicationMeasurementList
                                                                            ProtocolIE-ID ::= 2057
id-Extension-FailureMeasurementList
                                                                             ProtocolIE-ID ::= 2058
id-Extension-TerminationMeasurementList
                                                                            ProtocolIE-ID ::= 2059
id-GsmCellList-CM-Rprt
                                                                             ProtocolIE-ID ::= 2060
id-GsmCellList-CM-Rqst
                                                                             ProtocolIE-ID ::= 2061
id-GsmCellList-CM-Rsp
                                                                             ProtocolIE-ID ::= 2062
id-LoadValue
                                                                             ProtocolIE-ID ::= 2063
id-EventH
                                                                             ProtocolIE-ID ::= 2064
```

END

## 9.3.7 Container Definitions

```
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Containers (5) }
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
__ ********************
-- IE parameter types from other modules.
__ ***********************************
IMPORTS
   maxPrivateIEs,
   maxProtocolExtensions,
   maxProtocolIEs,
   Criticality,
   Presence,
   PrivateIE-ID,
   ProtocolIE-ID
FROM RNSAP-CommonDataTypes;
__ ********************
-- Class Definition for Protocol IEs
  *****************
RNSAP-PROTOCOL-IES ::= CLASS {
   &id
               ProtocolIE-ID
                                         UNIQUE,
                      Criticality,
   &criticality
   &Value,
   &presence
                   Presence
WITH SYNTAX {
   ID
               &id
                   &criticality
   CRITICALITY
                   &Value
   TYPE
   PRESENCE
                   &presence
  -- Class Definition for Protocol IEs
__ ***********************************
RNSAP-PROTOCOL-IES-PAIR ::= CLASS {
   &id
               ProtocolIE-ID
                                         UNIQUE,
   &firstCriticality
                      Criticality,
   &FirstValue,
   &secondCriticality
                      Criticality,
   &SecondValue,
```

```
&presence
                   Presence
WITH SYNTAX {
   ID
                &id
   FIRST CRITICALITY
                      &firstCriticality
                   &FirstValue
   FIRST TYPE
   SECOND CRITICALITY
                       &secondCriticality
                   &SecondValue
   SECOND TYPE
   PRESENCE
                   &presence
  *****************
-- Class Definition for Protocol Extensions
RNSAP-PROTOCOL-EXTENSION ::= CLASS {
                ProtocolIE-ID
                                       UNIQUE,
   &criticality
                      Criticality,
   &Extension,
   &presence
                Presence
WITH SYNTAX {
                &id
   ID
   CRITICALITY
                   &criticality
                   &Extension
   EXTENSION
   PRESENCE
                   &presence
-- Class Definition for Private IEs
  *****************
RNSAP-PRIVATE-IES ::= CLASS {
                PrivateIE-ID,
   &criticality
                      Criticality,
   &Value,
   &presence
                Presence
WITH SYNTAX {
   ID
                &id
   CRITICALITY
                   &criticality
   TYPE
                &Value
   PRESENCE
                   &presence
  *****************
-- Container for Protocol IEs
__ ********************
```

```
ProtocolIE-Container {RNSAP-PROTOCOL-IES : IesSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-Field {{IesSetParam}}
ProtocolIE-Single-Container {RNSAP-PROTOCOL-IES : IesSetParam} ::=
   ProtocolIE-Field {{IesSetParam}}
ProtocolIE-Field {RNSAP-PROTOCOL-IES : IesSetParam} ::= SEQUENCE {
   id RNSAP-PROTOCOL-IES.&id ({IesSetParam}),
   criticality
               RNSAP-PROTOCOL-IES.&criticality ({IesSetParam}{@id}),
                                                     ({IesSetParam}{@id})
                   RNSAP-PROTOCOL-IES.&Value
  ****************
-- Container for Protocol IE Pairs
  ProtocolIE-ContainerPair {RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEQUENCE (SIZE (0..maxProtocolIEs)) OF
   ProtocolIE-FieldPair {{IesSetParam}}
ProtocolIE-FieldPair {RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::= SEQUENCE {
      RNSAP-PROTOCOL-IES-PAIR.&id
                                              ({IesSetParam}),
   firstCriticality RNSAP-PROTOCOL-IES-PAIR.&firstCriticality ({IesSetParam}{@id}),
   firstValue RNSAP-PROTOCOL-IES-PAIR.&FirstValue
                                                        ({IesSetParam}{@id}),
   secondCriticality RNSAP-PROTOCOL-IES-PAIR.&secondCriticality ({IesSetParam}{@id}),
                                                            ({IesSetParam}{@id})
   secondValue RNSAP-PROTOCOL-IES-PAIR. & SecondValue
  *****************
-- Container Lists for Protocol IE Containers
  *****************
ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES : IesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-Container {{IesSetParam}}
ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES-PAIR : IesSetParam} ::=
   SEQUENCE (SIZE (lowerBound..upperBound)) OF
   ProtocolIE-ContainerPair {{IesSetParam}}
    *****************
-- Container for Protocol Extensions
    *******************
ProtocolExtensionContainer {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
   SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
```

```
ProtocolExtensionField {{ExtensionSetParam}}
ProtocolExtensionField {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
           RNSAP-PROTOCOL-EXTENSION.&id
                                                       ({ExtensionSetParam}),
   criticality RNSAP-PROTOCOL-EXTENSION.&criticality
                                                               ({ExtensionSetParam}{@id}),
   extensionValue
                         RNSAP-PROTOCOL-EXTENSION. & Extension
                                                               ({ExtensionSetParam}{@id})
           *****************
-- Container for Private IEs
PrivateIE-Container {RNSAP-PRIVATE-IES : IesSetParam} ::=
   SEQUENCE (SIZE (1..maxPrivateIEs)) OF
   PrivateIE-Field {{IesSetParam}}
PrivateIE-Field {RNSAP-PRIVATE-IES : IesSetParam} ::= SEQUENCE {
                                                ({IesSetParam}),
                  RNSAP-PRIVATE-IES.&id
   criticality
                     RNSAP-PRIVATE-IES.&criticality
                                                       ({IesSetParam}{@id}),
   value
                  RNSAP-PRIVATE-IES.&Value
                                               ({IesSetParam}{@id})
END
```

## 9.4 Message Transfer Syntax

RNSAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ITU-T Rec. X.691 [20].

## 9.5 Timers

#### T Preempt

- Specifies the maximum time that a DRNS may wait for pre-emption of resources for establishment or reconfiguration of Radio Links.

#### $T_{RELOCprep}$

- Specifies the maximum time for the Enhanced Relocation procedure in the SRNC.

## Handling of Unknown, Unforeseen and Erroneous Protocol Data

#### 10.1 General

Protocol Error cases can be divided into three classes:

- 1. Transfer Syntax Error;
- 2. Abstract Syntax Error;
- 3. Logical Error.

Protocol errors can occur in the following functions within a receiving node.

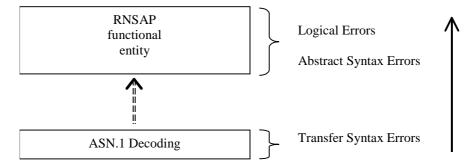


Figure 34: Protocol Errors in RNSAP

The information stated in subclauses 10.2, 10.3 and 10.4, to be included in the message used when reporting an error, is what at minimum shall be included. Other optional information elements within the message may also be included, if available. This is also valid for the case when the reporting is done with a response message. The latter is an exception to what is stated in subclause 4.1.

## 10.2 Transfer Syntax Error

A Transfer Syntax Error occurs when the receiver is not able to decode the received physical message. Transfer syntax errors are always detected in the process of ASN.1 decoding. If a Transfer Syntax Error occurs, the receiver should initiate Error Indication procedure with appropriate cause value for the Transfer Syntax protocol error.

Examples for Transfer Syntax Errors are:

- Violation of value ranges in ASN.1 definition of messages. E.g.: If an IE has a defined value range of 0 to 10 (ASN.1: INTEGER (0..10)), and 12 will be received, then this will be treated as a transfer syntax error;
- Violation in list element constraints. E.g.: If a list is defined as containing 1 to 10 elements, and 12 elements will be received, than this case will be handled as a transfer syntax error;
- Missing mandatory elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message);
- Wrong order of elements in ASN.1 SEQUENCE definitions (as sent by the originator of the message).

## 10.3 Abstract Syntax Error

#### 10.3.1 General

An Abstract Syntax Error occurs when the receiving functional RNSAP entity:

- 1. Receives IEs or IE groups that cannot be understood (unknown IE id);
- 2 Receives IEs for which the logical range is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);
- 3 Does not receive IEs or IE groups but according to the specified presence of the concerned object, the IEs or IE groups should have been present in the received message;
- 4 Receives IEs or IE groups that are defined to be part of that message in wrong order or with too many occurrences of the same IE or IE group;
- 5 receives IEs or IE groups but according to the conditional presence of the concerned object and the specified condition, the IEs or IE groups should not have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver. Case 4 (IEs or IE groups in wrong order or with too many occurrences) and Case 5 (erroneously present conditional IEs or IE groups) result in rejecting the procedure.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

## 10.3.2 Criticality Information

In the RNSAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- 1. Reject IE;
- 2. Ignore IE and Notify Sender;
- 3. Ignore IE.

The following rules restrict when a receiving entity may consider an IE, an IE group or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

- 1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by a receiving entity (some may still remain unsupported).
- 2. EP: The comprehension of different Eps within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

#### 10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, RNSAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field f the concerned object of class RNSAP-PROTOCOL-IES, RNSAP-PROTOCOL-IES-PAIR, RNSAP-PROTOCOL-EXTENSION or RNSAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

- 1. Optional;
- 2. Conditional;
- 3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

## 10.3.4 Not Comprehended IE/IE Group

#### 10.3.4.1 Procedure ID

The receiving node shall treat the different types of received criticality information of the *Procedure ID* according to the following:

#### **Reject IE:**

- If a message is received with a *Procedure ID* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

#### Ignore IE and Notify Sender:

- If a message is received with a *Procedure ID* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

#### **Ignore IE:**

- If a message is received with a *Procedure ID* marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

When using the Error Indication procedure to reject a procedure or to report an ignored procedure it shall include the *Procedure ID* IE, the *Triggering Message* IE, and the *Procedure Criticality* IE in the *Criticality Diagnostics* IE.

#### 10.3.4.1A Type of Message

When the receiving node cannot decode the *Type of Message* IE, the Error Indication procedure shall be initiated with an appropriate cause value.

#### 10.3.4.2 IEs Other Than the Procedure ID and Type of Message

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure ID* IE and *Type of Message* IE according to the following:

#### Reject IE:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a *response* message is received containing one or more IEs/IE groups marked with "*Reject IE*, that the receiving node does not comprehend, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

#### Ignore IE and Notify Sender:

- If a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and report in the response message of the procedure that one or more IEs/IE groups have been ignored. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report the outcome of the procedure is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups, and initiate the Error Indication procedure to report that one or more IEs/IE groups have been ignored.
- If a response message is received containing one or more IEs/IE groups marked with "Ignore IE and Notify Sender" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using the understood IEs/IE groups and initiate the Error Indication procedure.

#### **Ignore IE:**

- If a message initiating a procedure is received containing one or more IEs/IE groups marked with "Ignore IE" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.
- If a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using the understood IEs/IE groups.

When reporting not comprehended IEs/IE groups marked with "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting not comprehended IEs/IE groups marked with "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the not comprehended IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

## 10.3.5 Missing IE or IE Group

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

#### Reject IE:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall terminate the procedure and initiate the Error Indication procedure.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*, the receiving node shall consider the procedure as unsuccessfully terminated and initiate local error handling.

#### Ignore IE and Notify Sender:

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "Ignore IE and Notify Sender", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the response message, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a received message *initiating* a procedure that does not have a message to report the outcome of the procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message and initiate the Error Indication procedure to report that one or more IEs/IE groups were missing.

#### **Ignore IE:**

- If a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs are missing and continue with the procedure based on the other IEs/IE groups present in the message.
- If a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall ignore that those IEs/IE groups are missing and continue with the procedure based on the other IEs/IE groups present in the message.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using a response message defined for the procedure, the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

When reporting missing IEs/IE groups with specified criticality "Reject IE" or "Ignore IE and Notify Sender" using the Error Indication procedure, the Procedure ID IE, the Triggering Message IE, Procedure Criticality IE, the Transaction ID IE, and the Information Element Criticality Diagnostics IE shall be included in the Criticality Diagnostics IE for each reported IE/IE group. In the Information Element Criticality Diagnostics IE the Repetition Number IE shall be included and in addition, if the missing IE/IE group is not at message hierarchy level 1 (top level; see annex C) also the Message Structure IE shall be included.

## 10.3.6 IEs or IE Groups Received in Wrong Order or With Too Many Occurrences or Erroneously Present

If a message with IEs or IE groups in wrong order or with too many occurrences is received or if IEs or IE groups with a conditional presence are present when the condition is not met (i.e. erroneously present), the receiving node shall behave according to the following:

- If a message *initiating* a procedure is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the cause value "Abstract Syntax Error (Falsely Constructed Message)" using the message normally used to report unsuccessful outcome of the procedure. In case the information received in the initiating message was insufficient to determine a value for all IEs that are required to be present in the message used to report the unsuccessful outcome of the procedure, the receiving node shall instead terminate the procedure and initiate the Error Indication procedure.
- If a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node shall terminate the procedure and initiate the Error Indication procedure, and use cause value "Abstract Syntax Error (Falsely Constructed Message)".
- If a *response* message is received containing IEs or IE groups in wrong order or with too many occurrences or erroneously present, the receiving node consider the procedure as unsuccessfully terminated and initiate local error handling.

When determining the correct order only the IEs specified in the specification version used by the receiver shall be considered.

## 10.4 Logical Error

Logical error situations occur when a message is comprehended correctly, but the information contained within the message is not valid (i.e. semantic error), or describes a procedure which is not compatible with the state of the receiver. In these conditions, the following behaviour shall be performed (unless otherwise specified) as defined by the class of the elementary procedure, irrespective of the criticality information of the IEs/IE groups containing the erroneous values.

#### Class 1:

Where the logical error occurs in a request message of a class 1 procedure, and the procedure has a message to report this unsuccessful outcome, this message shall be sent with an appropriate cause value. Typical cause values are:

#### **Protocol Causes:**

- 1. Semantic Error;
- 2. Message not Compatible with Receiver State.

Where the logical error is contained in a request message of a class 1 procedure, and the procedure does not have a message to report this unsuccessful outcome, the procedure shall be terminated and the Error Indication procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering Message* IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

Where the logical error exists in a response message of a class 1 procedure, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

#### Class 2:

Where the logical error occurs in a message of a class 2 procedure, the procedure shall be terminated and the Error Indication procedure shall be initiated with an appropriate cause value. The *Procedure ID* IE, the *Triggering Message* IE and the *Transaction ID* IE within the *Criticality Diagnostics* IE shall then be included in order to identify the message containing the logical error.

## 10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclauses of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message or ERROR INDICATION message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.

If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality "ignore and notify" have earlier occurred within the same procedure.

## Annex A (normative): Allocation and Pre-emption of Radio Links in the DRNS

## A.1 Deriving Allocation Information for a Radio Link

#### A.1.1 Establishment of a New Radio Link

The Allocation Information for a Radio Link in the case of establishment of a new Radio Link shall be derived as follows:

- The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The Allocation/Retention Priority IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the UE in the DRNS or
- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels that are intended to use the Radio Link is set to "no priority", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels that are intended to use the Radio Link is not set to "no priority", the allocation priority and the pre-emption capability of the Radio Link shall be set according to the following:
  - The transport channels that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link.
  - The allocation priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all non excluded transport channels that are intended to use the Radio Link.
  - If all non-excluded transport channels that are intended to use a Radio Link to be established have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "shall not trigger pre-emption".

If one or more non-excluded transport channels that are intended to use the Radio Link to be established have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

## A.1.2 Modification of an Existing Radio Link

The Allocation Information for a Radio Link in the case of modification of a Radio Link (addition or modification of transport channels using the Radio Link) shall be derived as follows:

The latest received Allocation/Retention Priority IE for each transport channel shall be used.

Note: The Allocation/Retention Priority IE for a transport channel may have been received in

- a) the procedure that establishes the first Radio Link for the UE in the DRNS,
- b) a previous procedure adding or modifying the transport channel, or
- c) the current procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all transport channels to be added or modified in the Radio Link is set to "no priority", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".

- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more of the transport channels to be added or modified in the Radio Link is not set to "no priority", the allocation priority of and the pre-emption capability of the Radio Link to be modified shall be set according to the following:
  - The transport channels to be added or modified that have the *Priority Level* IE in the *Allocation/Retention Priority* IE set to "no priority" shall be excluded when setting the allocation priority and pre-emption capability of a Radio Link to be modified.
  - The allocation priority for a Radio Link to be modified shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all the non-excluded transport channels that are to be added or modified.
  - If all non-excluded transport channels that are to be added or modified in the Radio Link have the preemption capability, given by the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE, set to "shall not trigger pre-emption", the pre-emption capability of the Radio Link to be modified shall be set to "shall not trigger pre-emption".
    - If one or more of the non-excluded transport channels to be added or modified in the Radio Link have the value of the *Pre-emption Capability* IE in the *Allocation/Retention Priority* IE set to "may trigger pre-emption", the pre-emption capability of the Radio Link to be modified shall be set to "may trigger pre-emption".

The derived allocation priority and pre-emption capability are only valid during this allocation/retention process.

## A.2 Deriving Retention Information for a Radio Link

The Retention Information for an existing Radio Link shall be derived as follows:

- The latest received *Allocation/Retention Priority* IE for each transport channel shall be used.

Note: The *Allocation/Retention Priority* IE for a transport channel may have been received in a) the procedure that establishes the first Radio Link for the UE in the DRNS or

- b) a procedure adding or modifying the transport channel.
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for one or more transport channels using the Radio Link is set to "no priority", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".
- If the *Priority Level* IE in the *Allocation/Retention Priority* IE for all the transport channels using the Radio Link is not set to "no priority", the retention priority of the Radio Link and the pre-emption vulnerability of the Radio Link shall be set according to the following:
  - The retention priority for a Radio Link shall be set to highest priority level, given by the *Priority Level* IE in the *Allocation/Retention Priority* IE, for all transport channels that uses the Radio Link.
  - If all transport channels that uses the Radio Link have the pre-emption vulnerability, given by the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE, set to "pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "pre-emptable".
    If one or more transport channels that uses the Radio Link have the value of the *Pre-emption Vulnerability* IE in the *Allocation/Retention Priority* IE set to "not pre-emptable", the pre-emption vulnerability of the Radio Link shall be set to "not pre-emptable".

The derived retention priority and pre-emption vulnerability are valid until they are changed, or until the Radio Link is deleted. When new transport channels are added to or deleted from the Radio Link or when existing transport channels are modified with regards to the *Allocation/Retention Priority* IE, the retention information shall be derived again according to above.

### A.3 The Allocation/Retention Process

The DRNS shall establish or modify the resources for a Radio Link according to:

- The value of the Allocation Information (allocation priority and pre-emption capability) of the Radio to be established or modified. The Allocation Information is derived according to clause A.1.

- The value of the Retention Information (retention priority and pre-emption vulnerability) of existing Radio Links. The Retention Information derived according to clause A.2.
- The resource situation in the DRNS.

Whilst the process and the extent of the pre-emption functionality is operator dependent, the pre-emption indicators (pre-emption capability and pre-emption vulnerability) shall be treated as follows:

- -. If the pre-emption capability for a Radio Link to be established or modified is set to "may trigger preemption" and the resource situation so requires, the DRNS may trigger the pre-emption process in clause A.4 to free resources for this allocation request.
- -. If the pre-emption capability for a Radio Link to be established or modified is set to "shall not trigger 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 DRNS shall initiate the Radio Link Pre-emption procedure for all the UE Contexts having Radio Links selected for pre-emption and start the  $T_{Preempt}$  timer.

When enough resources are freed to establish or modify the Radio Link(s) according to the request, the DRNS shall stop the  $T_{Preempt}$  timer and complete the procedure that triggered the pre-emption process in accordance with the "Successful Operation" subclause of the procedure.

If the T<sub>Preempt</sub> timer expires, the DRNS shall reject the procedure that triggered the pre-emption process and complete the procedure in accordance with the "Unsuccessful Operation" subclause of the procedure.

# Annex B (informative): Measurement Reporting

When the *Report Characteristics* IE is set to "Event A" (figure B.1), the Measurement Reporting procedure is initiated when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

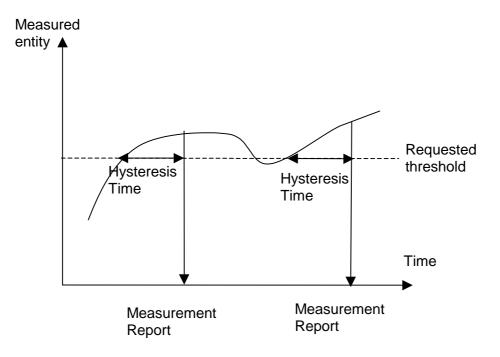


Figure B.1: Event A reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event B" (figure B.2), the Measurement Reporting procedure is initiated when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the value zero shall be used for the hysteresis time.

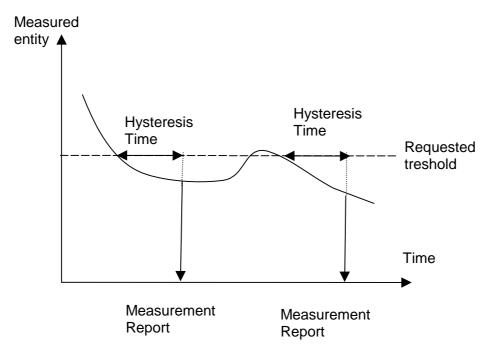


Figure B.2: Event B reporting with Hysteresis Time specified

When the *Report Characteristics* IE is set to "Event C" (figure B.3), the Measurement Reporting procedure is initiated always when the measured entity rises by an amount greater than the requested threshold within the requested time. The reporting in figure B.3 is initiated if the Rising Time T1 is less than the requested time.

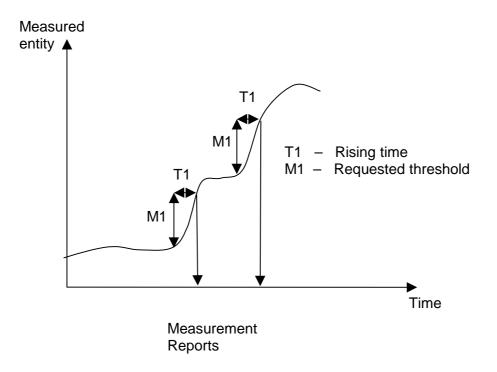


Figure B.3: Event C reporting

When the *Report Characteristics* IE is set to "Event D" (figure B.4), the Measurement Reporting procedure is initiated always when the measured entity falls by an amount greater than the requested threshold within the requested time. The reporting in figure B.4 is initiated if the Falling Time T1 is less than the requested time.

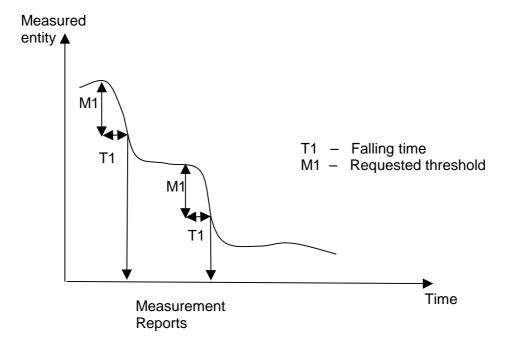


Figure B.4: Event D reporting

When the *Report Characteristics* IE is set to "Event E" (figure B.5), the Measurement Reporting procedure (Report A) is initiated always when the measured entity rises above the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.5). If *Report Periodicity* IE is provided DRNS shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity falls below the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity falls below the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) the Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.

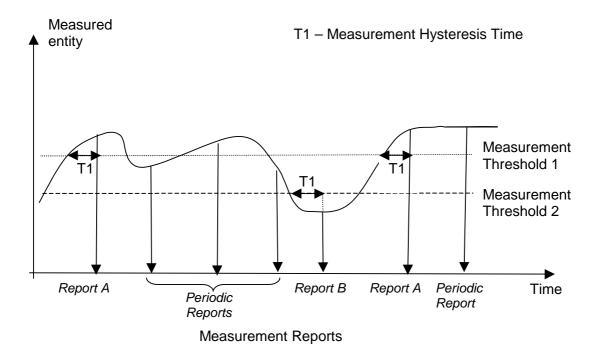
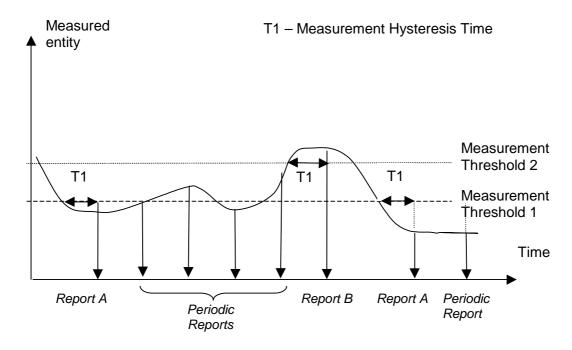


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event F" (figure B.6), the Measurement Reporting procedure (Report A) is initiated always when the measured entity falls below the "Measurement Threshold 1" and stays there for the "Measurement Hysteresis Time" (T1 in figure B.6). If *Report Periodicity* IE is provided DRNS shall also initiate Measurement Reporting procedure periodically. The periodic reporting continues although the measured entity rises above the "Measurement Threshold 1" and is terminated by the Report B.

When the Report A conditions have been met and the measured entity rises above the "Measurement Threshold 2" and stays there for the "Measurement Hysteresis Time" (T1) Measurement Reporting procedure (Report B) is initiated and the periodic reporting is terminated.



Measurement Reports

Figure B.6: Event F reporting with Hysteresis Time specified and Periodic Reporting requested

When the *Report Characteristics* IE is set to "Event H" (figure B.7), the Measurement Reporting procedure (Report A) is initiated when the measurement value of measured entity rises above the *Measurement Threshold 1* and stays above the threshold for the *Measurement Hysteresis Time* ( $T_1$  in figure B.7).] The measurement value of measured entity in Report A substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions has been met and the measurement value of measured entity rises above or falls below the *Measurement Base Value* by *Measurement Fluctuation Range* (H<sub>1</sub> in figure B.7), and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7) counting from the beginning of every *Report Periodicity*, the Measurement Reporting procedure (Report B or Report C) is initiated. The the measurement value of measured entity in (Report B or Report C) substitutes the *Measurement Base value* for the consequent measurement reporting.

When the Report A conditions have been met and the measurement value of measured entity falls below the *Measurement Threshold 2* and stays there for the *Measurement Hysteresis Time* (T<sub>h</sub> in figure B.7), the Measurement Reporting procedure (Report D) is initiated and the reporting is terminated.

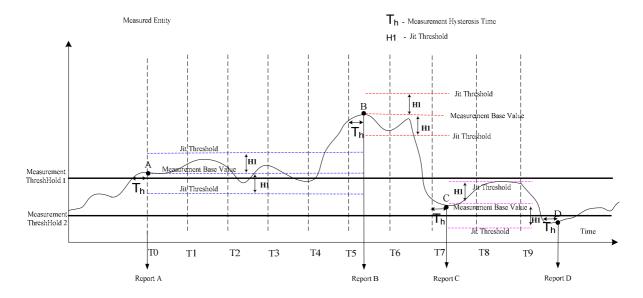


Figure B.7: Event H reporting with Hysteresis Time specified and Periodic Reporting requested

## Annex C (informative): Guidelines for Usage of the Criticality Diagnostics IE

## C.1 EXAMPLE MESSAGE Layout

Assume the following message format:

IE/Group Name	Presence	Range	IE Type and Referenc e	Semantics Description	Criticality	Assigned Criticality
Message Type	М		_		YES	reject
Transaction ID	М				-	,
Α	М				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>			1	,
>>>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.

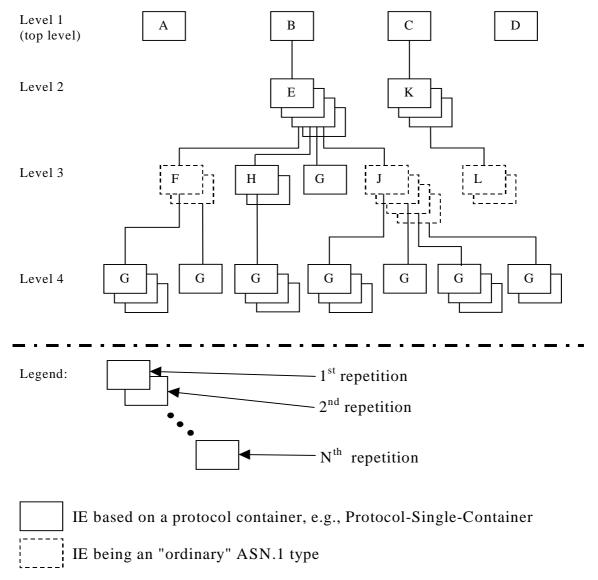
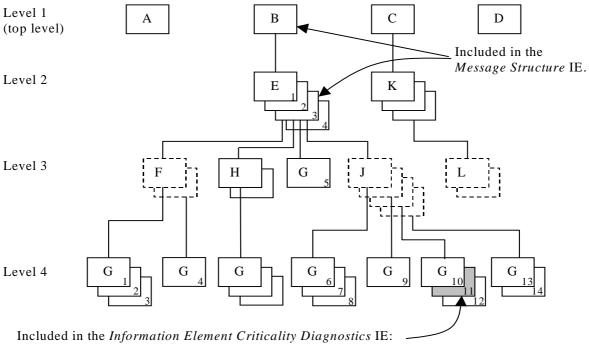


Figure C.1: Example of content of a received RNSAP message based on the EXAMPLE MESSAGE

### C.3 Content of Criticality Diagnostics

### C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

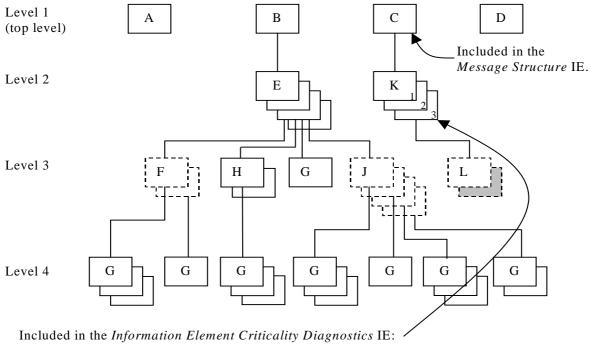
Figure C.2: Example of a received RNSAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE J shown in the figure C.2 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 4.
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition	11	Repetition number on the reported level, i.e. level 4.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is
		the eleventh occurrence of IE G within the IE E (level 2).
Type of Error	not	
	underst	
	ood	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, second	repetition
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.
Number		

- Note 2. The IE J on level 3 cannot be included in the *Message Structure* IE since they have no criticality of their own.
- Note 3. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

### C.3.2 Example 2



- a) IE ID IE
- b) Repetition Number IE

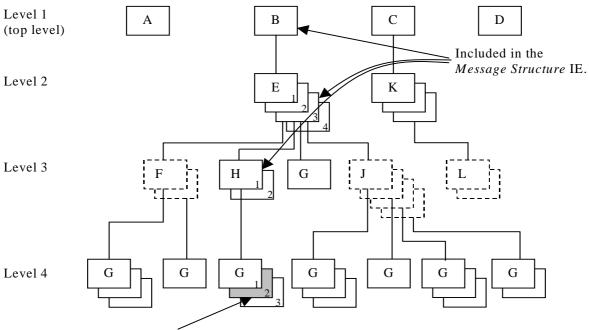
Figure C.3: Example of a received RNSAP message containing a not comprehended IE

If there is an error within the second instance (marked as grey) in the sequence (IE L in the tabular format) on level 3 below IE K in the structure shown in the figure C.3 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore	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 Structu	re, first repe	etition
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

### C.3.3 Example 3



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

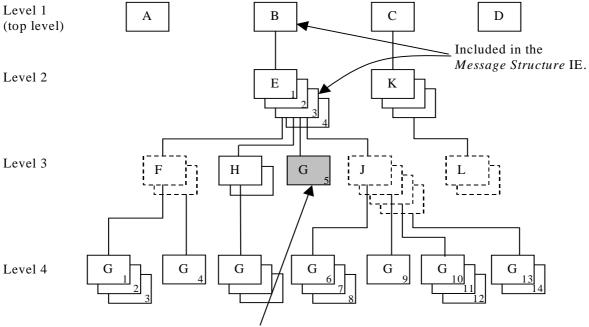
Figure C.4: Example of a received RNSAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE H shown in the figure C.4 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	ignore	Criticality for IE on the reported level, i.e. level 4.
	and	
	notify	
IE ID	id-G	IE ID from the reported level, i.e. level 4.
Repetition	2	Repetition number on the reported level, i.e. level 4.
Number		
Type of Error	not	
	underst	
	ood	
Message Structur	re, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	re, second	repetition
>IE ID	id-E	IE ID from level 2.
>Repetition	3	Repetition number from level 2.
Number		
Message Structur	re, third rep	petition
>IE ID	id-H	IE ID from the lowest level above the reported level, i.e. level 3.
>Repetition	1	Repetition number from the lowest level above the reported level, i.e. level 3.
Number		

Note 5. The repetition number of level 4 indicates the number of repetitions of IE G received up to the detected erroneous repetition, counted below the same instance of the previous level with assigned criticality (instance 1 of IE H on level 3).

### C.3.4 Example 4



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

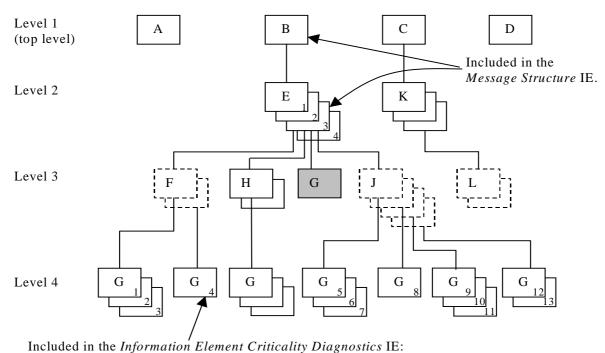
Figure C.5: Example of a received RNSAP message containing a not comprehended IE

If there is an error within the instance marked as grey in the IE G in the IE E shown in the figure C.5 above, this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition	5	Repetition number on the reported level, i.e. level 3.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE this is
		the fifth occurrence of IE G within the IE E (level 2).
Type of Error	not	
	underst	
	ood	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, second	repetition
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.
Number		

Note 6. The repetition number of the reported IE indicates the number of repetitions of IE G received up to the detected erroneous repetition, counting all occurrences of the IE G below the same instance of the previous level with assigned criticality (instance 3 of IE E on level 2).

### C.3.5 Example 5



- a) IE ID IE
- b) Repetition Number IE

Figure C.6: Example of a received RNSAP message with a missing IE

If the instance marked as grey in the IE G in the IE E shown in the figure C.6 above, is missing this will be reported within the *Information Element Criticality Diagnostics* IE within the *Criticality Diagnostics* IE as follows:

IE name	Value	Comment
IE Criticality	reject	Criticality for IE on the reported level, i.e. level 3.
IE ID	id-G	IE ID from the reported level, i.e. level 3.
Repetition	4	Repetition number up to the missing IE on the reported level, i.e. level 3.
Number		(Since the IE E (level 2) is the lowest level included in the Message Structure IE there
		have been four occurrences of IE G within the IE E (level 2) up to the missing
		occurrence.
Type of Error	missing	
Message Structur	e, first repe	etition
>IE ID	id-B	IE ID from level 1.
Message Structur	e, second	repetition
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.
>Repetition	3	Repetition number from the lowest level above the reported level, i.e. level 2.
Number		

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

```
B ::= SEQUENCE {
                   E-List,
    iE-Extensions ProtocolExtensionContainer { {B-ExtIEs} } OPTIONAL,
}
B-Exties RNSAP-PROTOCOL-EXTENSION ::= {
E-List ::= SEQUENCE (SIZE (1..maxE)) OF ProtocolIE-Single-Container { {E-IEs} }
E-Ies RNSAP-PROTOCOL-IES ::= {
   { ID id-E CRITICALITY ignore TYPE E PRESENCE mandatory }
E ::= SEQUENCE {
                   F-List,
   h
                   H-List.
    g
                   G-List1
                   J-List,
    iE-Extensions ProtocolExtensionContainer { \{E-ExtIEs\} } OPTIONAL,
}
E-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
F-List ::= SEQUENCE (SIZE (1..maxF)) OF F
F ::= SEQUENCE {
                   G-List2 OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {F-ExtIEs} } OPTIONAL,
}
F-ExtIEs
         RNSAP-PROTOCOL-EXTENSION ::= {
\texttt{G-List2} ::= \texttt{SEQUENCE} \ (\texttt{SIZE} \ (1...3, \ \ldots)) \ \texttt{OF} \ \texttt{ProtocolIE-Single-Container} \ \left\{ \ \{\texttt{G2-IEs}\} \ \right\}
G2-IES RNSAP-PROTOCOL-IES ::= {
   H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }
H-Ies RNSAP-PROTOCOL-IES ::= {
    H ::= SEQUENCE {
                   G-List3 OPTIONAL,
                                ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
    iE-Extensions
H-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
\texttt{G-List3} ::= \texttt{SEQUENCE} \ (\texttt{SIZE} \ (1...3, \ \ldots)) \ \texttt{OF} \ \texttt{ProtocolIE-Single-Container} \ \left\{ \ \{\texttt{G3-IEs}\} \ \right\}
G3-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
G-List1 ::= ProtocolIE-Single-Container { G1-IEs} }
G1-IES RNSAP-PROTOCOL-IES ::= {
```

```
{ 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
           RNSAP-PROTOCOL-EXTENSION ::= {
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
C ::= SEQUENCE {
                   K-List,
   iE-Extensions ProtocolExtensionContainer { {C-ExtIEs} } OPTIONAL,
}
C-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}
K-List ::= SEQUENCE (SIZE (1..maxK)) OF ProtocolIE-Single-Container { {K-IEs} }
K-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-K CRITICALITY notify TYPE K PRESENCE mandatory }
K ::= SEQUENCE {
                   L-List,
   \verb|iE-Extensions| & ProtocolExtensionContainer { K-ExtIEs} } & OPTIONAL,
}
K-Exties RNSAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                    M OPTIONAL,
   \verb|iE-Extensions| & \verb|ProtocolExtensionContainer| & \verb|\{L-ExtIEs\}| & \verb|OPTIONAL|, \\
L-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{\tt ExampleMessage-Extensions~RNSAP-PROTOCOL-EXTENSION~::=~\{}
```

# Annex D (normative): DRNS Behaviour at SRNC or RNSAP Signalling Bearer Failure

This annex describes the DRNC actions in the event of SRNC or RNSAP Signalling Bearer failure when all or some of the UE Contexts related to the SRNC need to be removed in DRNC.

## D.1 Detection of SRNC or RNSAP Signalling Bearer/Connection Failure

Termination of all or some of the UE Contexts in DRNC which are related to an SRNC may be triggered due to failure of SRNC, RNSAP Signalling Bearer or the Iur signalling connection of an UE(s).

#### D.1.1 Termination of all UE Contexts Related to a Specific SRNC

Termination of all UE Contexts in DRNC which are related to a specific SRNC is triggered if the RNSAP Signalling Bearer failure is detected by the RNSAP according to the procedure described in the sub-clause 4.5.1.5.1 of TS 25.420. By "all" UE Contexts, it means all Ues having dedicated and/or common channel resources.

### D.1.2 Termination of Specific UE Context

Termination of a specific UE Context in DRNC is triggered for an UE which has dedicated transport channel resources according to the procedure described in the sub-clause 4.5.1.5.2 of TS 25.420.

### D.2 DRNC Actions at UE Context Termination

When termination of the UE Context is required, the DRNC shall remove any common and/or dedicated radio resources related to the UE Context. The DRNC shall also initiate release of the dedicated or common user plane resources that were involved in these UE contexts. In addition, if it is possible the DRNC shall release the RRC connection.

## Annex E (informative): Change History

Release 9 version created based on v8.6.0   9.0.0	TSG #	TSG Doc.	CR	Rev	Subject/Comment	New
18		-	-	-		
18	45	RP-090777	1521	2		
455         RP-090772   1526         2.         Introduction of Dual-Band HSDPA         9.00           45         RP-090773   1536         1.         Introduction of MIMO for DC INSDPA         9.00           46         RP-091188   1540         Introduction of Cell Portion for 1.28 Mcps TDD         9.10           46         RP-091186   1542         Introduction of Cell Portion for 1.28 Mcps TDD         9.10           46         RP-091186   1542         Activation and deactivation of secondary carrier in non serving Node B         9.10           46         RP-091180   1551         I Correction of a abnormal conditions for Dual cell HS-DSCH in RL Addition procedure         9.10           46         RP-091181   1555         I Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps         9.10           46         RP-091181   1565         I MACe Reset Indicator for MACI-Reset         9.10           46         RP-091182   1560         I MACE Reset Indicator for MACI-Reset         9.10           46         RP-091179   1563         I Wing and Interest	45				· ·	
RP-090773   1536   1				2		
46         RP-091188   54-01           Introduction of Cell Portion for 1.28 Mpps TDD         9.1.0           46         RP-091186   54-22           Activation and deactivation of secondary carrier in non serving Node B         9.1.0           46         RP-091186   54-22           Activation and deactivation of secondary carrier in non serving Node B         9.1.0           46         RP-091180   55-11           Correction of abnormal conditions for Dual cell IR-SDSCH in RL Addition procedure         9.1.0           46         RP-091180   55-51           Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps         9.1.0           46         RP-091181   1558   1         MAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179   1565           I Macy Proceedings of CP-LSDPA         9.1.0           46         RP-091179   1565           STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091179   1575           STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091178   1573           Correction of Dual Cell HSDPA         9.1.0           47         RP-100216   1576           Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100219   1577           Addition of HS-DSCH physical layer category over lur         9.2.0	45					1
RP-091186   154-1   Single Stream MIMO for DC-HSDPA   9.1.0				-		
46         RP-091186   1542   .         Activation and deactivation of secondary carrier in non serving Node B. 9.1.0         9.1.0           46         RP-091180   1551   .         Correction of abnormal conditions for Dual cell IR-SDSCH in RL Addition procedure         9.1.0           46         RP-091181   1558   .         Colficiation of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps         9.1.0           46         RP-091181   1558   .         MAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091179   1567   .         Further Corrections for DC-HSDPA         9.1.0           46         RP-091179   1563   .         Wrong ref in tabular         9.1.0           46         RP-091179   1567   .         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091179   1575   .         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091179   1573   .         Correction of Red HSPA Capability in tor RNSAP         9.1.0           47         RP-100216   1576   .         Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100219   1577   .         Addition of DL-HSDPA Capability in tor RNSAP         9.1.0           47         RP-100216   1586   .         Lenk Type Capability in tor RNSAP         9.2.0           47         RP-1				1		1
RP-091181   1558   1   Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure   9.1.0				_		
RP-091181   1558   Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps   9.1.0				1		1
TDD						
46         RP-091181   1558   1         MAC-e Reset Indicator for MAC-I Reset         9.1.0           46         RP-091182   1560   Further Corrections for DCH-ISDPA         9.1.0           46         RP-091179   1563   Wrong ref in tabular         9.1.0           46         RP-091186   1568   Wrong ref in tabular         9.1.0           46         RP-091186   1568   Immoduction of Dual Cell HSDPA         9.1.0           46         RP-091186   1568   Immoduction of Dual Cell E-DCH mode of operation         9.1.0           46         RP-091179   1573   Removal of MAC-e-Is format indicator         9.1.0           46         RP-091186   1574   Introduction of Red HSPA Capability into RNSAP         9.1.0           47         RP-100215   1576   Addition of HS-DSCH physical layer category over fur         9.2.0           47         RP-100215   1577   E-RNTI Allocation for UE moves to Cell _FACH from Cell_DCH         9.2.0           47         RP-100215   1578   Addition of HS-DSCH physical layer category over fur         9.2.0           47         RP-100215   1586   Correction for the description of E-DCH serving radio link IE for E-DCH semi-persistent p.0         9.2.0           47         RP-100215   1586   Correction for the description of E-DCH serving radio link IE for E-DCH semi-persistent p.0         9.2.0           47         RP-100215   1586   Correction for the description of E-DCH serving radio links with	10	141 001100	1001			0.1.0
46         RP-091182   1560           Further Corrections for DC-HSDPA         9.1.0           46         RP-091179   1563           STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091186   1585           STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091187   1571           Removal of MAC-ehs format indicator         9.1.0           46         RP-091179   1573           Removal of MAC-ehs format indicator         9.1.0           46         RP-091186   1574           Introduction of Nea HSPA Capability into RNSAP         9.1.0           46         RP-091186   1574           Introduction of Rea HSPA Capability into RNSAP         9.1.0           47         RP-100215   1576           Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100219   1517           Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100219   1581           Lenk Introduction of DC-HSDPA Capability in lur         9.2.0           47         RP-100219   1581           Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100221   1587           Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100221   1586           Combining E-DCH Radio Links within the RLS         9	46	RP-091181	1558	1		9.1.0
	46			-		
46         RP-091179         1567         STTD is cell specific in Dual-Cell HSDPA         9.1.0           46         RP-091186         1568         2         Introduction of Dual Cell E-DCH mode of operation         9.1.0           46         RP-091186         1571         Removal of MAC-ehs format indicator         9.1.0           46         RP-091186         1573         Correction on 1875         9.1.0           47         RP-100219         1573         Introduction of Re9 HSPA Capability into RNSAP         9.1.0           47         RP-100219         1577         1         E-RNT1 Allocation for UE moves to Cell FACH from Cell_DCH         9.2.0           47         RP-100219         1579         Addition of HS-DSCH physical layer categopy over lur         9.2.0           47         RP-100219         1581         Allow reconfiguration of some less in RL Addition procedure         9.2.0           47         RP-100218         1584         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100218         1586         Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100221         1587         1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100221         1587				1		1
46         RP-091186   1563   2         Introduction of Dual Cell E-DCH mode of operation         9.1.0           46         RP-091197   1571   1572   1572   1574   1         Removal of MAC-ehs format indicator         9.1.0           46         RP-091196   1574   1         Introduction of Re9 HSPA Capability into RNSAP         9.1.0           47         RP-100215   1576   Addition of HS-DSCH physical layer category over lur         9.2.0           47         RP-100215   1577   E-RNT1 Allocation for UE moves to Cell FACH from Cell DCH         9.2.0           47         RP-100215   1578   Allow reconfiguration of some les in RL Addition procedure         9.2.0           47         RP-100215   1581   Correction of DCH-ISDPA Capability in lur         9.2.0           47         RP-100215   1586   Correction of DCH-ISDPA Capability in lur         9.2.0           47         RP-100215   1586   Correction of DCH-ISDPA Capability in lur         9.2.0           47         RP-100215   1586   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100215   1586   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1583   Long traction of Machine Capability Report in lur         9.2.0           47         RP-100216   1501   State transition of Enhanced CELL FACH UE for LCR TDD         9.2.0           47         RP-100230   1583	46					
46         RP-091179   1571         Removal of MAC-ehs format indicator         9.1.0           46         RP-091179   1573         Correction on IE "E-ROCH Table Choice"         9.1.0           46         RP-091186   1574   1         Introduction of Re9 HSPA Capability into RNSAP         9.1.0           47         RP-100219   1577   1         E-RNT1 Allocation for UE moves to Cell F-ACH from Cell_DCH         9.2.0           47         RP-100219   1587   1         E-RNT1 Allocation for UE moves to Cell F-ACH from Cell_DCH         9.2.0           47         RP-100219   1587   1         Allow reconfiguration of some less in RL Addition procedure         9.2.0           47         RP-100219   1588   Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100220   1587   Correction of DC-HSDPA Capability in lur         9.2.0           47         RP-100220   1587   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1588   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1592   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1593   Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1593   Addition of DSNS Validity Period in RNSAP         9.2.0           47 <td< td=""><td></td><td></td><td></td><td>2</td><td></td><td></td></td<>				2		
ABC   RP-091178   1573   Correction on IE*E-AGCH Table Choice*   9.1.0				_		
RP-091186   1574   Introduction of Re9 HSPA Capability into RNSAP   9.1.0						1
47         RP-100215   1576         Addition of HS-DSCH physical layer category over fur         9.2.0           47         RP-100215   1579         IE-RNT Allocation for UE moves to Cell. FACH from Cell. DCH         9.2.0           47         RP-100218   1589         Correction of DC-HSDPA Capability in fur         9.2.0           47         RP-100218   1584         Correction of DC-HSDPA Capability in fur         9.2.0           47         RP-100215   1586         Combining E-DCH Radio Links within the RLS         9.2.0           47         RP-100215   1586         Combining E-DCH Radio Links within the RLS         9.2.0           47         RP-100215   1586         Combining E-DCH Radio Links within the RLS         9.2.0           47         RP-100230   1587   1         Correction of Multi-cell Capability Report in lur         9.2.0           47         RP-100230   1588   2         Introduction of HS-DSCH resources on TS0 for 1.28Mcps TDD         9.2.0           47         RP-100230   1589   3         Correction to state transition of Enhanced CELL_FACH UE for LCR TDD         9.2.0           47         RP-100230   1589   3         Addition of DSNSS Validity Period in RNSAP         9.2.0           47         RP-100218   1596   5         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           47         RP-100218   1596				1		
RP-100219   1577	47			•		
RP-100219   1581   Correction of DC-HSDPA Capability in lur	47			1		
RP-100219   1581   Correction of DC-HSDPA Capability in Iur   9.2.0						1
RP-100215   1586						1
Operation						
RP-100220   1586   Combining E-DCH Radio Links within the RLS   9.2.0	41	100210	1304			3.2.0
RP-100220   1587   Correction of Multi-cell Capability Report in Iur   RP-100230   1588   2	<i>1</i> 7	RP-100215	1586			920
RP-100230   1588   2				1		1
RP-100217   1591   3				2		
477         RP-100230         1592         2         Rel-9 Flexible cell combinations in DC-HSDPA         9.2.0           477         RP-100229         1594         1         Addition of DGNSS Validity Period in RNSAP         9.2.0           477         RP-100229         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           477         RP-100218         1596         1         Syncronization detection window configuration in CPC for 1.28 Mcps TDD         9.2.0           477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100299         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100221         1608         3         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         3         Correction of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100221         1608         3         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           478         RP-100221<						1
RP-100230   1593   1   Addition of DGNSS Validity Period in RNSAP   9.2.0						
477         RP-100229         1594         1         Introduction of UE Aggregate Maximum Bit Rate Enforcement Indicator         9.2.0           477         RP-100231         1596         1         Syncronization detection window configuration in CPC for 1.28 Mcps TDD         9.2.0           477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100199         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100221         1608         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.2           04/2010         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100591         1625         Coll Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0						1
477         RP-100218         1596         1         Syncronization detection window configuration in CPC for 1.28 Mcps TDD         9.2.0           477         RP-100230         1597         2         Measurement occasion configuration in CPL DCH for 1.28 Mcps TDD         9.2.0           477         RP-100199         1604         Indication of Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100221         1606         3         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected at typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrupted headers fixed         9.2.3           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100594				-		1
477         RP-100230         1597         2         Measurement occasion configuration in CELL_DCH for 1.28Mcps TDD         9.2.0           477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100221         1608         3         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         3         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Correction for Endorest fixed         9.2.3           04/2010         Correction for Endorest fixed         9.2.0           04/2010         Correcti				1		
477         RP-100216         1601         Correction for Procedural Text on E-RNTI Allocation at E-DCH Serving Cell Change         9.2.0           477         RP-100199         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           477         RP-100221         1608         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         <				2		1
477         RP-100199         1604         Indication of Precoding Weight Set Restriction preference         9.2.0           477         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1606         3         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional occrrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.2           04/2010         Correction of procedure text that appears to be duplicated and miscording in RL Addition procedure         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction of DC-HSDPA and MIMO operation         9.3.0           48         RP-100991         1631         Correction for Enhanced Serving Cell Change         9.3.0           49						
47         RP-100229         1605         Rapporteur's update of RNSAP protocol         9.2.0           47         RP-100221         1608         Corrections to DC HSUPA         9.2.0           47         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrupted headers fixed         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-10094         1631         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100904         1634         2 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
477         RP-100224         1606         3         Corrections to DC HSUPA         9.2.0           477         RP-100221         1608         Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration         9.2.0           04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrupted headers fixed         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-10094         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100904         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49						
RP-100221   1608   Remove Cell Specific HARQ memory partitioning for DC HSDPA+MIMO and additional corrections for HS-DSCH preconfiguration   9.2.0				2		
Corrections for HS-DSCH preconfiguration				3		-
04/2010         Corrected a typo in ASN.1 to make it pass the syntax checker         9.2.1           04/2010         ToC updated         9.2.2           04/2010         Corrupted headers fixed         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100545         1631         Correction for Enhanced Serving Cell Change         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100909         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         RP-100904         1643	47	KF-100221	1000			9.2.0
04/2010         ToC updated         9.2.2           04/2010         Corrupted headers fixed         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100945         1631         Correction for Enhanced Serving Cell Change         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100905         1637         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         RP-100911         <	04/2010				Corrected a type in ASN 1 to make it page the syntax checker	0.2.1
04/2010         Corrupted headers fixed         9.2.3           48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100545         1631         Correction for Enhanced Serving Cell Change         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100909         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100901         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         RP-100911         1635         2         Introduction of AC-HSDPA						1
48         RP-100592         1618         1         CPC parameters missing for serving HS-DSCH RL change in RL Addition procedure         9.3.0           48         RP-100593         1622         Correction of procedure text that appears to be duplicated and mis-placed         9.3.0           48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100595         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100545         1631         Correction for Enhanced Serving Cell Change         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100905         1637         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           09/2010         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-1010911         1638         1         S						
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48         RP-100594         1625         2         CQI Feedback Cycle k for DC-HSDPA and MIMO operation         9.3.0           48         RP-100591         1629         Correction when the power offset for S-CPICH for MIMO is zero         9.3.0           48         RP-100545         1631         Correction for Enhanced Serving Cell Change         9.3.0           49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100909         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           49         RP-100910         1635         2         Introduction of evaluated based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of				ı		1
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RP-100545 1631						
49         RP-100904         1633         1         Clarification of 64 QAM usage at intra Node B serving HS-DSCH RL change         9.4.0           49         RP-100909         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           09/2010         -         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1650         2         Correction						
49         RP-100909         1634         2         Corrections to HSDPA secondary serving cell list handling         9.4.0           49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           09/2010         -         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1650         2         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-				1		
49         RP-100905         1637         Correction of procedure text for E-DCH SPS operation         9.4.0           49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           09/2010         -         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability fo						
49         RP-100904         1641         Addition of UE with enhanced HS-SCCH support indicator IE for Cell_FACH         9.4.0           09/2010         -         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Additio						
09/2010         -         -         -         Release 10 version created based on v9.4.0         10.0.0           49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability for Multi-Carrier HSDPA and Single Stream         10.1.0				-		
49         RP-100911         1635         2         Introduction of 4C-HSDPA         10.0.0           49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.0.0           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability for Multi-Carrier HSDPA and Single Stream         10.1.0		117-100904	1041			
49         RP-100910         1638         1         Small Technical Enhancements and Improvements for GNSS (RNSAP)         10.00           50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability for Multi-Carrier HSDPA and Single Stream MIMO         10.1.0		- DD 100014	1625	-		
50         RP-101275         1642         Correction of 4C-HSDPA secondary serving HS-DSCH RL change         10.1.0           50         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability for Multi-Carrier HSDPA and Single Stream MIMO         10.1.0						
60         RP-101274         1643         2         Introduction of MC-HSUPA to RNSAP         10.1.0           50         RP-101277         1644         2         Introduction of MU-MIMO to RNSAP         10.1.0           50         RP-101269         1647         Corrections to E-DCH MAC-d Flow Multiplexing for 1.28Mcps TDD         10.1.0           50         RP-101269         1650         2         Correction of Inactivity Threshold for UE DRX Cycle for 1.28Mcps TDD         10.1.0           50         RP-101271         1652         1         Power Offset For S-CPICH for MIMO of secondary cell         10.1.0           50         RP-101275         1657         1         Addition of simultaneous cell capability for Multi-Carrier HSDPA and Single Stream MIMO         10.1.0				1		
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50 RP-101275 1658 3 Throughput/Energy Savings tradeoff for Dual Band UEs 10.1.0				1	MIMO	
	50	RP-101275	1658	3	Throughput/Energy Savings tradeoff for Dual Band UEs	10.1.0

SP-409   SP-106829   Clarification on the use of References (TS 21 801 CR400309)   10.2.0		1				
Section   Sect	SP-49	SP-100629			Clarification on the use of References (TS 21.801 CR#0030)	10.2.0
51         RP-110224 1683         Correction of SPNL carrier group indicator for 12 Mey Tab Mys Tab M				1		
51         RP-110224 1664 J.         Correction of SNPL carrier group indicator for 1.28 Mcps TDD Multi-Carrier E-DCH 10.2.0           51         RP-110239 1664 J.         I.         Battery optimization - Labulatin/SN.1 mismatch cleanup         10.2.0           51         RP-110230 1669 J.         I.         Introduction of MDT         10.2.0           52         RP-110880 1674 J.         Clarification on the Range of Possible Secondary Serving Cell List         10.2.0           52         RP-110880 1681 J.         Missalignment between message labular and ASN.1 for Idle Interval Information IE         10.3.0           52         RP-110880 1681 J.         Extension of General Evener message labular and ASN.1 for Idle Interval Information IE         10.3.0           52         RP-110880 1681 J.         Extension of Information Transfer control for UTRAN ANR related information         10.3.0           52         RP-110881 1685 I.         UE support indicator for D. secondary HS-DSCH activation state according to RRC         10.3.0           52         RP-110880 1686 I.         UE support indicator for D. secondary HS-DSCH activation state according to RRC         10.3.0           52         RP-110880 1686 I.         UE support indicator for D. secondary HS-DSCH activation state according to RRC         10.3.0           52         RP-110880 1686 I.         UE support indicator for D. secondary HS-DSCH activation state according to RRC						
51         RP-110229         1667         1         Battery optimization - tabular/ASN.1 mismatch cleanup         10.2.0           51         RP-110230         1669         5         Extension of MDT         10.2.0           51         RP-110881         1641         Lordination of MDT         10.3.0           52         RP-110881         1677         1         Missilgomen between message tabular and ASN.1 for Idle Interval Information IE         10.3.0           52         RP-110889         1681         1         Introduction of Enhancements of Jurg Interface         10.3.0           52         RP-110889         1681         4         Introduction of Enhancements of Jurg Interface         10.3.0           52         RP-110689         1683         1         Introduction of Enhancements of Jurg Interface         10.3.0           52         RP-110689         1688         1         UE support indicator for DL secondary HS-DSCH activation state according to RRC         10.3.0           52         RP-110890         1688         1         Correction of Indicator for DL secondary HS-DSCH activation state according to RRC         10.3.0           52         RP-110890         1688         1         Correction of Indicator for DL secondary HS-DSCH activation state according to RRC         10.3.0           52 <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td>				1		1
SP-110229   1669   1						
51         RP-110888 1674   Clarification on the Range of Possible Sacondary Serving Cell List         102.0           52         RP-110689 1677   Misalgoment between message tabular and ASN.1 for Idle Interval Information IE         103.0           52         RP-110689 1678   Misalgoment between message tabular and ASN.1 for Idle Interval Information IE         103.0           52         RP-110889 1682   Misal All Introduction of Enhancements of Iur-g Interface         Interface Misal Assistance Interface           52         RP-110689 1686   Misal All Introduction of Enhancements of Iur-g Interface         Interface Interface           52         RP-110689 1686   Misal All Introduction of Information transfer control for UTRAN ANR releate Information Interface         103.0           52         RP-110680 1686   Misal All Introduction of Information transfer control for UTRAN ANR releate Information Interface         103.0           52         RP-110680 1686   Misal All Introduction of Information transfer control for UTRAN ANR releate Information Interface         103.0           52         RP-110680 1686   Misal All Introduction of Information Interface Introduction Interface         103.0           52         RP-110680 1686   Misal All Introduction of Information Interface         103.0           52         RP-110680 1686   Misal All Introduction Introd				1		
22 RP-110889 1674   Clarification on the Range of Possible Secondary Serving Cell List   10.3.0				1		
10.30	51	RP-110226 1	669	5	Extension of maximum number neighbouring RNCs	10.2.0
RP-110890   1678   3	52	RP-110688 1	674	1	Clarification on the Range of Possible Secondary Serving Cell List	10.3.0
10.30	52	RP-110681 1	677	1	Misalignment between message tabular and ASN.1 for Idle Interval Information IE	10.3.0
10.30		RP-110689 1	678	3	Extend the Number of Supported Carriers for Multi-Carrier HSDPA for 1.28Mcps TDD	10.3.0
RP-110689   1682   1	52			4		
RP-110693   1683   3				1		
Rep-110681   1685   1				3		
RP-110680   1868   1						
RP-110686   1686   1   Correction of abnormal condition text   10.3.0	02	1110001	000	•	,,,	10.0.0
RP-110681   1887   1   Rapporteur's proposal following review of TS 25.423   10.3.0	52	RP-110690 1	686	1		10.3.0
RP-110693   1688   Z   ANR Report Distribution using Direct Information Transfer procedure   10.3.0						
RP-110893   1689   Z.   ANR Neighbour cell configuration supported by Information Exchange Initiation procedure   10.3.0 proc						
Procedure						
Reference review outcome in TS 25.423   10.30	32	KF-110093 1	009	2		10.3.0
Sa	52	RP-110695 1	600			10 3 0
S3   RP-111195   1599   1   Clarification on M1 and M2 in MDT Configuration over lur   10.4 0				1		
RP-111195   700   3						
S3   RP-111195   701   Z   Area scope RAI list in MDT configuration   10.4.0						
Sa						
10.4.0   10.5   RP-111196   1708   1   Rapporteur corrections   10.4.0   10.4.0   10.5   RP-111196   1709   -     Correction of some generic references to dated references   10.4.0   10.4.0   10.5   RP-111196   1710   1   Correction of the CELL_DCH Measurement Occasion Information for 1.28Mcps TDD   10.4.0   10.5   RP-1111694   1714   -   Addition of new Band 26 for E850   10.5.0   10.				2		1
10.40   Sample   RP-111196   1709   Correction of some generic references to dated references   10.40   Sample   RP-111196   1710   Correction of the CELL_DCH Measurement Occasion Information for 1.28Mcps TDD   10.40   Sample   RP-111654   1714   Addition of new Band 26 for E850   10.5.0   Sample   RP-111649   1715   Addition of TCE IP in IUR INVOKE TRACE   10.5.0   Sample   RP-111645   1714   Sample   RP-111645   1714   Sample   RP-111645   1714   Sample			-			
S4				1	- ' '	
Facility			-		1	
Facing				1		
54         RP-111651         1718         1         Support for frequency specific compressed mode         10.5.0           54         RP-111645         1724         2         Support of dynamic HS-SCCH order for DTXDRX         10.5.0           11/2/2011         Release 11 version created based on v10.5.0         11.0.0           54         RP-111653         1716         1         Introduction of UL CLTD         11.0.0           54         RP-111652         1722         1         Introduction of UL CLTD         11.0.0           55         RP-120235         1732         1         Introduction of 8-carrier HSDPA         11.0.0           55         RP-120234         1735         -         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           56         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120775 </td <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>				-		
February   Fig. 2   Support of dynamic HS-SCCH order for DTXDRX   10.5.0		RP-111649 1	715	2	Addition of TCE IP in IUR INVOKE TRACE	10.5.0
12/2011	54	RP-111651 1	718	1	Support for frequency specific compressed mode	10.5.0
54         RP-111653         1716         1         Introduction of UL CLTD         11.0.0           54         RP-111652         1722         1         Introduction of S-carrier HSDPA         11.0.0           55         RP-120234         1735         -         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           55         RP-120234         1735         -         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           56         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120744         1741         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120746         1752         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1754         Introduction of Unit an unit	54	RP-111645 1	724	2	Support of dynamic HS-SCCH order for DTXDRX	10.5.0
54         RP-111652         1722         1         Introduction of 8-carrier HSDPA         11.0.0           55         RP-120234         1735         -         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           55         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           55         RP-120815         1740         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TS0 capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120752         1750         1         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1 <td>12/2011</td> <td></td> <td></td> <td></td> <td>Release 11 version created based on v10.5.0</td> <td>11.0.0</td>	12/2011				Release 11 version created based on v10.5.0	11.0.0
55         RP-120235         1732         1         Addition of new Band 26 for E850         11.1.0           55         RP-120234         1735         -         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           55         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120745         1741         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120744         1743         -         Clarification of Extended S-RNTI         11.2.0           56         RP-120746         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121132         1757         1         Further corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132	54	RP-111653 1	716	1	Introduction of UL CLTD	11.0.0
55         RP-120234         1735         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           55         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120815         1740         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           57         RP-121131         1756         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121132         1757         1         Further corrections on U.L. CLTD         11.3.0           57         RP-121132         1757         7         Further corrections o	54	RP-111652 1	722	1	Introduction of 8-carrier HSDPA	11.0.0
55         RP-120234         1735         Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE         11.1.0           55         RP-120231         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120815         1740         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           57         RP-121131         1756         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121132         1757         1         Further corrections on U.L. CLTD         11.3.0           57         RP-121132         1757         7         Further corrections o	55	RP-120235 1	732	1	Addition of new Band 26 for E850	11.1.0
55         RP-120211         1738         1         The role of RNC in RNSAP Reset procedure         11.1.0           56         RP-120815         1740         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120744         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TS0 capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120751         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         1         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           58         RP-121730         1766         2		RP-120234 1	735	-	Correction of placement of Power Offset For S-CPICH for MIMO Request Indicator IE	11.1.0
56         RP-120745         1740         -         Clarification of the carrier capability for two-carrier HSDPA for 1.28Mcps TDD         11.2.0           56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TSO capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120761         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121141         1762         1         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121141         1762 <td< td=""><td></td><td>RP-120231 1</td><td>738</td><td>1</td><td>The role of RNC in RNSAP Reset procedure</td><td>11.1.0</td></td<>		RP-120231 1	738	1	The role of RNC in RNSAP Reset procedure	11.1.0
56         RP-120745         1741         1         Some corrections for UL CLTD         11.2.0           56         RP-120744         1743         -         Clarification of the enhanced TS0 capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120761         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Corrections on UL CLTD         11.3.0           58         RP-121730         1766         2         Introduction of Wild Interpretable of (#1763) [MCC]         11.3.1           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58				-		
56         RP-120744         1743         -         Clarification of the enhanced TS0 capability for 1.28Mcps TDD         11.2.0           56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120746         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-1217272         1768         3         Introduction of Wil				1		
56         RP-120752         1750         1         Introduction of Extended S-RNTI         11.2.0           56         RP-120746         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           57         RP-121740         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           59         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         Introduction of Uplink MIMO and 64QAM in TS 25.423         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH				-		
56         RP-120746         1752         3         Supporting Non-adjacent multi-carrier operation         11.2.0           56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           58         RP-121720         1766         2         Introduction of WILD Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature				1		
56         RP-120751         1754         Introduction of enhanced DC-HSDPA         11.2.0           57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           09/2012         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of UPInk MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121729         1779         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           59         RP-121726         1780         ESCC support in MIMO with four						1
57         RP-121131         1756         Corrections on Multicell E-DCH Restriction of Secondary cell list         11.3.0           57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Enther Enhancements to CELL_FACH feature         11.4.0           58         RP-121729         1769         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121725         1771         2         Introduction of Enther Enhancements to CELL_FACH feature         11.4.0           59         RP-130224         1780 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
57         RP-121132         1757         1         Further corrections on UL CLTD         11.3.0           57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           09/2012         Removed errorneously implemented CR (#1763) [MCC]         11.3.1           58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121729         1769         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell						
57         RP-121140         1762         1         Correction of misalignment between ASN.1 and tabular format         11.3.0           09/2012         Removed errorneously implemented CR (#1763) [MCC]         11.3.1           58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Addition of new information to neighbo				1		_
09/2012         Removed errorneously implemented CR (#1763) [MCC]         11.3.1           58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130223         1792         1<					Correction of misclianment between ACN 1 and tabular format	
58         RP-121730         1766         2         Introduction of UPH in dedicated measurement procedure         11.4.0           58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59	-	KP-121140 1	102	1		
58         RP-121726         1767         Supporting MIMO with four transmit antennas         11.4.0           58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130223         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212 <td< td=""><td></td><td>DD 404700 1</td><td>700</td><td>2</td><td></td><td>_</td></td<>		DD 404700 1	700	2		_
58         RP-121727         1768         3         Introduction of Multiflow in TS 25.423         11.4.0           58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130227         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212<				2		
58         RP-121729         1769         2         Introduction of Uplink MIMO and 64QAM in TS 25.433         11.4.0           58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130227         1795         2         Extending maxEARFCN         11.5.0           59				0		
58         RP-121725         1771         2         Introduction of Further Enhancements to CELL_FACH feature         11.4.0           58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0						
58         RP-121737         1779         1         Specification cleanup before freeze         11.4.0           58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0					·	
58         RP-121726         1780         ESCC support in MIMO with four transmit antennas         11.4.0           59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL CLTD, UL MIMO, UL 16QAM and 64QAM         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0				2	<u> </u>	
59         RP-130224         1782         2         Addition of new information to neighbouring E-UTRA cell information element         11.5.0           59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL 15.0         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0				1		
59         RP-130205         1785         1         Adding enhanced serving cell change support for 4C-HSDPA, 8C-HSDPA, Multflow, UL 11.5.0         11.5.0           59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0						
SP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0				2		
59         RP-130206         1789         1         Correction of Power Offset for Multiflow         11.5.0           59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0	59	RP-130205 1	785	1		11.5.0
59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0						
59         RP-130223         1792         1         Erroneous addition of MDT configuration to lur         11.5.0           59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0		RP-130206 1	789	1		
59         RP-130206         1793         1         Codebook restriction in MIMO with four transmit antennas         11.5.0           59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0	59			1	Erroneous addition of MDT configuration to lur	11.5.0
59         RP-130237         1795         2         Extending maxEARFCN         11.5.0           59         RP-130212         1796         3         Rapporteur correction of RNSAP         11.5.0				1		
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### History

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