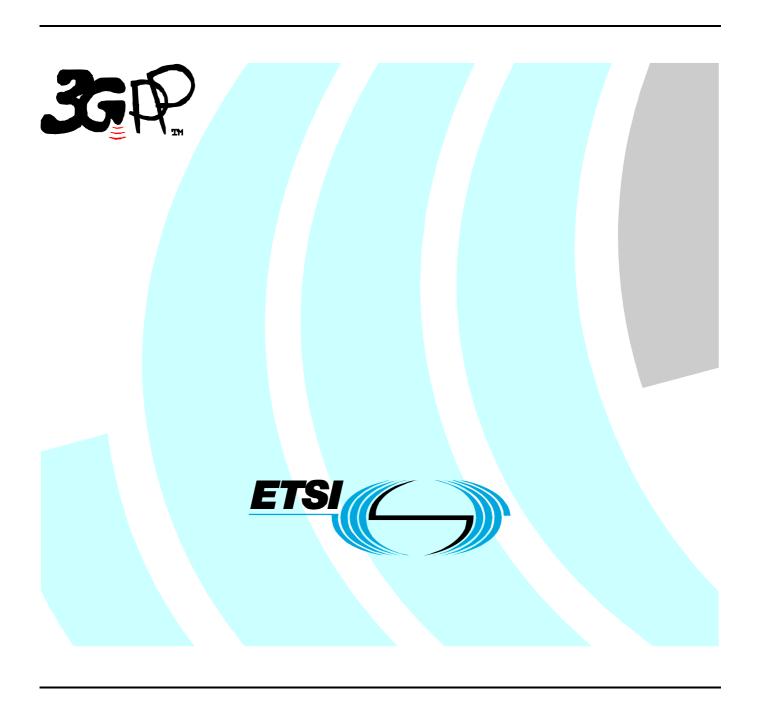
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Foreword

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

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

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- x the first digit:
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- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

[19]

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". [7] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception". [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 (07/2002): "Information technology - Abstract Syntax Notation [18] One (ASN.1): Specification of basic notation".

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ITU-T Recommendation X.681 (07/2002): "Information technology - Abstract Syntax Notation

[20]	ITU-T Recommendation X.691 (07/2002): "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
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[22]	3GPP TS 25.224: "Physical Layer Procedures (TDD)".
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[25]	3GPP TS 23.032: "Universal Graphical Area Description (GAD)".
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[27]	3GPP TS 25.213: "Spreading and modulation (FDD)".
[28]	3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
[29]	GSM TS 05.05: "Digital cellular telecommunications system (Phase 2+); Radio transmission and reception".
[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 "Internet Protocol, Version 6 (IPv6) Specification".
[34]	IETF RFC 768 "User Datagram Protocol", (8/1980)
[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]	3GPP TR 43.930: "Iur-g interface; Stage 2".
[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 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
[45]	IETF RFC 2475 "An Architecture for Differentiated Services".
[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 rd , 2006.
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[55]	IS-GPS-200, Revision D, Navstar GPS Space Segment/Navigation User Interfaces, March 7 th , 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".

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 an SCCP connection 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 [36].

UE Link: see definition in [50].

URA Link: see definition in [50].

MBMS Bearer Service: see defintion in [51].

MBMS session: see defintion in [50].

MBMS session start: see defintion in [50].

MBMS session stop: see defintion in [50].

MBMS Selected Services: see defintion in [50].

3.2 Symbols

Void.

3.3 Abbreviations

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

A-GPS Assisted-GPS

ALCAP Access Link Control Application Part

APN Access Point Name

ASN.1 Abstract Syntax Notation One

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

CCCH Common Control Channel

CCPCH Common Control Physical Channel CCTrCH Coded Composite Transport Channel

CFN Connection Frame Number

C-ID Cell Identifier
CM Compressed Mode
CN Core Network

CPICH Common Pilot Channel
CRNC Controlling RNC
DBSS Drift BSS

C-RNTI Cell Radio Network Temporary Identifier

CS Circuit Switched

CTFC Calculated Transport Format Combination DCH Dedicated Channel

DGANSS Differential GANSS DGPS Differential GPS DL Downlink

DPC Downlink Power Control

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

DRNC Drift RNC DRNS Drift RNS

D-RNTI Drift Radio Network Temporary Identifier

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

E-AGCH E-DCH Absolute Grant Channel

E-DCH Enhanced UL DCH

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

E-RNTI E-DCH RNTI

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

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

E-UTRA Evolved UTRA

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

EP Elementary Procedure
FACH Forward Access Channel
FDD Frequency Division Duplex

F-DPCH Fractional DPCH FN Frame Number FP Frame Protocol

GANSS Galileo and Additional Navigation Satellite Systems

GERAN GSM EDGE Radio Access Network

GA Geographical Area

GAGAN GPS Aided Geo Augmented Navigation

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

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
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

SDU Service Data Unit SF System Frame

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

SRNC Serving RNC SRNS Serving RNS

S-RNTI Serving Radio Network Temporary Identifier

STTD Space Time Transmit Diversity

TDD Time Division Duplex TF Transport Format

TFCI Transport Format Combination Indicator
TFCS Transport Format Combination Set

TFS Transport Format Set

TGCFN Transmission Gap Connection Frame Number

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

TPC Transmit Power Control TrCH Transport Channel

TS Time Slot

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

UARFCN UTRA Absolute Radio Frequency Channel Number

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

UL Uplink

UMTS Universal Mobile Telecommunications System

URA UTRAN Registration Area

U-RNTI UTRAN 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.

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

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

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

shall not be included. For requirements 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

between the 1.28Mcps TDD specific paragraphs.

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

[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 *Information Element*

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

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

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

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

Error (Reject)".

5 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.

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

Fti	Flower (com. Books 1 or (c)
Function Padia Link Management	Elementary Procedure(s)
Radio Link Management	a) Radio Link Setup b) Radio Link Addition
	c) Radio Link Addition
	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
OFDANI O' Ilia Tana fan	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
Common Transport Channel Resources Management	Initiation
ivianayement	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
The second secon	b) Common Measurement Reporting
	c) Common Measurement Termination
	d) Common Measurement Failure
Information Exchange	a) Information Exchange Initiation
	b) Information Reporting
	c) Information Exchange Termination
	d) Information Exchange Failure
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Reset	Reset
UE Measurement Forwarding[TDD]	a) UE Measurement Initiation
	1 · · · · · · · · · · · · · · · · · · ·
	b) UE Measurement Reporting
	c) UE Measurement Termination
	c) UE Measurement Termination d) UE Measurement Failure
Trace	c) UE Measurement Termination

Function	Elementary Procedure(s)
MBMS UE Linking/De-linking	a) Common Transport Channel Resources
	Initiation
	b) Radio Link Setup
	c) Downlink Signalling Transfer
	d) MBMS Attach
	e) MBMS Detach
MBMS Channel Type Indication	a) Direct Information Transfer
	b) Uplink Signalling Transfer
	c) Radio Link Setup
	d) Radio Link Addition
	e) Common Transport Channel Resources
	Initiation
MBMS Preferred Frequency Layer Indication	a) Direct Information Transfer
	b) Radio Link Setup
	d) Radio Link Addition
MBMS URA Linking/De-linking	a) Downlink Signalling Transfer
	b) MBMS Attach
	c) MBMS Detach
MBMS MCCH Information Control	a) MBSFN MCCH Information
Direct Information Transfer	a) Direct Information Transfer
Relocating serving RNC	a) Enhanced Relocation
	b) Enhanced Relocation Cancel
	c) Enhanced Relocation Signalling Transfer
	d) Enhanced Relocation Release

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

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 REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronised Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Physical Channel Reconfiguration	PHYSICAL CHANNEL RECONFIGURATION REQUEST	PHYSICAL CHANNEL RECONFIGURATION COMMAND	PHYSICAL CHANNEL RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Common Transport Channel Resources Initialisation	COMMON TRANSPORT CHANNEL RESOURCES REQUEST	COMMON TRANSPORT CHANNEL RESOURCES RESPONSE	COMMON TRANSPORT CHANNEL RESOURCES FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
UE Measurement Initiation[TDD]	UE MEASUREMENT INITIATION REQUEST	UE MEASUREMENT INITIATION RESPONSE	UE MEASUREMENT INITIATION FAILURE
Enhanced Relocation	ENHANCED RELOCATION REQUEST	ENHANCED RELOCATION RESPONSE	ENHANCED RELOCATION FAILURE

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
OLIVAN Opinik dignalling Transfer	INDICATION
Downlink Signalling Transfer	DOWNLINK SIGNALLING TRANSFER REQUEST
Relocation Commit	RELOCATION COMMIT
Paging	PAGING REQUEST
Synchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION COMMIT
Commit	
Synchronised Radio Link Reconfiguration	RADIO LINK RECONFIGURATION CANCEL
Cancellation	
Radio Link Failure	RADIO LINK FAILURE INDICATION
Radio Link Restoration	RADIO LINK RESTORE INDICATION
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION REQUEST
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE
	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
Function dispation	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
lur 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

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

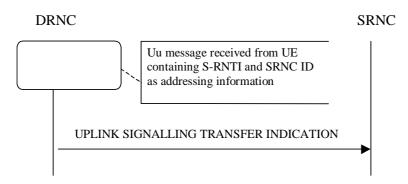


Figure 1: Uplink Signalling Transfer procedure, Successful Operation

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 7.68Mcps TDD* 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 - 9.2.3.31].

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 [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.]

[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 ref. [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 ref. [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

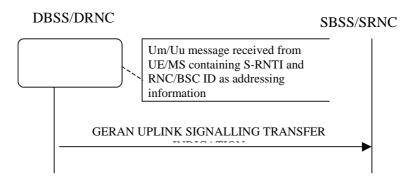


Figure 1A: GERAN Uplink Signalling Transfer procedure, Successful Operation

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 [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 [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 [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 [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 [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 ref. [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 ref. [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

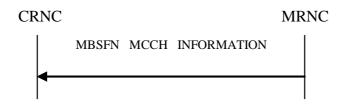


Figure 4A: MBSFN MCCH Information procedure, Successful Operation

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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8.3 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

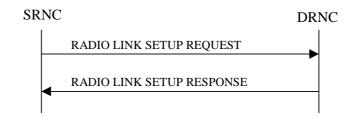


Figure 5: Radio Link Setup procedure: Successful Operation

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.

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, ref. [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, ref. [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, ref. [4]. [FDD - If no Transport channel BER is available for the

selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4].] [TDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [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 [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 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 [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 recieved 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 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 [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 [32] and MAC-hs [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 is included in the HS-DSCH FDD Information IE, then]
 - [FDD The DRNS shall activate the MIMO 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 [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.]
- [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 [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use a different HS-SCCH in consecutive TTIs for this UE.]
- [FDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP RESPONSE message.]
- [1.28 Mcps TDD The DRNS shall include the *SixtyfourQAM DL Support Indicator* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD 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 [32].]

[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 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 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 [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 - 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 [10]. If the E-DPDCH Power Interpolation IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in [10].]

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the E-DPCH Information IE, which contains the Minimum Reduced E-DPDCH Gain Factor IE, then the DRNS shall use the value to determine the applicable minimum gain factor ($\beta_{ed,k,reduced,min}$) defined in [10]. For the case the Minimum Reduced E-DPDCH Gain Factor IE is not available for the UE Context, the DRNS may use the default value defined in [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 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 [32] and MAC [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* and *E-HICH* FDD Scrambling Code IE and shall include the *E-RGCH* and *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* and *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* and *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 [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 [41].]

[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.]

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 - DL Code Information:]

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

[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.]

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 ref. [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 [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 [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 [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 [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 [21] 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 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 [21].]
- [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 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 [21].]
- [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the *E-DCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK SETUP RESPONSE message.]
- [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.]

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 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.]

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

[FDD - If 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 [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 [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 [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 ref.[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 ref. [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 ref. [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 ref. [10]).]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the 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_{init} 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 LCR IE. If the Neighbouring TDD Cell Information IE includes the Sync Case IE for the set to "Case1", the DRNC shall include the Time Slot For SCH IE in the Neighbouring TDD Cell Information IE 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 and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a and 9.2.3.1b.
- 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 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 Colocation 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 [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. Ref. [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

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

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR:]

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

[1.28Mcps TDD - 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.]

MBMS Handling:

If the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall perform the UE Linking as specified in [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 the DRNS shall if supported preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [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 [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 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 [18].]
- [FDD The DRNS shall include, in the *HS-DSCH Preconfiguration Info* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message or in the *Successful RL Information Response* IE of the RADIO LINK SETUP FAILURE message, IEs according to the rules defined for HS-DSCH setup and:]
 - [FDD if HARQ Preamble Mode IE is included in the HS-DSCH Preconfiguration Setup IE the HARQ Preamble Mode Activation Indicator IE]
 - [FDD if MIMO Activation Indicator IE is included in the HS-DSCH Preconfiguration Setup IE the MIMO N/M Ratio IE]

- [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used in the 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 without HS-SCCH constraint 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 shall be included]
- [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 may allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
 - [FDD The 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]

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.]

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[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.]

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

[FDD - For each E-DCH RL which has or can have a common generation of E-RGCH information with another RL (current or future) when the 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 [32] and MAC [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.]

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 ref. [4].]
- [TDD start transmission on the new RL immediately as specified in ref. [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 ref. [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 ref. [4].]

8.3.1.3 Unsuccessful Operation

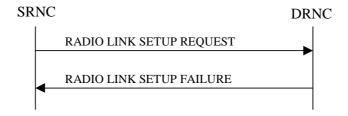


Figure 6: Radio Link Setup procedure: Unsuccessful Operation

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.]

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[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.]

[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.]

Typical cause values are:

Radio Network Layer Causes:

[FDD - UL Scrambling Code Already in Use;]

DL Radio Resources not Available;

UL Radio Resources not Available;

[FDD - Combining Resources not available;]

Combining not Supported

Requested Configuration not Supported;

Cell not Available;

[FDD - Requested Tx Diversity Mode not Supported;]

Power Level not Supported;

Number of DL codes not supported;

Number of UL codes not supported;

Dedicated Transport Channel Type not Supported;

DL Shared Channel Type not Supported;

[TDD - UL Shared Channel Type not Supported;]

[FDD - UL Spreading Factor not Supported;]

[FDD - DL Spreading Factor not Supported;]

CM not Supported;

[FDD - DPC mode change not Supported;]

Cell reserved for operator use;

Delayed Activation not supported;

E-DCH not supported;

[FDD - F-DPCH not supported;]

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

[FDD - Continuous Packet Connectivity HS-SCCH less operation not Supported;]

[FDD - MIMO not supported;]

[FDD - E-DCH TTI2ms not supported;]

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

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

[FDD - MIMO not available;]

[FDD - SixteenQAM UL not Supported;]

HS-DSCH MAC-d PDU Size Format not supported;

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

E-DCH MAC-d PDU Size Format not available;

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

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

[FDD - Multi Cell operation not available.]

[FDD - Multi Cell operation not supported.]

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 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" and/or the Additional HS Cell Information RL Setup 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 a MIMO Activation Indicator IE and an 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 *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 FAILRE message.]

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

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

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

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

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

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

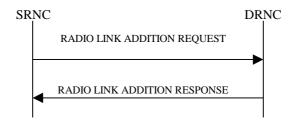


Figure 7: Radio Link Addition procedure: Successful Operation

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.

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 - DL Code Information:]

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

[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.]

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 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.]

[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 is present the DRNS shall activate/deactivate the Transmit Diversity for each new Radio Link in accordance with the *Transmit Diversity Indicator* IE using the diversity mode of the existing Radio Link(s).]

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

[FDD - If the 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 LCR IE. If the Neighbouring TDD Cell Information IE includes the Sync Case IE set to "Case1", the DRNC shall include the Time SlotFor SCH IE in the Neighbouring TDD Cell Information IE. If the Neighbouring TDD Cell Information IE 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 and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a and 9.2.3.1b.
- 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 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 [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. Ref. [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

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

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR:]

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

[1.28Mcps TDD - 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.]

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 the DRNS shall, if supported, preconfigure the indicated cells for Enhanced HS Serving Cell Change according to [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 [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 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 [18].
- [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 the *MIMO N/M Ratio* IE]
 - [FDD if *HS-DSCH MAC-d PDU Size Format* IE is included in the *HS-DSCH Preconfiguration Setup* IE and set to "Flexible MAC-d PDU Size" and if Sixtyfour QAM will not be used for the cell in the preconfiguration the *HS-DSCH TB Size Table Indicator* IE for each preconfigured cell.]
 - [FDD if Sixtyfour QAM Usage Allowed Indicator IE is included in the Secondary Cells IE in the HS-DSCH Preconfiguration Setup IE or in the HS-DSCH Preconfiguration Setup IE the SixtyfourQAM DL Usage Indicator IE for each preconfigured cell]
 - [FDD if Continuous Packet Connectivity HS-SCCH less Information IE is included in the HS-DSCH Preconfiguration Setup IE the Continuous Packet Connectivity HS-SCCH less Information Response IE]
 - [FDD if the *UE without HS-SCCH constraint 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 – 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 may allocate for the preconfigured configuration a primary E-RNTI identifier or a secondary E-RNTI identifier or both for the new Serving E-DCH Radio Link and include these E-RNTI identifiers along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE.]
- [FDD The 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.]

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

[FDD - For each E-DCH RL which has or can have a common generation of E-RGCH information with another RL (current or future) when the 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 [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 - HS-DSCH Setup at Serving HS-DSCH Radio Link Change:]

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

- [FDD The 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 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 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 [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 recieved 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 [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 [32] and MAC-hs [41].]
- [FDD If the MIMO Activation Indicator IE is included in the HS-DSCH FDD Information IE, then]
 - [FDD The DRNS shall activate the MIMO 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 [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 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 RADIO LINK ADDITION RESPONSE message if it decides to use the octet aligned table defined in [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the UE without HS-SCCH constraint indicator IE is included in the HS-DSCH FDD Information IE, then the DRNS may use a different HS-SCCH in consecutive TTIs for this UE.]
- [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 [32].]

- [FDD The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the *HS-DSCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving HS-DSCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD If the *Serving Cell Change CFN* IE is not included then the DRNS shall activate immediately the resources that are allocated for the new serving HS-PDSCH Radio Link, and shall keep active the resources that are allocated for the previous serving HS-PDSCH Radio Link.]
- [FDD If the requested Serving HS-DSCH Radio Link Change was successful or unsucessful, the DRNS shall indicate this in the *HS-DSCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

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

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

- [FDD In the new configuration the DRNS shall allocate the HS-PDSCH resources for the new secondary serving HS-PDSCH Radio Link. Non cell specific secondary serving Radio Link and non cell specific secondary serving HS-DSCH parameters take the same values as for the serving HS-DSCH cell.]
- [FDD 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 – Secondary Serving HS-DSCH Setup at Serving HS-DSCH Radio Link Change:]

- [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 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 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 [41] for HS-DSCH Transport Block Size signalling.]
- [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 - 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 and E-HICH FDD Scrambling Code* IE and shall include the *E-RGCH and 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 and 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 and E-HICH Channelisation Code* IE contains invalid data.]

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

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

- [FDD If the new Serving E-DCH RL is in this DRNS:]
 - [FDD The DRNS shall allocate a primary E-RNTI identifier or a secondary E-RNTI identifier or both and include these E-RNTI identifiers and the Channelisation Code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *E-DCH Serving Cell Change Information Response* IE for the indicated RL in the RADIO LINK ADDITION RESPONSE message.]
 - [FDD The DRNS may include the *Serving Grant Value* IE and *Primary/Secondary Grant Selector* IE in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message for the initial grant for the new serving E-DCH RL.]
 - [FDD If the E-DCH HARQ process allocation for 2ms TTI for scheduled and/or non-scheduled transmission shall be changed, the DRNS shall allocate resources according to the new/changed configuration and include the new/changed configuration in the *E-DCH FDD Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]
 - [FDD If a serving cell change is performed the RADIO LINK ADDITION RESPONSE message may contain invalid data (see 9.2.2.4C).]
 - [FDD The DRNS may include the *Default Serving Grant in DTX Cycle 2* IE in the RADIO LINK ADDITION RESPONSE message for the new serving E-DCH RL.]
- [FDD The DRNS may include the E-RGCH/E-HICH Channelisation Code IE and/or the E-HICH Signature Sequence IE and/or the E-RGCH Signature Sequence IE or may alternatively include the E-RGCH Release Indicator IE in the E-DCH FDD DL Control Channel Information IE in the E-DCH Serving Cell Change Information Response IE in the RADIO LINK ADDITION RESPONSE message for any of the other E-DCH Radio Link in the DRNS Communication Context that have not been included in the E-DCH FDD DL Control Channel Information IE in RL Information Response IE.]
- [FDD If the *Serving Cell Change CFN* IE is included in the RADIO LINK ADDITION REQUEST message, then the DRNS shall activate the resources that are allocated for the new serving E-DCH Radio Link at the next coming CFN with a value equal to the value requested by the SRNC, or earlier. In this case, in the new configuration the DRNS shall, if applicable, de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link. The DRNS shall deactivate those resources at the next coming CFN with a value equal to the value requested by the SRNC.]
- [FDD- If the *Serving Cell Change CFN* IE is not included then the DRNS shall activate immediately the resources that are allocated for the new serving E-DCH Radio Link, and shall keep active the resources that are allocated for the previous serving E-DCH Radio Link.]
- [FDD If the addition of the requested Serving E-DCH Radio Link was successful but the Serving E-DCH Radio Link change was unsuccessful, the DRNS shall indicate this in the *E-DCH Serving Cell Change Information Response* IE in the RADIO LINK ADDITION RESPONSE message.]

[FDD - E-DPCH Handling:]

[FDD - If the RADIO LINK ADDITION REQUEST message includes an *E-DPCH Information* IE, 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 [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in [10].]

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

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

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

[FDD - E-DCH Setup:]

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

- [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 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 [32] and MAC [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 [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 [41].]

[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 [32] and MAC-hs [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.1
- [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 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 [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 recieved 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.]

[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 [32] and MAC [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.]

[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 [21] 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 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 [21].]
- [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 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 [21].]
- [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the *E-DCH Semi-Persistent scheduling Information Response LCR* IE in the RADIO LINK ADDITION RESPONSE message.]
- [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.]

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 ref. [4].]
- [TDD start transmission on the new RL immediately as specified in ref. [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 ref. [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 ref. [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

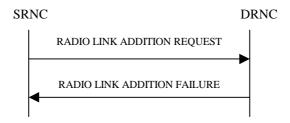


Figure 8: Radio Link Addition procedure: Unsuccessful Operation

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.]

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;]

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 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, 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 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 Serving Cell Change Information*] and the *HS-DSCH MAC-d PDU Size Format* IE in the *HS-DSCH*

Information IE [FDD - in the *HS-DSCH Serving Cell Change Information*] has the value "Flexible MAC-d PDU Size", the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.

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

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

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains the MIMO Activation Indicator IE, Sixtyfour QAM Usage Allowed Indicator IE set to "Allowed" and/or the Additional HS Cell Information RL Addition 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 a *MIMO Activation Indicator* IE and an *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 HS Cell Information RL Addition* IE indicating a secondary serving cell that is not in the same Node B as the new serving HS-DSCH cell, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message]

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Additional HS Cell Information RL Addition* IE and if the *HS-DSCH 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.

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

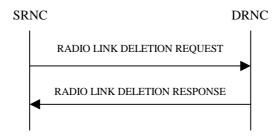


Figure 9: Radio Link Deletion procedure, Successful Operation

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

8.3.3.3 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

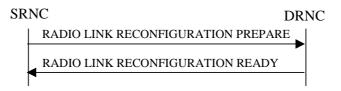


Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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.

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, ref. [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, ref. [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, ref. [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4].] [TDD If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [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 ref. [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 [8]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the *pth* to "*PhCH number p*".]
- [FDD If the *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 ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the 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 [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 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-TFCS Information* IE in the *E-DPCH Information* IE contains the *E-TFCI Boost Information* IE, the DRNS shall use the information according to [10]. If the *E-TFCI Boost Information* IE is not present, the DRNS shall use the value "127" in the algorithm defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION PREPARE message.]
- [FDD If the *E-DPCH Information* IE includes the *E-TTI* IE, the 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 [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 [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 [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 [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 [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 [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.]

[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 [21] 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 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 [21].]
- [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 [21].]
- [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 [21].]
- [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the *E-DCH Semi-Persistent scheduling Information Response LCR* 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 [21].
- [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 *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 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 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 [21].
 - [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 If the *Semi-Persistent E-DCH releted E-HICH Information* IE is included in the *E-DCH Semi-Persistent scheduling Information LCR* IE, then the DRNS shall use this information to modify the configuration of Semi-Persistent E-DCH releted E-HICH.]
- [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the *E-DCH Semi-Persistent scheduling Information Response LCR* 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.]

[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 IE,] [1.28Mcps TDD DL Timeslot Information IE,] [3.84Mcps TDD DL Timeslot Information LCR IE,] [3.84Mcps 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 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 [12] and [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 T.68 Mcps* IE/*DL DPCH to be Added T.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 IE* (or the *Rx Timing Deviation 3.84 Mcps Extended* IE if the cell containing the radio link is configured for extended timing advance) in the RADIO LINK RECONFIGURATION READY message]. [7.68 Mcps TDD - If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation 7.68 Mcps* IE in the RADIO LINK RECONFIGURATION READY message].]

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

[1.28Mcps TDD - The DRNS shall use the *UL SIR Target* IE in the *UL CCTrCH To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [12] and [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 [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.]

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 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* IF
- 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 [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 recieved in RADIO LINK RECONFIGURATION PREPARE in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE for a Priority Queue including *Scheduling Priority Indicator* IE and *Maximum MAC-d PDU Size Extended* IE.
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in [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 [32] and MAC-hs [41].
- [FDD If the MIMO Activation Indicator IE is included in the HS-DSCH FDD Information IE, then:]
 - [FDD The DRNS shall activate the MIMO 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 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [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 RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use a different HS-SCCH in consecutive TTIs for this UE.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [FDD 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 [32].]

[FDD - Secondary Serving HS-DSCH Setup:]

[FDD - If the *C-ID* IE is present in the *Additional HS Cell Information RL Reconf Prep* IE in the RADIO LINK RECONFIGURATION PREPARE message, then:]

- [FDD The 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 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 [41] for secondary serving HS-DSCH Transport Block Size signalling.]

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 IE* II.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 LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD HS-PDSCH Timeslot Specific Information IE] [1.28 Mcps TDD HS-PDSCH Timeslot Specific Information LCR IE] [7.68 Mcps TDD HS-PDSCH Timeslot Specific Information 7.68 Mcps IE] in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.

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

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Reconf Prep* IE , this 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. 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 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.]

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 [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 recieved 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 for a Priority Queue 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 [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 [32] and MAC-hs [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 is included in the HS-DSCH Information To Modify IE, then:]
 - [FDD 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.]

- [FDD If the *MIMO 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 [10] for MIMO and include the *MIMO Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [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 RADIO LINK RECONFIGURATION READY message if it decides to use the octet aligned table defined in [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.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the 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 [32].]

[FDD - Secondary Serving HS-DSCH Modification:]

 $[FDD-If the RADIO LINK RECONFIGURATION PREPARE \ message includes the \ \textit{HS-DSCH FDD Secondary Serving Information To Modify IE}, then:]$

- [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 *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, 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 [41] for secondary serving HS-DSCH Transport Block Size signalling.]

[FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Prep* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the 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* IF
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.
- The DRNC shall include the *HS-DSH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [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 recieved 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.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes *DL RLC PDU Size Format* IE for a Priority Queue in the 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 [32].]

[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 - 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 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 [32] and MAC [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 [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 [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 and 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 and 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 [32] and MAC [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 ($\beta_{ed,i,ua}$) as defined in [10].]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the 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 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 [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 [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 - 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.]

[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 - 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 PREPARATION 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]

[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 [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.]

[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 [32] and MAC [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.]

[7.68Mcps TDD - E-DCH Modification:]

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

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

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

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]
- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD– If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS shall use this new power offset value.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels:]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the DRNS shall apply the values in the new configuration.]
 - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNS shall apply the value in the new configuration.]
- [TDD– If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE, then the DRNS shall use this value to determine whether MAC-e Reset is performed in the UE for sending the HARQ Failure Indication.]

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.]

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

[3.84 Mcps TDD 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 Aliminum 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 [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 [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

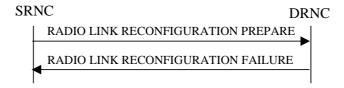


Figure 11: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

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.

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.]

[1.28Mcps TDD- MIMO not supported;]

[1.28Mcps TDD - MIMO not available;]

[1.28Mcps TDD - SixtyfourQAM DL and MIMO Combined not available.]

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 or *E-DPCCH Power Offset* 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 or establish the the secondary serving HS-DSCH Radio Link 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 ADDITION PREPARE message contains a *MIMO Activation Indicator* IE and an *Additional HS Cell Information RL Reconf Prep* IE, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains an *Additional HS Cell Information RL Reconf Prep* IE and the concerned UE Context is configured to apply MIMO, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]
- [FDD If the RADIO LINK RECONFIGURATION PREPARE message contains the *Additional HS Cell Information RL Reconf Prep* IE indicating a new secondary serving cell that is not in the same Node B as the serving HS-DSCH cell (or new serving in case of simultaneous serving HS-DSCH cell change), then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message]

If, 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.

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 ref.[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 ref.[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 [4], subclause 5.10.1, and in [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]

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.]

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.

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, ref. [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, ref. [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, ref. [4]. [FDD If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4].] [TDD If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [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 ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to "Not Used", the 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 [10]. If the *E-DPDCH Power Interpolation* IE is not present, the DRNS shall use the E-DPDCH power extrapolation formula defined in [10] if the *E-DCH FDD Information* IE is included in the RADIO LINK RECONFIGURATION REQUEST message.]

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

[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 [21] 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 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 [21].]
- [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 [21].]
- [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 [21].]
- [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the *E-DCH Semi-Persistent scheduling Information Response LCR* 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 [21].
- [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 *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 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 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 [21].
 - [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 If the Semi-Persistent E-DCH releted E-HICH Information IE is included in the E-DCH Semi-Persistent scheduling Information LCR IE, then the DRNS shall use this information to modify the configuration of Semi-Persistent E-DCH releted E-HICH.]
 - [1.28 Mcps TDD The DRNS shall allocate the E-PUCH codes needed for E-DCH Semi-Persistent scheduling operation and include the E-DCH Semi-Persistent scheduling Information Response LCR 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.]

[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 [12] and [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 - 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]

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.]

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 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 [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 recieved 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 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 [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 [32] and MAC-hs [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 is included in the HS-DSCH FDD Information IE, then]
 - [FDD The DRNS shall activate the MIMO 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 [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.]
- [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 RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [41] for HS-DSCH Transport Block Size signalling.]
- [FDD If the *UE without HS-SCCH constraint indicator* IE is included in the *HS-DSCH FDD Information* IE, then the DRNS may use a different HS-SCCH in consecutive TTIs for this UE.]
- [FDD If secondary serving HS-DSCH is applied also in the new configuration, then any changes related to parameters that are common for both the serving and the secondary serving HS-DSCH should be applied also for the secondary serving HS-DSCH.]
- [FDD 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 [32].]

[FDD - Secondary Serving HS-DSCH Setup:]

[FDD - If the *C-ID* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, 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 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 [41] for HS-DSCH Transport Block Size signalling.]

Intra-DRNS Serving HS-DSCH Radio Link Change:

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

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- If fields are to be included in the User Plane by the SRNC to handle TNL Congestion Control for HSDPA in the DRNS, then the DRNC shall include the *User Plane Congestion Fields Inclusion* IE in the *HS-DSCH Information Response* IE.
- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message. [FDD The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.] [1.28Mcps TDD– The *HARQ Memory Partitioning* IE may contain the *HARQ Memory Partitioning Information Extension For MIMO* IE.]
- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD HS-SCCH Specific Information Response IE] [1.28Mcps TDD HS-SCCH Specific Information Response LCR IE] [7.68 Mcps TDD HS-SCCH Specific Information Response 7.68 Mcps IE] in the HS-DSCH TDD Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD The DRNC shall include the [3.84 Mcps TDD HS-PDSCH Timeslot Specific Information IE] [1.28 Mcps TDD HS-PDSCH Timeslot Specific Information LCR IE] [7.68 Mcps TDD HS-PDSCH Timeslot Specific Information 7.68 Mcps IE] in the HS-DSCH Information Response IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

- The DRNC may include the *Transport Layer Address* IE and the *Binding ID* IE for HS-DSCH MAC-d flow in the [FDD *HS-DSCH FDD Information Response* IE] [TDD *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- If the *TNL QoS* IE is included for a MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink between the DRNS and the SRNC for the related MAC-d flow.

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

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE in the *Additional HS Cell Information RL Reconf Req* IE, this 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. 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 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.]

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 [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 Oueue 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 [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* To Modify IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, then]
 - [FDD 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.]
 - [FDD If the MIMO 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 [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 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 RADIO LINK RECONFIGURATION RESPONSE message if it decides to use the octet aligned table defined in [41] for HS-DSCH Transport Block Size signalling.]
- [1.28Mcps TDD- If the *MIMO Mode Indicator* To Modify 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 - 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 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 [41] for HS-DSCH Transport Block Size signalling.]

[FDD – Secondary Serving HS-DSCH Removal:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Secondary Serving Remove* IE in the *Additional HS Cell Information RL Reconf Req* IE, then the indicated secondary serving HS-DSCH Radio Link shall be removed.]

HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, 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 [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 received in RADIO LINK RECONFIGURATION REQUEST message in the *HS-DSCH*

MAC-d Flows To Add IE for a Priority Queue including Scheduling Priority Indicator IE and Maximum MAC-d PDU Size Extended IE

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the 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.
- [FDD If the RADIO LINK RECONFIGURATION REQUEST message includes *DL RLC PDU Size Format* IE for a Priority Queue in the 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 [32].]

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 – 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 [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 - 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 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 [32] and MAC [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 [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 [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 and 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 and E-HICH Channelisation Code* IE contains invalid data.]

[FDD - E-DCH Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the $\emph{E-DCH FDD Information To Modify}$ 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 [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 REQUEST 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 [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 [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 - 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.]

[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* 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.]

[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.]

[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 $\emph{E-DCH TDD Information To Modify}$ IE, then:]

- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *E-DCH MAC-d Flow Specific Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains a *TNL QoS* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *Maximum Number of Retransmissions for E-DCH* IE for an E-DCH MAC-d flow then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.]

- [1.28Mcps TDD If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Retransmission Timer* IE for an E-DCH MAC-d flow then the DRNS shall use this information to set the retransmission timer.]
- [TDD– If the *TNL QoS* IE is included in the *E-DCH TDD Information to Modify* IE for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH HARQ Power Offset TDD* IE for an E-DCH MAC-d flow the DRNS shall use this new power offset value.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH MAC-d Flow Multiplexing List* IE for an E-DCH MAC-d flow the DRNS shall use this information for the related resource allocation operation.]
- [TDD- If the *E-DCH TDD Information To Modify* IE contains the *E-DCH Grant Type* IE, the DRNS shall treat the E-DCH MAC-d flow as Scheduled or Non-scheduled accordingly.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Add* or *E-DCH Logical Channel To Delete* IEs, the DRNS shall use this information to add/delete the indicated logical channels. When a logical channel is deleted, all its associated configuration data shall also removed.]
- [TDD- If the *E-DCH TDD Information To Modify* IE includes the *E-DCH Logical Channel To Modify* IE, the DRNS shall use this information to modify the indicated logical channels:]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Priority Indicator* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *Scheduling Information* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Guaranteed Bit Rate* IE, the DRNS shall apply the values in the new configuration.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes E-*DCH DDI Value* IE, the DRNS shall apply the values in the new configuration.]
 - [1.28Mcps TDD If the *E-DCH Logical Channel To Modify* IE includes *MAC-es Maximum Bit Rate LCR* IE, the DRNS shall use this information for the related resource allocation operation, and when applicable, for E-DCH scheduling.]
 - [TDD If the *E-DCH Logical Channel To Modify* IE includes the *Maximum MAC-d PDU Size Extended* IE, the DRNC shall apply the value in the new configuration.]
- [TDD– If the *E-DCH TDD Information To Modify* IE includes the *MAC-e Reset Indicator* IE, then the DRNS shall use this value to determine whether MAC-e Reset is performed in the UE for sending the HARQ Failure Indication.]

General:

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, *HS-DSCH Information* IE, *HS-DSCH Information To Modify Unsynchronised* IE, *HS-DSCH MAC-d Flows To Add* IE, [FDD - *RL Specific E-DCH Information* IE] [TDD - *E-DCH MAC-d Flows to Add* IE], the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included], HS-DSCH MAC-d flow [FDD - for which the *Transport Bearer Not Requested Indicator* IE is not included] 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 [4], subclause 5.10.1, and in [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.]

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

[3.84 Mcps TDD 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

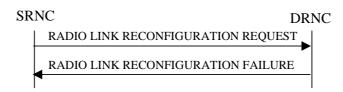


Figure 15: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

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.

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.]

[1.28Mcps TDD - MIMO not available;]

[1.28Mcps TDD- SixteenQAM UL not Supported;]

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

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, *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 or or establish the the secondary serving HS-DSCH Radio Link 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 a MIMO Activation Indicator IE and an Additional HS Cell Information RL Reconf Req IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message contains an *Additional HS Cell Information RL Reconf Req* IE and the concerned UE Context is configured to apply MIMO, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message 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, 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.

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

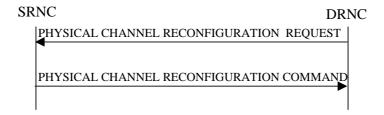


Figure 16: Physical Channel Reconfiguration procedure, Successful Operation

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 F-ormat F IE the SRNC shall apply the values of the F-DPCH F-OPCH F-OPCH

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.

8.3.8.3 Unsuccessful Operation

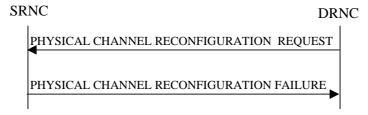


Figure 17: Physical Channel Reconfiguration procedure, Unsuccessful Operation

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

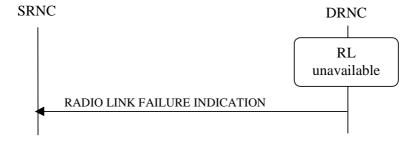


Figure 18: Radio Link Failure procedure, Successful Operation

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 ref. [10] subclause 4.3 and [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 ref. [10] subclause 4.3 and [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 ref. [10] shall use the

minimum value of the parameters N_INSYNC_IND that are configured in the cells supporting the radio links of the RL Set.1

[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

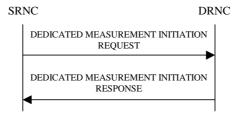


Figure 20: Dedicated Measurement Initiation procedure, Successful Operation

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 [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 [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).

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

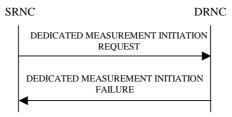


Figure 21: Dedicated Measurement Initiation procedure, Unsuccessful Operation

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.

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

Dedicated	Report Characteristics Type								
Measurement Type	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
SIR	X	Х	X	Х	Х	Х	Х	X	Modification
SIR Error	Х	Х	Х	Х	Х	Х	Х	Х	
Transmitted Code	X	X	Х	Х	Х	Х	Х	Χ	
Power									
RSCP	X	Х	X	Х	Х	Х	Х	Χ	
Rx Timing Deviation	Х	Х	Х	Х			Х	Х	
Round Trip Time	Χ	X	X	Χ	Х	Χ	Х	Χ	
Rx Timing Deviation	Χ	X	X	Χ			X	Χ	
LCR									
HS-SICH Reception	X	X	X	X			X	Χ	
Quality									
Angle Of Arrival LCR	Χ	X							
Rx Timing Deviation	X	X	X	X			X	Χ	
7.68Mcps									
Rx Timing Deviation	X	X	X	X			X	Χ	
3.84Mcps Extended									

If the Dedicated Measurement Type received in the *Dedicated Measurement Type* IE is not defined in ref. [11] or [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 ref. [23] and [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 ref. [23] and [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 [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 ref. [10].

Power Adjustment

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

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

where the sum is performed over an adjustment period corresponding to a number of frames equal to the value of the *Adjustment Period* IE, P_{ref} is the value of the *DL Reference Power* IE, $P_{P-CPICH}$ is the power used on the primary CPICH, P_{init} is the code power of the last slot of the previous adjustment period and r is given by the *Adjustment Ratio* IE. If the last slot of the previous adjustment period is within a transmission gap due to compressed mode, P_{init} shall be set to the same value as the code power of the slot just before the transmission gap.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE and the DL TX power range set by the 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 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

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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 [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 [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 [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

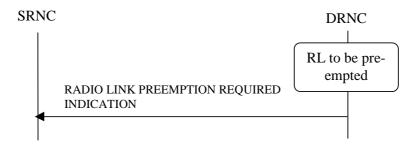


Figure 26B: Radio Link Pre-emption procedure, Successful Operation

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 [4].]
 - [TDD start transmission on the new RL immediately as specified in [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 [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 [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 ref.[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 ref.[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 [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 on a radio link for a UE-UTRAN connection or to update phase reference on a list of the radio links.

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

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

8.3.21.2 Successful Operation



Figure 26E: Radio Link Parameter Update Indication, Successful Operation

The Radio Link Parameter Update procedure is initiated by the DRNS by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the SRNC.

HS-DSCH related Parameter(s) Updating:

If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to HS-DSCH, it contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If the DRNS needs to update HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - HS-DSCH FDD Update Information IE] [TDD - HS-DSCH TDD Update Information IE].

If the DRNS needs to allocate new HS-SCCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator* IE.

[FDD - If the DRNS needs to allocate new HS-PDSCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-PDSCH Code Change Indicator* IE.]

[FDD - If the DRNS needs to update the CQI Feedback Cycle k, CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k* IE, *CQI Repetition Factor* IE, *ACK-NACK Repetition Factor* IE, *CQI Power Offset* IE, *ACK Power Offset* IE and/or *NACK Power Offset* IE.]

[TDD - If the DRNS needs to update the TDD ACK-NACK Power Offset the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including TDD ACK-NACK Power Offset IE.]

[FDD – Secondary Serving HS-DSCH related Parameter(s) Updating:]

[FDD - If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to secondary serving HS-DSCH, it contains suggested value(s) of the secondary serving HS-DSCH related parameter(s) that should be reconfigured on the radio link.]

[FDD - If the DRNS needs to update secondary serving HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message and include the *Additional HS Cell Information RL Param Upd* IE.]

- [FDD If the DRNS needs to allocate new secondary serving HS-SCCH Codes, the DRNS shall include the HS-SCCH Code Change Indicator IE in the HS-DSCH FDD Secondary Serving Update Information IE.]
- [FDD If the DRNS needs to allocate new HS-PDSCH Codes, the DRNS shall include the HS-PDSCH Code Change Indicator IE in the HS-DSCH FDD Secondary Serving Update Information IE.]

[FDD – Phase Reference Handling:]

[FDD – If DRNS needs to update phase reference for the channel estimation for one or several Radio Links, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Phase Reference Update Information* IE for the concerned RL(s).]

[FDD – E-DCH:]

[FDD – If DRNS needs to update E-DCH related parameters, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH FDD Update Information* IE.]

[FDD - If the DRNS needs to update the HARQ process allocation for non-scheduled transmission and/or HARQ process allocation for scheduled Transmission, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including the *HARQ Process Allocation For 2ms Non-Scheduled Transmission* Grant IE for the concerned MAC-d Flows and/or *HARQ Process Allocation For 2ms Scheduled Transmission* Grant IE.]

[FDD - If the DRNS needs to allocate new E-AGCH Channelisation Code, new E-RGCH/E-HICH Channelisation Code, new E-RGCH Signature Sequence and/or new E-HICH Signature Sequence, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH DL Control Channel Change Information* IE.]

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

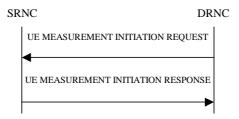


Figure 26F: UE Measurement Initiation procedure, Successful Operation

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 [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 [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

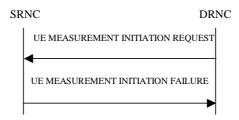


Figure 26G: UE Measurement Initiation procedure, Unsuccessful Operation

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 [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 [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 ref. [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 [48] and [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.

8.3.26.3 Abnormal Conditions

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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 [48] and [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

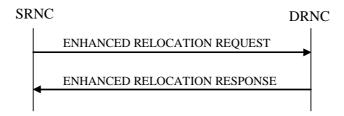


Figure 26M: Enhanced Relocation procedure: Successful Operation

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 $T_{RELOC_{prep.}}$ The ENHANCED RELOCATION REQUEST message shall contain the *Cause* IE with an appropriate value e.g.: "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons", "Directed Retry", "Reduce Load in Serving Cell", "No Iu CS UP relocation".

If the ENHANCED RELOCATION REQUEST message includes SRNC-ID, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context.

8.3.28.3 Unsuccessful Operation

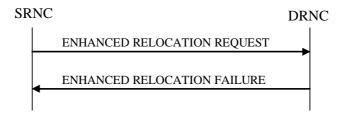


Figure 26N: Enhanced Relocation procedure: Unsuccessful Operation

If the DRNC is not able to accept any of the RABs or a failure occurs during the procedure, the DRNC shall send the ENHANCED RELOCATION FAILURE message to the SRNC. The message shall contain the *Cause* IE with an appropriate value.

Interactions with Enhanced Relocation Cancel procedure:

If there is no response from the DRNC to the ENHANCED RELOCATION REQUEST message before timer $T_{RELOCprep}$ expires in the DRNC, the SRNC should cancel the Enhanced Relocation procedure towards the DRNC by initiating the Enhanced Relocation Cancel procedure with the appropriate value for the *Cause* IE, e.g. " $T_{RELOCprep}$ expiry". The SRNC shall ignore any ENHANCED RELOCATION RESPONSE or ENHANCED RELOCATION FAILURE message received after the initiation of the Enhanced Relocation Cancel procedure and remove any reference and release any resources related to the concerned UE Context.

8.3.28.4 Abnormal Conditions

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8.3.29 Enhanced Relocation Cancel

8.3.29.1 General

This procedure is used to cancel an 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

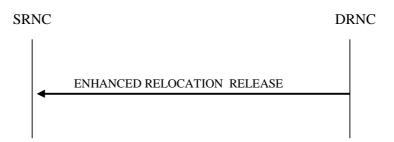


Figure 26Q: Enhanced Relocation Signalling Transfer procedure, Successful Operation

The procedure consists of the ENHANCED RELOCATION RELEASE message sent by the DRNC to the SRNC.

Upon reception of the ENHANCD 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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8.4 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

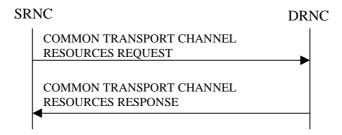


Figure 27: Common Transport Channel Resources Initialisation procedure, Successful Operation

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 perform the UE Linking as specified in [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.]

[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.]

8.4.1.3 Unsuccessful Operation

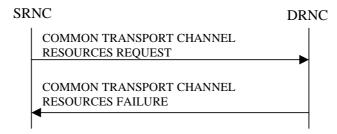


Figure 28: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

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.

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

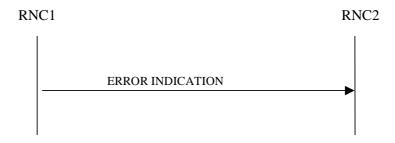


Figure 30: Error Indication procedure, Successful Operation

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 RNC₁/BSS₁ and RNC₂/BSS₂ 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 RNC₁ and the RNC to which the request is sent is referred to as RNC₂.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.2.2 Successful Operation

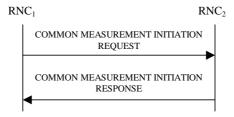


Figure 30A: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC₁ to the RNC₂.

Upon receipt, the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ may use any appropriate time slots, midamble shifts and burst types to make the measurement.]
- [7.68 Mcps TDD The RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 [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 RNC₂ 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 RNC₂ 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 [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 RNC₂ 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 RNC₂ shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event B", the RNC₂ 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 RNC₂ shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to "Event C", the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂shall 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 RNC₂ 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 RNC₂ 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 RNC₂ shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall use the value of the *Measurement Threshold 1* IE instead. If the *Measurement Hysteresis Time* IE is not included, the RNC₂ shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to "On Modification" and if the *SFN* IE is not provided, the RNC₂ 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 [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 RNC₂ shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

- 1. If the Common Measurement Type IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning":
 - If the $T_{UTRAN-GPS}$ Change Limit IE is included in the $T_{UTRAN-GPS}$ Measurement Threshold Information IE, the RNC₂ shall calculate the change of $T_{UTRAN-GPS}$ value (F_n) each time a new measurement result is received after point C in the measurement model [26]. The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the $T_{UTRAN-GPS}$ Change Limit IE. The change of $T_{UTRAN-GPS}$ value (F_n) is calculated according to the following:

 $F_n=0$ for n=0

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

M_n is the latest measurement result received after point C in the measurement model [26], measured at SFN_n.

 M_{n-1} is the previous measurement result received after point C in the measurement model [26], measured at SFN_{n-1} .

M₁ is the first measurement result received after point C in the measurement model [26], after first Common Measurement Reporting at initiation or after the last event was triggered.

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

- If the Predicted T_{UTRAN-GPS} Deviation Limit IE is included in the T_{UTRAN-GPS} Measurement Threshold Information IE, the RNC₂ shall update the P_n and F each time a new measurement result is received after point C in the measurement model [26]. The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the Predicted T_{UTRAN-GPS} Deviation Limit IE. The P_n and F_n are calculated according to the following:

 $P_n=b$ for n=0

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

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

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

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

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

 F_n is the deviation of the last measurement result from the predicted $T_{UTRAN\text{-}GPS}$ 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 [26], measured at SFN_n.

M₁ is the first measurement result received after point C in the measurement model [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 RNS₂ in an implementation-dependent way after point B (see model of physical layer measurements in [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 RNC₂ shall calculate the change of SFN-SFN value (F_n) each time a new measurement result is received after point C in the measurement model [26]. The RNC₂ shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

 $F_n=0$ for n=0

 $[FDD - F_n = (M_n - a) \mod 614400 \text{ for n} > 0]$

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

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

a is the last reported SFN-SFN.

M_n is the latest measurement result received after point C in the measurement model [26], measured at SFN_n.

 M_1 is the first measurement result received after point C in the measurement model [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 RNC₂ shall each time a new measurement result is received after point C in the measurement model [26], update the P_n and F_n. The RNC₂ shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

 $P_n=b$ for n=0

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

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

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

b is the last reported SFN-SFN value.

- 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 [26], measured at the [TDD the Time Slot TS_n of] the Frame SFN_n .
- M₁ is the first measurement result received after point C in the measurement model [26], after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the RNS₂ in an implementation-dependent way after point B (see model of physical layer measurements in [26]).

- 3. If the Common Measurement Type IE is set to "UTRAN GANSS Timing of Cell Frames for UE Positioning":
 - If the $T_{UTRAN-GANSS}$ Change Limit IE is included in the $T_{UTRAN-GANSS}$ Measurement Threshold Information IE, the RNC₂ shall calculate the change of $T_{UTRAN-GANSS}$ value (F_n) each time a new measurement result is received after point C in the measurement model [26]. The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the $T_{UTRAN-GANSS}$ Change Limit IE. The change of $T_{UTRAN-GANSS}$ value (F_n) 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 $Predicted\ T_{UTRAN-GANSS}$ $Deviation\ Limit\ IE$ is included in the $T_{UTRAN-GANSS}$ $Measurement\ Threshold\ Information\ IE$, the RNC₂ shall update the P_n and F each time a new measurement result is received after point C in the measurement model [26]. The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the $Predicted\ T_{UTRAN-GANSS}$ $Deviation\ Limit\ IE$. The P_n and F_n are calculated according to the following:

 $P_n=b$ for n=0

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

 $F_n = min((GAM_n - P_n) \mod 5308416000000, (P_n - GAM_n) \mod 5308416000000)$ 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_{UTRAN-GANSS} Drift Rate value.

b is the last reported T_{UTRAN-GANSS} 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_n is the latest GANSS measurement result received after point C in the GANSS measurement model, measured at SFN_n

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.

The T_{UTRAN-GANSSS} Drift Rate is determined by the RNS₂ in an implementation-dependent way after point B (see model of physical layer measurements in [26]).

If the *Report Characteristics* IE is not set to "On Demand", the RNC₂ 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 RNC₂ shall terminate the measurement locally without reporting this to RNC₁.

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_2 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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).

 $a = 1/2^{(k/2)}$ -, 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 [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 RNC₂ shall report all the available measurements in the Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE, and the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall include in the $T_{UTRAN-GANSS}$ Measurement Value Information IE, the $T_{UTRAN-GANSS}$ Quality IE and the $T_{UTRAN-GANSS}$ Drift Rate Quality IE, if available.

8.5.2.2.1 Successful Operation for lur-g

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC_1 to the BSS_2 or from the BSS_1 to the RNC_2/BSS_2 .

Upon receipt, the RNC₂/BSS₂ shall initiate the requested 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 RNC₂/BSS₂ 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 RNC₂/BSS₂ 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 RNC₂/BSS₂ 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_2/BSS_2 was able to initiate the measurement requested by RNC_1/BSS_1 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.

8.5.2.3 Unsuccessful Operation

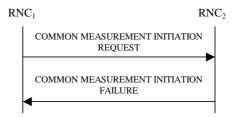


Figure 30B: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 ref. [11] or [15] to be measured on the Common Measurement Object Type indicated in the COMMON MEASUREMENT INITIATION REQUEST message the RNC₂ 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 RNC₂ 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 RNC₂ 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								
, , , , , , , , , , , , , , , , , , ,	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	Х	X	X	X	Х	
Transmitted Carrier Power	Х	Х	Х	Х	Х	Х	Х	Х	
UL Timeslot ISCP	Х	X	X	Х	Х	Х	Χ	Χ	
Load	Х	Х	Х	Х	Х	Х	Х	Х	
UTRAN GPS Timing of Cell Frames for UE Positioning	Х	Х							X
SFN-SFN Observed Time Difference	Х	Х							Х
RT load	Х	Х	Х	Х	Х	Х	Х	Х	
NRT load Information	Х	Х	Х	Х	Х	Х	Х	Х	
UpPTS interference	X	X	X	Χ	Х	X	Х	X	
UTRAN GANSS Timing of Cell Frames for UE Positioning	Х	X							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 RNS₂ 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 RNS₂ 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	Int	erface
	lur	lur-g
Received total wide band power	X	
Transmitted Carrier Power	X	
UL Timeslot ISCP	X	
Load	X	Χ
UTRAN GPS Timing of Cell	X	
Frames for LCS		
SFN-SFN Observed Time	X	
Difference		
RT load	X	Χ
NRT load Information	X	X
UTRAN GANSS Timing of Cell	Х	
Frames for UE Positioning		

If the RNC_2 receives from the BSS_1 a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the RNC_2 shall reject the Common Measurement Initiation procedure.

If the BSS_2 receives from the BSS_1 / RNC_1 a COMMON MEASUREMENT INITIATION REQUEST message in which a measurement, which is not applicable on the Iur-g interface, is requested, the BSS_2 shall reject the Common Measurement Initiation procedure.

If the RNC₂ receives from the BSS₁ a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the RNC₂ shall ignore that IE.

If the BSS₂ receives from the BSS₁ / RNC₁ a COMMON MEASUREMENT INITIATION REQUEST message in which the *SFN reporting indicator* IE is set to "FN Reporting Required", the BSS₂ 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 RNC₂/BSS₂ 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 RNC₂ 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 RNC₁ when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref. [23] and [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 RNC₂ was configured to perform the Measurement Recovery Behavior, the RNC₂ shall indicate Measurement Available to the RNC₁ when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [23] and [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 RNC₂ shall include the *SFN-SFN Quality* IE and the *SFN-SFN Drift Rate Quality* IE if available.

If the Common Measurement Type provided by RNC₁ when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GPS Timing of Cell Frames for UE Positioning", then the RNC₂ 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 RNC₁ when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GANSS Timing of Cell Frames for UE Positioning", then the RNC₂ 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 RNC₂/BSS₂ 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 RNC₁/BSS₁ when initiating the measurement with the Common Measurement Initiation procedure.

If the Common measurement type provided by RNC₁ when initiating the measurement with the Common Measurement Initiation procedure was "SFN-SFN Observed Time Difference", then RNC₂ 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 RNC₁ 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 RNC₂ 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 [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, RNC₂ shall terminate reporting of common measurements corresponding to the received *Measurement ID* IE.

8.5.4.2.1 Successful Operation for lur-g

The RNC_1/BSS_1 and RNC_2/BSS_2 shall use the Common Measurement Termination procedure as specified in section 8.5.4.2.

8.5.4.3 Abnormal Conditions

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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 RNC₂ to RNC₁ to inform the RNC₁ that a previously requested measurement can no longer be reported. RNC₂ has locally terminated the indicated measurement. The RNC₂ 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 RNC₁/BSS₁ and RNC₂/BSS₂ shall use the Common Measurement Failure procedure as specified in section 8.5.5.2.

8.5.5.3 Abnormal Conditions

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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 RNC₁ to RNC₂.

Upon receipt, the RNC₂ shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

If the *Information Exchange Object Type* is set to "MBMS Bearer Service" and the *Information Type Item* IE is set to "MBMS Bearer Service Full Address", the RNC₂ shall report for each TMGI included in the received *MBMS Bearer Service Identifiers List* IE, the Access Point Name and the IP Multicast Address corresponding to this TMGI in the *MBMS Bearer Service Identifiers List* IE in the INFORMATION EXCHANGE INITIATION RESPONSE message.

[FDD - If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Counting Information", the RNC₂ shall perform counting in cells as defined in [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 RNC₂ [50], the value "0". in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD - If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS Transmission Mode", the RNC₂ 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 RNC₂ that have a neighbour relation to the cells received in *MBMS Cell List* IE as defined in [50] in the INFORMATION EXCHANGE INITIATION RESPONSE message. If no cells of RNC₂ have a neighbour relation to a cell received in *MBMS Cell List* IE for a TMGI the value "Not Provided" shall be used]

[FDD - If the *Information Exchange Object Type* is set to "MBMS Cell" and the *Information Type Item* IE is set to "MBMS Neighbouring Cell Information", the RNC₂ shall report for each cell included in the received *MBMS Cell List* IE, the MBMS radio bearer information for each cells in the in the INFORMATION EXCHANGE INITIATION RESPONSE message.]

[FDD - If the *Information Exchange Object Type* is set to "MBMS Bearer Service in MBMS Cell" and the *Information Type Item* IE is set to "MBMS RLC Sequence Number", the RNC₂ 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 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 RNC₂ shall assume that the corresponding GANSS is "Galileo".

Information Report Characteristics:

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

If the *Information Report Characteristics* IE is set to "On Demand", the RNC₂ shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to "Periodic", the RNC₂ 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 RNC₂ 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 RNC₂ shall initiate the Information Reporting procedure when the requested information becomes available. The RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t_{ot} or WN_t parameter.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Almanac", the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Item when a change in the t_{oa} or WN_a parameter has occurred.
- If the *Information Type Item* IE is set to "GPS Information" and the *GPS Information Item* IE includes "GPS Real-Time Integrity", the RNC₂ 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 RNC₂ 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 RNC₂ shall report the result of both uplink and downlink cell capacity information.
- If any of the above *Information Type* IEs becomes temporarily unavailable, the RNC₂ 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 RNC₂ shall initiate the Information Reporting procedure for this specific Information.
- If the *Information Type* IE is set to "NACC related data", the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change has occurred in the t_{ot} or WN_t parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Almanac* IE, the RNC₂ shall initiate the Information Reporting procedure for this specific GANSS Information Item when a change in the T_{oa}, IOD_a, 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t_{ot}, WN_{ot}, WN_t, or N^A 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 RNC₂ shall initiate the Information Reporting procedure for this specific GANSS Information item when a change has occurred in the t_{EOP} parameter.
- If the *Information Type Item* IE is set to "GANSS Information" and the *GANSS Information* IE includes the *GANSS Auxiliary Information* IE, the RNC₂ 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.

Response message:

If the RNC₂ is able to determine the information requested by the RNC₁, 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 [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, 55, 56, 57, 58, 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 RNC₂ 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 RNC₂ shall include the *GANSS Additional Time Models* IE in *Requested Data Value* IE with the requested time information for each GANSS.

8.5.6.2.1 Successful Operation for lur-g

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from BSS_1 to BSS_2/RNC_2 or by RNC_1 to BSS_2 .

Upon receipt, the BSS₂/RNC₂ 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 RNC₂/BSS₂ 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

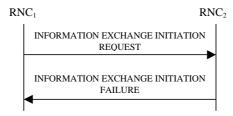


Figure 30G: Information Exchange Initiation procedure, Unsuccessful Operation

If the requested Information Type received in the *Information Type* IE indicates a type of information that RNC₂ cannot provide, the RNC₂ shall reject the Information Exchange Initiation procedure.

If the requested information provision cannot be accessed, the RNC₂ 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 RNC₂ 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 RNC₂ 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 RNC₂ shall reject the Information Exchange Initiation procedure and shall send the INFORMATION EXCHANGE INITIATION FAILURE message.

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 RNC₂ 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	Χ				
Altitude Information					
UTRAN Access Point Position	X				
IPDL Parameters	Χ	X	X		
GPS Information	Χ	X	X		
DGPS Corrections	Χ	Χ	X		
GPS RX Pos	Χ				
SFN-SFN Measurement Reference Point	Χ				
Position					
Cell Capacity Class	Χ		X		
NACC related data	Χ		X		
MBMS Bearer Service Full Address	Χ				
Inter-frequency Cell Information	X		X		
GANSS Information	Χ	X	X		
DGANSS Corrections	Χ	Χ	X		
GANSS RX Pos	X				
MBMS Counting Information [FDD only]	X				
MBMS Transmission Mode [FDD only]			X		
MBMS Neighbouring Cell Information	Χ		X		
[FDD only]					
MBMS RLC Sequence Number	Χ				
[FDD only]					

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	Χ	
UTRAN Access Point Position	Χ	
IPDL Parameters	Χ	
DGPS Corrections	Χ	
GPS Information	Χ	
GPS RX Pos	Χ	
SFN-SFN Measurement Reference Point Position	Χ	
Cell Capacity Class	Χ	X
NACC related data	Χ	
MBMS Bearer Service Full Address	Χ	
Inter-frequency Cell Information	Χ	
DGANSS Corrections	X	
GANSS Information	X	
GANSS RX Pos	Χ	
MBMS Counting Information [FDD only]	Χ	
MBMS Transmission Mode [FDD only]	Χ	
MBMS Neighbouring Cell Information [FDD only]	Χ	
MBMS RLC Sequence Number [FDD only]	Χ	

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 RNC₂ 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 RNC₁ 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 RNC₁/BSS₁ and RNC₂/BSS₂ shall use the Information Reporting procedure as specified in section 8.5.7.2.

8.5.7.3 Abnormal Conditions

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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 RNC₂ shall terminate the information exchange corresponding to the *Information Exchange ID* IE provided by the RNC₁ 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 RNC₂ to the RNC₁, to inform the RNC₁ that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The RNC₂ shall include in the INFORMATION EXCHANGE FAILURE INDICATION message the *Information Exchange ID* IE set to the same value provided by the RNC₁ when initiating the information exchange with the Information Exchange Initiation procedure, and the RNC₂ 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 RNC₁/BSS₁ and RNC₂/BSS₂ 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 RNC₁ and RNC₂ in the event of an abnormal failure.

The procedure uses connectionless signalling.

8.5.10.2 Successful Operation

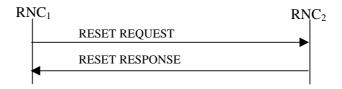


Figure 30K: Reset procedure, Successful Operation

The procedure is initiated with a RESET REQUEST message sent from the RNC₁ to the RNC₂.

If the *Reset Indicator* IE is set to "Context", then:

- For all indicated UE Contexts identified by the *S-RNTI* IE, the RNC₁ 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 RNC₂ shall take actions according to Annex D.2.
- For all indicated UE Contexts identified by the *D-RNTI* IE, the RNC2 in the role of SRNC, shall remove the
 information related to the RNC1 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 RNC₂ 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 RNC2 shall take actions according to Annex D.2.

If the Reset Indicator IE is set to "All Contexts", then the RNC₂ shall:

- In the role of DRNC, remove all the UE Contexts for which the RNC₁ is the SRNC and all the radio resources allocated for these UE Contexts. In addition, the RNC₂ shall take actions according to Annex D.2.
- In the role of SRNC, remove the information related to the RNC₁ for all the UE Contexts and all the radio resources allocated for these UE Contexts.

For all the removed UE Contexts and for all the UE Contexts for which the RNC_2 has removed information related to the RNC_1 , the RNC_2 shall also initiate release of the dedicated or common user plane resources that were involved in these UE Contexts. After clearing all related resources, the RNC_2 shall return the RESET RESPONSE message to the RNC_1 .

8.5.10.3 Abnormal Conditions

If the RESET message is received, any other ongoing procedure (except another Reset procedure) on same Iur interface related to a context indicated explicitly or implicitly in the message shall be aborted.

8.5.11 Direct Information Transfer

8.5.11.1 General

This procedure is used by an RNC to transfer information to another RNC spontaneously.

This procedure shall use the connectionless mode of signalling bearer.

8.5.11.2 Successful Operation



Figure 30L: Direct Information Transfer procedure, Successful Operation

The procedure is initiated with an DIRECT INFORMATION TRANSFER message sent from RNC₁ to RNC₂.

If the initiating RNC of this procedure is RNC₁, RNC₁ 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 RNC₁ is in the DRNC role for some UEs whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC₂ and if the channel type is determined by the RNC₁ for certain cells in the DRNS, the procedure shall be initiated by the RNC₁ to the RNC₂. In this case, the RNC₁ 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 RNC₁ is in the DRNC role for some UEs whose UE Link contains the concerned MBMS bearer service and whose SRNC is RNC₂, then the RNC₁ may initiate this procedure to indicate channel type change for the MBMS bearer service in certain cells. In this case, the RNC₁ shall include in the *Provided Information* IE the *Channel Type Information* IE in the DIRECT INFORMATION TRANSFER message.

The RNC₁ 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 RNC₁ 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 RNC₂ and if the preferred frequency layer is determined by the RNC₁ for certain cells that host at least one of these CELL_DCH UEs whose SRNC is RNC₂, the procedure shall be initiated by the RNC₁ to the RNC₂. In this case, the RNC₁ 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 RNC₁ that host at least one of these CELL_DCH UEs whose SRNC is RNC₂ 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.

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 [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 [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 [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 [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 [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 (C) 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	M		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	М		9.2.1.53	J	YES	reject
D-RNTI	0		9.2.1.24		YES	reject
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information	Ĭ	1	0.2.1.2		YES	reject
>UL Scrambling Code	М	,	9.2.2.53		-	10,000
>Min UL Channelisation	M		9.2.2.25		_	
Code Length	'''		0.2.2.20			
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		_	
>Puncture Limit	M		9.2.1.46	For the UL.	_	
>TFCS	M		9.2.1.63	1 01 1110 02.	_	
>UL DPCCH Slot Format	M		9.2.2.52		_	
>Uplink SIR Target	0		Uplink SIR		_	
σριτικ στις raiget			9.2.1.69			
>Diversity mode	М		9.2.2.8		_	
>Not Used	0		NULL		_	
>Not Used	0		NULL		_	
>DPC Mode	Ō		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		9.2.2.9		_	
>Number of DL	М		9.2.2.26A		_	
Channelisation Codes						
>TFCI Signalling Mode	M		9.2.2.46		_	
>TFCI Presence	C- SlotFormat		9.2.1.55		-	
>Multiplexing Position	M		9.2.2.26		_	
>Power Offset Information		1			_	
>>P01	M		Power Offset 9.2.2.30	Power offset for the TFCI bits.	-	
>>P02	M		Power Offset 9.2.2.30	Power offset for the TPC bits.	_	
>>P03	M		Power Offset 9.2.2.30	Power offset for the pilot bits.	-	
>FDD TPC Downlink Step Size	M		9.2.2.16		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	М		9.2.2.21a		_	
DCH Information	М		DCH FDD Information 9.2.2.4A		YES	reject
RL Information		1 <maxno ofRLs></maxno 	0.2.2. 17		EACH	notify
>RL ID	M		9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>First RLS Indicator	M		9.2.2.16A		_	
>Frame Offset	M		9.2.1.30		_	
>Chip Offset	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
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
Active Pattern Sequence Information	0		9.2.2.A		YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
DL Power Balancing Information	0		9.2.2.10A		YES	ignore
HS-DSCH Information	0		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-PDSCH RL ID	C – InfoHSDS CH		RL ID 9.2.1.49		YES	reject
MBMS Bearer Service List	_	0 <maxno ofMBMS></maxno 			GLOBAL	notify
>TMGI	М		9.2.1.80		_	
E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	М		9.2.2.24e		_	
>Puncture Limit	М		9.2.1.46		_	
>E-TFCS Information	М		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		_	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>HARQ Info for E-DCH	M		9.2.2.66			
>HS-DSCH Configured	M		9.2.2.00 9.2.2.19C		_	
Indicator	IVI		9.2.2.190		_	
> Minimum Reduced E-	0		9.2.2.102		YES	ignore
DPDCH Gain Factor			0.2.2.102		120	ignore
E-DCH FDD Information	C-		9.2.2.4B		YES	reject
	EDCHInfo					,
Serving E-DCH RL	0		9.2.2.38C		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset Information		1			_	
>>PO2	M		Power	This IE shall	_	
			Offset	be ignored		
			9.2.2.30	by DRNS.		
>FDD TPC Downlink 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	0		9.2.2.86		YES	reject
Support Request						-
>F-DPCH Slot Format	0		9.2.2.85		YES	Ignore
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.21b		YES	ignore
DCH Indicator For E-DCH- HSDPA Operation	0		9.2.2.67		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.9		YES	reject
Continuous Packet	0		9.2.2.72		YES	reject
Connectivity DTX-DRX Information						
Continuous Packet	0		9.2.2.74		YES	reject
Connectivity HS-SCCH less Information						-
Extended SRNC-ID	0		Extended	The	YES	reject
			RNC-ID 9.2.1.50a	Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.		
Additional HS Cell Information RL Setup		0 <maxno ofHSDSC H-1></maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID		_	
			9.2.1.49			
>C-ID	M		9.2.1.6		_	
>HS-DSCH Secondary	M		9.2.2.19aa		_	
Serving Information			L]		

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
maxnoofRLs	Maximum number of RLs for one UE.
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can join.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.1.3.2 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		ı	
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		YES	reject
D-RNTI	0		9.2.1.24		YES	reject
UL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	М		9.2.3.3A	For the UL	_	
>Minimum Spreading Factor	М		9.2.3.4A	For the UL	_	
>Maximum Number of UL Physical Channels per Timeslot	М		9.2.3.3B		-	
>Support of 8PSK	0		9.2.3.7H	Applicable to 1.28Mcps TDD only	YES	ignore
>Minimum Spreading Factor 7.68Mcps	0		9.2.3.19	Applicable to 7.68Mcps TDD only	YES	ignore
DL Physical Channel Information		1			YES	reject
>Maximum Number of Timeslots	М		9.2.3.3A	For the DL	_	
>Minimum Spreading Factor	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	YES	ignore

		1	1	TDD only		
>Minimum Spreading Factor	0		9.2.3.19	Applicable to	YES	ignore
7.68Mcps			9.2.3.19	7.68Mcps TDD only	1123	ignore
>Maximum Number of DL	0		9.2.3.20	Applicable to	YES	ignore
Physical Channels 7.68Mcps			0.2.0.20	7.68Mcps TDD only	120	ignore
>Maximum Number of DL	0		9.2.3.21	Applicable to	YES	ignore
Physical Channels per Timeslot 7.68Mcps				7.68Mcps TDD only		3
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH Information		0 <maxno ofCCTrCH s></maxno 		For DCH and USCH	EACH	notify
>CCTrCH ID	М	- Gr	9.2.3.2		_	
>TFCS	M		9.2.1.63	For the UL.	_	
>TFCI Coding	M		9.2.3.11	1 01 1110 02.	_	
>Puncture Limit	M		9.2.1.46			
>TDD TPC Uplink Step Size	Ö		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 <maxno ofCCTrCH s></maxno 		For DCH and DSCH	EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	М		9.2.1.63	For the DL.	_	
>TFCI Coding	М		9.2.3.11		_	
>Puncture Limit	М		9.2.1.46		_	
>TDD TPC Downlink Step Size	M		9.2.3.10		-	
>TPC CCTrCH List		0 <maxno CCTrCHs></maxno 		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	М		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

D. 0. '''. DOLL		1	004404	T	\/50	
>RL Specific DCH	0		9.2.1.49A		YES	ignore
Information			0.04.4045		VEC	:t
>Delayed Activation >UL Synchronisation	0	01	9.2.1.19Aa	Manadata	YES YES	reject
Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps	YES	reject
				TDD.		
>>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
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	C - InfoHSDS CH		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 <maxno ofMBMS></maxno 			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	M		9.2.3.37		_	
>E-DCH MAC-d Flows	М		9.2.3.38		-	
Information TDD	N 4		0.0.0.40			
>E-DCH TDD Information	M O		9.2.3.40	TDD only	- VEC	roigat
E-DCH Serving RL E-DCH Information 7.68Mcps	0	01	9.2.1.49	TDD only	YES YES	reject
-	D.4	01	0.0.0.00	7.68Mcps TDD only	162	reject
>E-PUCH Information	M		9.2.3.36		_	
>E-TFCS Information TDD	M		9.2.3.37		_	
>E-DCH MAC-d Flows Information TDD	M		9.2.3.38		_	
>E-DCH TDD Information 7.68Mcps	М		9.2.3.51		-	
E-DCH Information 1.28Mcps		01		1.28Mcps TDD only	YES	reject
>E-PUCH Information LCR	M		9.2.3.36a		_	
>E-TFCS Information TDD	М		9.2.3.37		_	
>E-DCH MAC-d Flows Information TDD	М		9.2.3.38		-	
>E-DCH TDD Information LCR	М		9.2.3.40a		-	
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Continuous Packet	0		9.2.3.61	1.28 Mcps	YES	reject
Connectivity DRX Information	I	1	I	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

Condition	Explanation
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.

Range bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCH for one UE.
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can join.

9.1.4 RADIO LINK SETUP RESPONSE

9.1.4.1 FDD Message

IE/Group Name	Presence	Range	IE Type 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	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	Ō		9.2.1.11		YES	ignore
RL Information Response		1 <maxno ofRLs></maxno 	0.2.1111		EACH	ignore
>RL ID	М	011 (20)	9.2.1.49		_	
>RL Set ID	M		9.2.2.35		_	
>URA Information	O		9.2.1.70B		_	
>SAI	M		9.2.1.52		_	
>Cell GAI	O		9.2.1.5A			
					_	
>UTRAN Access Point Position	0		9.2.1.70A		_	
>Received Total Wide Band Power	М		9.2.2.35A		_	
>Not Used	0		NULL			
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		_	
>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	3	YES	ignore
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>Non Combining or First					_	
>>>DCH Information Response	М		9.2.1.16A		_	
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>SSDT Support Indicator	М		9.2.2.43		_	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>Primary Scrambling Code	0		9.2.1.21A		_	
>UL UARFCN	0		9.2.1.45 UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	_	
>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	_	
>Primary CPICH Power	М		9.2.1.44		_	
>Not Used	O		NULL		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
>Neighbouring UMTS Cell	0		9.2.1.41A		_	
Information >Neighbouring GSM Cell	0		9.2.1.41C		_	
Information >PC Preamble	M		9.2.2.27a			
>SRB Delay	M		9.2.2.27a 9.2.2.39A		_	
>Cell GA Additional Shapes	0		9.2.2.39A 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 <maxno ofActiveM BMS></maxno 			GLOBAL	ignore
>>TMGI	M		9.2.1.80		_	
>>Transmission Mode	0		9.2.1.81		_	
>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Frame Offset	0		9.2.1.30		YES	ignore
>Chip Offset	0		9.2.2.1		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
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	O		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 <maxno ofHSDSC H-1></maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH-RNTI	М		9.2.1.30P		_	
>HS-DSCH FDD Secondary Serving Information Response	M		9.2.2.19ba		_	
>SixtyfourQAM DL Support	0		9.2.1.123		_	

	IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
ĺ	Indicator						

Range bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE.
maxnoofActiveMBMS	Maximum number of MBMS bearer services that are active in parallel.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
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	Ō		9.2.1.11		YES	ignore
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	М		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 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nt in ref. [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	М		9.2.3.7E		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B		-	
>UL CCTrCH Information		0 <maxno ofCCTrCH s></maxno 		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		_	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		YES	ignore
>DL CCTrCH Information		0 <maxno ofCCTrCH s></maxno 	3.2.11.00	For DCH	GLOBAL	ignore
>>CCTrCH ID	M	J/	9.2.3.2	 	ļ	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>DL DPCH Information		01	Reference		YES	ignore
>>>Repetition Period	М	0 1	9.2.3.7		-	ignore
>>>Repetition Length	M		9.2.3.6			
>>>TDD DPCH Offset	M		9.2.3.8A			
>>>DL Timeslot	M		9.2.3.2C			
Information						
>>CCTrCH Maximum DL TX Power	0		DL Power 9.2.1.21A	Maximum allowed power on 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 Response		0 <maxnoof DSCHs></maxnoof 			GLOBAL	ignore
>>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 Management	М		9.2.3.13		-	
>USCH Information		0	+		GLOBAL	ignore
Response		<maxnoof USCHs></maxnoof 			GLOBAL	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		1	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		ı	
>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 9.2.1.56		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
Uplink SIR Target	М		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
RL Information Response LCR		01		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD	YES	ignore
>RL ID	М		9.2.1.49		_	
>URA Information	М		9.2.1.70B		_	
>SAI	М		9.2.1.52		-	
>Cell GAI	0		9.2.1.5A		_	
>UTRAN Access Point Position	0		9.2.1.70A		-	
>UL Time Slot ISCP Info	М		9.2.3.13H		_	
>Maximum Uplink SIR	М		Uplink SIR			

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			9.2.1.69			
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	M		DL Power		_	
>UARFCN	0		9.2.1.21A UARFCN 9.2.1.66	Corresponds to Nt in ref.	_	
>Cell Parameter ID	0		9.2.1.8	[7]	_	
>SCTD Indicator	0		9.2.1.78		_	
>PCCPCH Power	M		9.2.1.43		_	
>Alpha Value	M		9.2.1.43 9.2.3.a		_	
>UL PhysCH SF Variation	M		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 <maxno ofCCTrCH sLCR></maxno 		For DCH	GLOBAL	ignore
>>CCTrCH ID	M		9.2.3.2		_	
>>UL DPCH Information LCR		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>UL Timeslot Information LCR	М		9.2.3.13G		_	
>>Uplink SIR Target CCTrCH	0		Uplink SIR 9.2.1.69		YES	ignore
>DL CCTrCH Information LCR		0 <maxno ofCCTrCH sLCR></maxno 	0.2.1.00	For DCH	GLOBAL	ignore
>>CCTrCH ID	M	SLUK>	9.2.3.2			
>>DL DPCH Information LCR	IVI	01	9.2.3.2		YES	ignore
>>>Repetition Period	M		9.2.3.7			
>>>Repetition Feriod	M		9.2.3.6			
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot Information LCR	M		9.2.3.2E		_	
>>>TSTD Indicator	M		9.2.3.13E	1		
>DCH Information Response	O	<u> </u>	9.2.1.16A		YES	ignore
>DSCH Information Response LCR		0 <maxnoof DSCHsLC R></maxnoof 	5.2.1.107		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	1	_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Eayer Address >>Transport Format Management	M		9.2.3.13		_	
>USCH Information		0	1		GLOBAL	ignore
Response LCR		<pre><maxnoof r="" uschslc=""></maxnoof></pre>			GLOBAL	ignore
>>USCH ID	М		9.2.3.14		_	
>>Binding ID	0		9.2.1.3		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Transport Layer	0		9.2.1.62		_	
Address						
>>Transport Format Management	М		9.2.3.13		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>HCS Prio	0		9.2.1.30N		YES	ignore
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>Uplink Timing Advance Control LCR	М		9.2.3.13K		YES	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
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 <maxno ofActiveM BMS></maxno 	0.2.0.0011		GLOBAL	ignore
>TMGI	М		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	M	01	0.24.40	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 >SAI	O M		9.2.1.70B 9.2.1.52			
>SAI >Cell GAI	О		9.2.1.52 9.2.1.5A			
>UTRAN Access Point Position	0		9.2.1.70A			
>UL Time Slot ISCP Info	М		9.2.3.13D		_	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		-	
>Maximum Allowed UL Tx Power	М		9.2.1.35		_	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nt in ref.	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
	_			[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	М		9.2.3.7E		_	
>Secondary CCPCH Info 7.68Mcps TDD	0		9.2.3.22		_	
>UL CCTrCH Information 7.68 Mcps		0 <maxno ofCCTrCH s></maxno 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2			
>>UL DPCH Information		01			YES	ignore
>>>Repetition Period	M		9.2.3.7		_	_
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	М		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 <maxno ofCCTrCH s></maxno 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH Information		01			YES	ignore
>>>Repetition Period	М		9.2.3.7		-	ignore
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>DL Timeslot	M		9.2.3.28		_	
Information 7.68Mcps >>CCTrCH Maximum DL	0		DL Power	Maximum	_	
TX Power	0		9.2.1.21A	allowed power on DPCH	_	
>>CCTrCH Minimum DL TX Power	0		DL Power 9.2.1.21A	Minimum allowed power on DPCH	_	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DSCH Information Response 7.68 Mcps		0 <maxnoof DSCHs></maxnoof 			GLOBAL	ignore
>>DSCH ID	M		9.2.3.3ae		_	
>>DSCH Flow Control Information	М		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 7.68 Mcps		0 <maxnoof USCHs></maxnoof 			GLOBAL	ignore
>>USCH ID	М	-	9.2.3.14		-	
>>Binding ID	0	1	9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>>Transport Format Management	М		9.2.3.13		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>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
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

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.
maxnoofCCTrCHs	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.
maxnoofCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxnoofActiveMBMS	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	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
D-RNTI	0		9.2.1.24		YES	ignore
CN PS Domain Identifier	0		9.2.1.12		YES	ignore
CN CS Domain Identifier	0		9.2.1.11		YES	ignore
CHOICE Cause Level	М				YES	ignore
>General					_	J
>>Cause	М		9.2.1.5		_	
>RL Specific					_	
>>Unsuccessful RL Information Response		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.49		_	
>>>Cause	М		9.2.1.5		_	
>>>Max UE DTX Cycle	C-DTX- CycleNotA vailable		9.2.2.87		YES	ignore
>>Successful RL		0 <maxno< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxno<>			EACH	ignore
Information Response	<u> </u>	ofRLs-1>	<u> </u>		<u> </u>	
>>>RL ID	М		9.2.1.49		_	
>>>RL Set ID	М		9.2.2.35		_	
>>>URA Information	0		9.2.1.70B		_	
>>>SAI	М		9.2.1.52		_	
>>>Cell GAI	0		9.2.1.5A		_	
>>>UTRAN Access Point Position	0		9.2.1.70A		_	
>>>Received Total Wide Band Power	М		9.2.2.35A		_	
>>>Not Used	0		NULL		_	
>>>DL Code Information	М		FDD DL Code Information 9.2.2.14A		-	
>>>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		ı	
>>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	M		9.2.2.43		_	
>>>Maximum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>>>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>>>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>>>Maximum Allowed UL Tx Power	М		9.2.1.35		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Maximum DL TX	М		DL Power		_	
Power			9.2.1.21A			
>>>Minimum DL TX Power	М		DL Power 9.2.1.21A		1	
>>>Primary CPICH Power	М		9.2.1.44		_	
>>>Primary Scrambling Code	0		9.2.1.45		-	
>>>UL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	-	
>>>DL UARFCN	0		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	-	
>>>Not Used	0		NULL		-	
>>>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>>>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>>>PC Preamble	М		9.2.2.27a		_	
>>>SRB Delay	М		9.2.2.39A		_	
>>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Primary CPICH Usage For Channel Estimation	0		9.2.2.32A		YES	ignore
>>>Secondary CPICH Information	0		9.2.2.38A		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxno ofActiveM BMS></maxno 			GLOBAL	ignore
>>>>TMGI	M		9.2.1.80		_	
>>>>Transmission Mode	0		9.2.1.81		_	
>>>Preferred Frequency Layer	0		UARFCN 9.2.1.66		-	
>>>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>>>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9A		YES	ignore
>>>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
>>HS-DSCH-RNTI	0		9.2.1.30P		YES	ignore
>>HS-DSCH Information Response	O		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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		YES	ignore
>>Additional HS Cell Information Response	0	0 <maxno ofHSDSC H-1></maxno 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>>>HS-PDSCH RL ID	M		RL ID 9.2.1.49		_	
>>>HS-DSCH-RNTI	М		9.2.1.30P		_	
>>>HS-DSCH FDD Secondary Serving Information Response	М		9.2.2.19ba		-	
>>>SixtyfourQAM DL Support Indicator	0		9.2.1.123		_	
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
maxnoofRLs	Maximum number of RLs for one UE.
maxnoofActiveMBMS	Maximum number of MBMS bearer services that are active in parallel.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.1.5.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
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		_	
>>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	M		Uplink SIR 9.2.1.69		YES	reject
RL Information		1 <maxn oofRLs- 1></maxn 			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
Active Pattern Sequence Information	0		9.2.2A	Either all the already active Transmissio n Gap Sequence(s) are addressed (Transmissio n Gap Pattern sequence shall overlap with the existing one) or none of the transmission gap sequences is activated.	YES	reject
DPC Mode	0		9.2.2.12A		YES	reject
Permanent NAS UE Identity	0		9.2.1.73		YES	ignore
Serving E-DCH RL	0		9.2.2.38C		YES	reject
Initial DL DPCH Timing Adjustment Allowed	0		9.2.2.21b		YES	ignore
HS-DSCH Serving Cell Change Information	0		9.2.2.19f		YES	reject
Serving Cell Change CFN	0		CFN 9.2.1.9		YES	reject

E-DPCH Information		01			YES	reject
>Maximum Set of E- DPDCHs	М		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 Indicator	М		9.2.2.19C		YES	reject
> Minimum Reduced E- DPDCH Gain Factor	0		9.2.2.102		YES	ignore
E-DCH FDD Information	C- EDCHInfo		9.2.2.4B		YES	reject
Additional HS Cell Information RL Addition		0 <maxn oofHSDS CH-1></maxn 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>C-ID	M		9.2.1.6		_	
>HS-DSCH FDD Secondary Serving Information	М		9.2.2.19aa		-	

Condition	Explanation
EDCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Range bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH
	cells for one UE.

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	•
RL Information		1			YES	reject
>RL ID	M		9.2.1.49		_	•
>C-ID	M		9.2.1.6		_	
>Frame Offset	M		9.2.1.30		ı	
>Diversity Control Field	M		9.2.1.20		-	
>Primary CCPCH RSCP	0		9.2.3.5		ı	
>DL Time Slot ISCP Info	0		9.2.3.2D	Applicable to 3.84Mcps TDD and 7.68Mcps TDD only	ŀ	
>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< maxno 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	_	
DL CCTrCH Information		0< maxno ofCCTr CHs >			EACH	notify
>CCTrCH ID	M		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	0.1	RL ID 9.2.1.49	0.0414	YES	reject
E-DCH Information		01		3.84Mcps TDD only	YES	reject
>E-PUCH Information	M		9.2.3.36		ı	

>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		9.2.3.40		-	
E-DCH Serving RL	0		9.2.1.49	3.84Mcps	YES	reject
_				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				TDD only		

Range bound	Explanation
maxnoofCCTrCHs	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 and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	. 0,001
RL Information Response		1 <maxnoof RLs-1></maxnoof 			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	М		9.2.1.49	Reference RL ID	_	
>>>DCH Information Response	0		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>>Non Combining					_	
>>>DCH Information Response	М		9.2.1.16A		_	
>>>E-DCH FDD Information Response	0		9.2.2.4C		YES	ignore
>SSDT Support Indicator	M		9.2.2.43		_	
>Minimum Uplink SIR	М		Uplink SIR 9.2.1.69		_	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		_	
>Closed Loop Timing Adjustment Mode	0		9.2.2.3A		_	
>Maximum Allowed UL Tx Power	М		9.2.1.35		-	
>Maximum DL TX Power	М		DL Power 9.2.1.21A		-	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		-	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>PC Preamble	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 <maxnoof< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxnoof<>			GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	•		
Service List		ActiveMBM S>				
>>TMGI	M		9.2.1.80		_	
>>Transmission Mode	0		9.2.1.81		_	
>>Preferred Frequency	0		UARFCN		_	
Layer			9.2.1.66			
>E-DCH RL Set ID	0		RL Set ID 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	0		9.2.2.4D		YES	ignore
>Initial DL DPCH Timing Adjustment	0		DL DPCH Timing Adjustment 9.2.2.9.A		YES	ignore
>F-DPCH Slot Format	0		9.2.2.85		YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		YES	ignore
>HS-DSCH Preconfiguration Info	0		9.2.2.99		YES	ignore
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 <maxnoof HSDSCH-1></maxnoof 		For secondary serving HS- DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH Secondary Serving Cell Change Information Response	M		9.2.2.19ga		_	

Range bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE.
maxnoofActiveMBMS	Maximum number of MBMS bearer services that are active in parallel.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells 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		_	
Mandanian Halla LOID	N.4		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		_	
Mr.: BLTVB			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 Configuration	М		9.2.3.7E		_	
>Secondary CCPCH Info TDD	0		9.2.3.7B		-	
>UL CCTrCH Information		0 <maxnoof CCTrCHs></maxnoof 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		-	
>>UL DPCH		01			YES	ignore
Information						
>>>Repetition Period	M		9.2.3.7		1	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	M		9.2.3.8A		_	
>>>UL Timeslot Information	M		9.2.3.13C		ı	
>DL CCTrCH Information		0 <maxnoof CCTrCHs></maxnoof 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH Information		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		_	
>>>DL Timeslot Information	M		9.2.3.2C		-	
>>CCTrCH Maximum DL	0		DL Power	Maximum	YES	ignore
TX Power			9.2.1.21A	allowed power on DPCH	120	ignore
>>CCTrCH Minimum DL	0		DL Power	Minimum	YES	ignore
TX Power			9.2.1.21A	allowed		

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Kererenee	power on		
>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></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	0		9.2.1.62		-	
>USCH Information Response		0 <maxnoof USCHs></maxnoof 			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		-	ion-
>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
Criticality Diagnostics	0	0.1	9.2.1.13	Manadata	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		_ _	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Position						
>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	M		9.2.1.35		_	
Power						
>Maximum DL TX Power	М		DL Power 9.2.1.21A		_	
>Minimum DL TX Power	М		DL Power 9.2.1.21A		_	
>Alpha Value	М		9.2.3.a		_	
>UL PhysCH SF Variation	M		9.2.3.13B		_	
>Synchronisation Configuration	М		9.2.3.7E		_	
>Secondary CCPCH Info TDD LCR	0		9.2.3.7F		_	
>UL CCTrCH Information LCR		0 <maxnoof CCTrCHsLC R></maxnoof 		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	М		9.2.3.8A		_	
>>>UL Timeslot	M		9.2.3.13G		_	
Information LCR						
>DL CCTrCH Information LCR		0 <maxnoof CCTrCHsLC R></maxnoof 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2		_	
>>DL 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		_	
>>>DL Timeslot Information LCR	М		9.2.3.2E		_	
>>>TSTD Indicator	М		9.2.3.13E		_	
>DCH Information Response	М		9.2.1.16A		_	
>DSCH Information Response LCR		0 <maxnoof DSCHsLCR</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 USCHsLCR</maxnoof 			GLOBAL	ignore
>>USCH ID	М	-	9.2.3.14		_	
>>Transport Format	M		9.2.3.13		_	
Management						

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>CHOICE Diversity Indication	0				-	
>>>Non Combining					_	
>>>Binding ID	0		9.2.1.3		_	
>>>>Transport Layer Address	0		9.2.1.62		_	
>Neighbouring UMTS Cell Information	0		9.2.1.41A		_	
>Neighbouring GSM Cell Information	0		9.2.1.41C		_	
>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore
>Uplink Timing Advance Control LCR	M		9.2.3.13K		YES	ignore
>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
>PowerControl GAP	0		INTEGER (1255)	Unit: umber of subframes Applicable to 1.28Mcps TDD only	YES	ignore
>Neighbouring E-UTRA Cell Information	0		9.2.1.41De		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	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	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 9.2.3.7F			
>Synchronisation	M	Į	9.2.3.7E]	_	

Configuration Secondary CCPCH Info O Secondary CCPCH O O Secondary CCPCH O O O O O O O O O	IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH Info 7.68Mcps TOP	Configuration			Reference			
7.88Mcps TDD		0		0 2 2 22			
SUL CCTrCH Information C.emaxnoof For DCH GLOBAL Ignore CCTrCHs SUL DPCH Information 7.68 Meps CCTrCHs SUL DPCH Information 7.68 Meps SUL DPCH Information 7.68 Meps SUL Timeslot M SUL Timesl				9.2.3.22		_	
7.68 CCTCCHS	>UL CCTrCH Information		0 <maxnoof< td=""><td></td><td>For DCH</td><td>GLOBAL</td><td>ignore</td></maxnoof<>		For DCH	GLOBAL	ignore
SPECTICH ID					1012011	OLOD/ LE	ignore
South Sout	>>CCTrCH ID	М	001101101	9.2.3.2		_	
Information 7.68 Mcps			01	0.2.0.2		YES	ignore
Septention Period M 9.2.3.7 -	Information 7.68 Mcps					_	3
SSTID DPCH Offset M 9.2.3.8A -	>>>Repetition Period	M		9.2.3.7		_	
Note	>>>Repetition Length	M		9.2.3.6		_	
Information 7.68Mcps	>>>TDD DPCH Offset	M		9.2.3.8A		_	
Description	>>>UL Timeslot	M		9.2.3.26		_	
7.68 Mcps							
SPCCTrCH ID					For DCH	GLOBAL	ignore
SOL DPCH Information 7.68 Mcps			CCTrCHs>				
Information 7.68 Mcps		M		9.2.3.2		_	
>>>Repetition Period M 9.2.3.7 -			01			YES	ignore
>>>Repetition Length M 9.2.3.6 -				0007			
SSTDD DPCH Offset M 9.2.3.8A -							
SSPECIFIC Nation Selection Selection							
Information 7.68Mcps						_	
Securify Securify		IVI		9.2.3.28		_	
TX Power				DI Dower	Maximum		
Double D		0				_	
Section	1 × Powei			9.2.1.21A			
SCCTrCH Minimum DL							
TX Power 9.2.1.21A allowed power on DPCH	>>CCTrCH Minimum DI	0		DI Power		_	
DCH Information							
DPCH	17(1 0110)			0.2.1.2.77			
SCHOICE Diversity M							
Indication	>DCH Information		01			_	
Social	>>CHOICE Diversity	M				_	
S>>>RLID	Indication						
New Yes New						_	
S>>>DCH	>>>>RL ID	M		9.2.1.49	Reference	_	
Information Response S>>Non Combining Solution Solution					RL		
Response	>>>DCH	0		9.2.1.16A		YES	ignore
S							
No.							
Information Response	>>>Non Combining			0.04.404		_	
Response		IVI		9.2.1.16A		_	
DSCH Information Response 7.68 Mcps							
Response 7.68 Mcps			0			GLOBAL	ignoro
DSCHs						GLOBAL	ignore
>>DSCH ID M 9.2.3.3ae - >>Transport Format Management M 9.2.3.13 - >>DSCH Flow Control Information M 9.2.3.3ag - Information SCHOICE Diversity O - Indication SOLO Combining - - >>Non Combining - - >>>SHINGING ID O 9.2.1.3 - >>>>Transport O 9.2.1.62 - SUSCH Information Column C	Response 7.00 meps						
>>Transport Format Management M 9.2.3.13 - >>DSCH Flow Control Information M 9.2.3.3ag - >>CHOICE Diversity Indication O - >>Non Combining - - >>>Binding ID O 9.2.1.3 - >>>Transport O 9.2.1.62 - SUSCH Information Response 7.68 Mcps O	>>DSCH ID	М	200.102	9.2.3.3ae		_	
Management 9.2.3.3ag - >>DSCH Flow Control Information M 9.2.3.3ag - >>CHOICE Diversity Indication O - - >>Non Combining - - - >>>Binding ID O 9.2.1.3 - >>>Transport O 9.2.1.62 - SUSCH Information Response 7.68 Mcps O VSCHs> GLOBAL ignore >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -						_	
>>DSCH Flow Control Information M 9.2.3.3ag - >>CHOICE Diversity Indication O - - >>Non Combining - - - >>>Binding ID O 9.2.1.3 - >>>Transport O 9.2.1.62 - >USCH Information Response 7.68 Mcps O CMAXNOOF USCHS >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -							
Information		М		9.2.3.3aa		_	
>>CHOICE Diversity O — Indication — — >>Non Combining — — >>>Binding ID O 9.2.1.3 — >>>Transport O 9.2.1.62 — Layer Address O GLOBAL ignore VSCH Information O Comaxnoof USCHs — >>USCH ID M 9.2.3.14 — >>Transport Format M 9.2.3.13 —				1 2.29			
Indication		0				_	
>>>>Binding ID O 9.2.1.3 - >>>>Transport Layer Address O 9.2.1.62 - >USCH Information Response 7.68 Mcps O <max.noof USCHs> GLOBAL ignore >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -</max.noof 	Indication						
>>>>Transport O 9.2.1.62 - Layer Address O GLOBAL ignore >USCH Information <max.noof< td=""> USCHs> - >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -</max.noof<>						_	
>>>>Transport Layer Address O 9.2.1.62 - >USCH Information Response 7.68 Mcps O <max.noof USCHs> GLOBAL ignore >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -</max.noof 				9.2.1.3		_	
>USCH Information 0 GLOBAL ignore Response 7.68 Mcps 0 <maxnoof< td=""> USCHs> - >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -</maxnoof<>		0		9.2.1.62		_	
Response 7.68 Mcps <maxnoof USCHs> >>USCH ID M 9.2.3.14 - >>Transport Format M 9.2.3.13 -</maxnoof 						<u> </u>	
USCHs> 9.2.3.14 - >>Transport Format M 9.2.3.13 -			-			GLOBAL	ignore
>>USCH ID	Response 7.68 Mcps						
>>Transport Format M 9.2.3.13 -	. Hech ID	NA	USCHS>	00044			
						_	
Management	>>Transport Format Management	IVI		9.2.3.13		_	

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Orthodinty
>>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
>Idle Interval Information	0		9.2.3.60	TDD only	YES	ignore
Active MBMS Bearer Service List		0 <maxnoof ActiveMBM S></maxnoof 			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
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

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.
maxnoofCCTrCHs	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.
maxnoofCCTrCHsLCR	Maximum number of CCTrCH for one UE for 1.28Mcps TDD.
maxnoofActiveMBMS	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	М		9.2.1.59		_	•
CHOICE Cause Level	M				YES	ignore
>General					_	
>>Cause	M		9.2.1.5		_	
>RL Specific					_	
>>Unsuccessful RL		1 <maxnoof< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnoof<>			EACH	ignore
Information Response		RLs-1>				
>>>RL ID	M		9.2.1.49		_	
>>>Cause	M		9.2.1.5		_	
>>Successful RL Information Response		0 <maxnoof RLs-2></maxnoof 			EACH	ignore
>>>RL ID	M		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 Position	0		9.2.1.70A		_	
>>>Received Total Wide Band Power	M		9.2.2.35A		_	
>>>Not Used	0		NULL		_	
>>>DL Code	М		FDD DL		YES	ignore
Information			Code Information 9.2.2.14A			-
>>>CHOICE Diversity Indication	М		0.2.2.1		_	
>>>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	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	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>>>Neighbouring UMTS Cell Information	0		9.2.1.41A		-	
>>>Neighbouring GSM Cell Information	0		9.2.1.41C		-	
>>>Primary CPICH Power	М		9.2.1.44		_	
>>>PC Preamble	М		9.2.2.27a		_	
>>>SRB Delay	M		9.2.2.39A		_	
>>>Cell GA Additional Shapes	0		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	0		9.2.2.10B		YES	ignore
>>>HCS Prio	0		9.2.1.30N		YES	ignore
>>>Active MBMS Bearer Service List		0 <maxnoof ActiveMBM S></maxnoof 			GLOBAL	ignore
>>>TMGI	М	0,	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
>>>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
Criticality Diagnostics	0		9.2.1.13		YES	ignore
HS-DSCH Serving Cell Change Information Response	0		9.2.2.19g		YES	Ignore
E-DCH Serving Cell Change Information Response	0		9.2.2.19h		YES	Ignore
Additional HS Cell Change Information Response		0 <maxnoof HSDSCH-1></maxnoof 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	Ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH Secondary Serving Cell Change Information Response	М		9.2.2.19ga		_	
MAC-hs Reset Indicator	0		9.2.1.34B		YES	ignore

Range bound	Explanation
maxnoofRLs	Maximum number of radio links for one UE.
maxnoofActiveMBMS	Maximum number of MBMS bearer services that are active in parallel.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.1.8.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		ı	
CHOICE Cause Level	M				YES	ignore
>General					ı	
>>Cause	M		9.2.1.5		1	
>RL Specific					1	
>>Unsuccessful RL Information Response		1			YES	ignore
>>>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 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 <maxno ofRLs></maxno 			EACH	notify
>RL ID	М		9.2.1.49		_	

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

9.1.10 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

9.1.11 RADIO LINK RECONFIGURATION PREPARE

FDD Message 9.1.11.1

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			
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		01			YES	reject
>UL Scrambling Code	0		9.2.2.53		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69		_	
>Min UL Channelisation Code Length	0		9.2.2.25		-	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		_	
>Puncture Limit	0		9.2.1.46	For the UL.	_	
>TFCS	0		9.2.1.63	TFCS for the UL.	_	
>UL DPCCH Slot Format	0		9.2.2.52	OL.	_	
>Diversity Mode	0		9.2.2.8		_	
>Not Used	0		NULL			1
>Not Used	0		NULL			
>UL DPDCH Indicator For	0		9.2.2.52A		YES	reject
E-DCH Operation DL DPCH Information		01			YES	roicot
>TFCS		01	0.04.00	TECC for the	163	reject
	0		9.2.1.63	TFCS for the DL.	_	
>DL DPCH Slot Format	0		9.2.2.9		_	
>Number of DL Channelisation Codes	0		9.2.2.26A		I	
>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 Offset 9.2.2.30	Power offset for the TFCI bits	_	
>>>PO2	М		Power Offset 9.2.2.30	Power offset for the TPC bits	-	
>>>PO3	М		Power Offset 9.2.2.30	Power offset for the pilot bits	-	
>>FDD TPC Downlink Step Size	М		9.2.2.16		_	
>>Inner Loop DL PC Status	М		9.2.2.21a		-	
DCHs To Modify	0		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4A		YES	reject
DCHs To Delete		0 <maxnoof DCHs></maxnoof 			GLOBAL	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>DCH ID	М		9.2.1.16		_	
RL Information		0 <maxnoof RLs></maxnoof 			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
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 Indicator	0		9.2.2.19C		-	
> 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 E-DCH MAC-d Flows to	0		E-DCH MAC-d flows Information 9.2.2.4MC 9.2.1.90		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Delete						
Serving E-DCH RL	0		9.2.2.38C		YES	reject
F-DPCH Information		01			YES	reject
>Power Offset		1			_	
Information						
>>PO2	М		Power Offset 9.2.2.30	This IE shall be ignored by DRNS.	-	
>FDD TPC Downlink Step Size	М		9.2.2.16		_	
>Limited Power Increase	М		9.2.2.21A		_	
>Inner Loop DL PC Status	М		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		01			YES	reject
>Continuous Packet Connectivity DTX-DRX Information	0		9.2.2.72		_	7,000
>Continuous Packet Connectivity DTX-DRX Information To Modify	0		9.2.2.73		_	
>Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74		-	
>Continuous Packet Connectivity HS-SCCH less Deactivate Indicator	0		9.2.2.75A		YES	reject
Additional HS Cell Information RL Reconf Prep		0 <maxnoof HSDSCH-1></maxnoof 		For secondary serving HS- DSCH cell. Max 1 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		_	

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 Diversity Mode IE is present
•	in the <i>UL DPCH Information</i> IE and is not equal to
	"none".

Range bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE.
maxnoofRLs	Maximum number of RLs for a UE.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH
	cells for one UE.

9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL CCTrCH To Add		0 <maxno ofCCTrCH s></maxno 		For DCH and USCH	EACH	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 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	0		9.2.1.63	For the UL.	_	
>TFCI Coding	0		9.2.3.11		_	
>Puncture Limit	0		9.2.1.46		_	
>UL SIR Target	0		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only	YES	reject
>TDD TPC Uplink Step Size	0		9.2.3.10a	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH to Delete		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	M		9.2.3.2			
DL CCTrCH To Add		0 <maxno ofCCTrCH s></maxno 		For DCH and DSCH	EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	M		9.2.1.63	For the DL.	_	
>TFCI Coding	M		9.2.3.11		_	
>Puncture Limit	M		9.2.1.46		_	
>TPC CCTrCH List		0 <maxno CCTrCHs></maxno 		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	М		CCTrCH ID 9.2.3.2		-	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		_
DL CCTrCH To Modify		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
>TFCS	0		9.2.1.63	For the DL.	_	
>TFCI Coding	0		9.2.3.11		_	
>Puncture Limit	0		9.2.1.46		_	
>TPC CCTrCH List		0 <maxno CCTrCHs></maxno 		List of uplink CCTrCH which provide TPC	_	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.2		-	
>TDD TPC Downlink Step Size	0		9.2.3.10		YES	reject
DL CCTrCH to Delete		0 <maxno ofCCTrCH s></maxno 			EACH	notify
>CCTrCH ID	М		9.2.3.2		_	
DCHs To Modify	0		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	0		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	M		9.2.1.16		_	
DSCHs To Modify		0 <maxno ofDSCHs></maxno 			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		_	
>Scheduling Priority Indicator	0		9.2.1.51A		_	
>BLER	0		9.2.1.4		-	
>Transport Bearer Request Indicator	M		9.2.1.61		_	
>Traffic Class	0		9.2.1.58A		YES	ignore
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishmen t with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishmen t with ALCAP.	YES	ignore

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishmen t with ALCAP.	YES	ignore
DSCHs To Add	0		DSCH TDD Information 9.2.3.3a		YES	reject
DSCHs to Delete		0 <maxno ofDSCHs></maxno 			GLOBAL	reject
>DSCH ID	M		9.2.3.3ae		_	
USCHs To Modify		0 <maxno ofUSCHs></maxno 			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	М		9.2.1.61		-	
>RB Info		0 <maxno ofRB></maxno 		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 establishmen t with ALCAP.	YES	ignore
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishmen t with ALCAP.	YES	ignore
>TNL QoS	0		9.2.1.56A		YES	ignore

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and Reference	Description		Criticality
USCHs To Add	0		USCH		YES	reject
			Information 9.2.3.15			,
USCHs to Delete		0 <maxno< td=""><td>9.2.3.13</td><td></td><td>GLOBAL</td><td>reject</td></maxno<>	9.2.3.13		GLOBAL	reject
		ofUSCHs>				
>USCH ID	M		9.2.3.14		_	-
Primary CCPCH RSCP DL Time Slot ISCP Info	0		9.2.3.5	Ammliandala ta	YES YES	ignore
DL Time Slot ISCP Into	O		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 9.2.1.300A		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
PDSCH-RL-ID	0		RL ID 9.2.1.49		YES	ignore
UL Synchronisation Parameters LCR		01		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	М		9.2.3.13J		_	
>Uplink Synchronisation Frequency	М		9.2.3.131		_	
RL Information		0 <maxno ofRLs.</maxno 			YES	ignore
>RL ID	M	J 1201	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 Modify	0		9.2.3.42		_	
E-DCH Serving RL	0		9.2.1.49	3.84Mcps TDD only	YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Information		01	11010101100	7.68Mcps	YES	reject
7.68Mcps				TDD only		
>E-PUCH Information	0		9.2.3.36		_	
>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 Modify	0		9.2.3.42		_	
E-DCH Information		01		1.28Mcps	YES	reject
1.28Mcps		07		TDD only	120	10,000
>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	0					
>E-DCH MAC-d Flows to Delete			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		9.2.2.x10		_	
>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		_	

Range bound	Explanation
maxnoofDCHs	Maximum number of DCHs for a UE.
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofDSCHs	Maximum number of DSCHs for one UE.
maxnoofUSCHs	Maximum number of USCHs for one UE.
maxnoofRLs	Maximum number of RLs for one UE

9.1.12 RADIO LINK RECONFIGURATION READY

9.1.12.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
RL Information Response		0 <maxno ofRLs></maxno 			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		_	
>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
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 <maxno ofHSDSC H-1></maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH-RNTI	М		9.2.1.30P		_	
>HS-DSCH FDD	M		9.2.2.19ba		_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary Serving Information Response						

Range bound	Explanation
maxnoofRLs	Maximum number of RLs for a UE.
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.1.12.2 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 <maxnoof RLs></maxnoof 		See Note 1 below	YES	ignore
>RL ID	M		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		_	
>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 <maxnoof CCTrCHs></maxnoof 		For DCH	GLOBAL	ignore
>>CCTrCH ID	M		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	М		9.2.3.6		1	
>>>TDD DPCH Offset	M		9.2.3.8A		I	
>>> Rx Timing Deviation	0		9.2.3.7A		_	
>>>UL Timeslot Information	M		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 <maxno0 fTS></maxno0 		Applicable to 3.84Mcps TDD only	-	
>>>Time Slot	M		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 <maxno0 fDPCHs></maxno0 			_	
>>>>DPCH ID	М		9.2.3.3		_	
>>>>TDD Channelisation Code	0		9.2.3.8		-	
>>>UL Timeslot Information LCR		0 <maxno0 fTSLCR></maxno0 		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
			Reference			
Shift LCR						
>>>TFCI Presence	0		9.2.1.55		_	
>>>UL Code Information LCR		0 <maxno0 fDPCHLCR></maxno0 			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 <maxno0 fTS></maxno0 		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 <maxno0 fDPCHs768 ></maxno0 			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 <maxnoof DPCHs></maxnoof 			GLOBAL	ignore
>>>DPCH ID	M		9.2.3.3		-	
>>UL 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		_	
>>>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	М		9.2.3.8A		_	
>>> Rx Timing Deviation 7.68Mcps	0		9.2.3.30		-	
>>>UL Timeslot Information 7.68Mcps	М		9.2.3.26			
>DL CCTrCH Information		0 <maxnoof CCTrCHs></maxnoof 		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		_	
>>>Repetition Length	М		9.2.3.6			
>>>TDD DPCH Offset	M	1	9.2.3.8A	1	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>DL Timeslot Information	М		9.2.3.2C		_	
>>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 <maxnoo fTS></maxnoo 		Applicable to 3.84Mcps TDD only	Ι	
>>>Time Slot	M		9.2.1.56		_	
>>>>Midamble Shift And Burst Type	0		9.2.3.4		1	
>>>TFCI Presence	0		9.2.1.55		_	
>>>>DL Code		0 <maxnoo< td=""><td></td><td></td><td>_</td><td></td></maxnoo<>			_	
Information		fDPCHs>				
>>>>DPCH ID	M		9.2.3.3		_	
>>>>TDD Channelisation Code	0		9.2.3.8		I	
>>>DL Timeslot Information LCR		0 <maxno0 fTSLCR></maxno0 		Applicable to 1.28Mcps TDD only	GLOBAL	ignore
>>>>Time Slot LCR	М		9.2.3.12a		-	
>>>>Midamble Shift LCR	0		9.2.3.4C		_	
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information LCR		0 <maxno0 fDPCHLCR></maxno0 			GLOBAL	ignore
>>>>DPCH ID	M		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 <maxno0 fTS></maxno0 		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 <maxno0 fDPCHs768 ></maxno0 			_	
>>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>>>TDD Channelisation Code 7.68Mcps	0		9.2.3.25		I	
>>DL DPCH to be Deleted		0 <maxnoof DPCHs></maxnoof 			GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		_	<u> </u>

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>DL DPCH to be Deleted 7.68Mcps TDD		0 <maxnoof DPCHs768></maxnoof 			GLOBAL	ignore
>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>DL DPCH to be Added LCR		01		Applicable to 1.28Mcps TDD only	YES	ignore
>>>Repetition Period	M		9.2.3.7		ı	
>>>Repetition Length	M		9.2.3.6		_	
>>>TDD DPCH Offset	М		9.2.3.8A		_	
>>>DL Timeslot Information LCR	М		9.2.3.2E		_	
>>DL DPCH to be Added 7.68Mcps		01		Applicable to 7.68Mcps TDD only	YES	ignore
>>>Repetition Period	М		9.2.3.7		_	
>>>Repetition Length	М		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	j	YES	ignore
>DSCH to be Added or Modified		0 <maxnoof DSCHs></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		-	
>>Binding ID	0		9.2.1.3		_	
>>Transport Layer Address	0		9.2.1.62		_	
>USCH to be Added or Modified		0 <maxnoof USCHs></maxnoof 			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
>Secondary CCPCH Info	0		9.2.3.7F	Applicable to	YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD LCR			Kererence	1.28Mcps TDD only		
>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

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticalities.

Range bound	Explanation
maxnoofDSCHs	Maximum number of DSCHs for one UE.
maxnoofUSCHs	Maximum number of USCHs for one UE.
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or 7.68Mcps TDD.
maxnoofDPCHs	Maximum number of DPCH for a UE for 3.84Mcps TDD.
maxnoofTSLCRs	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxnoofDPCHLCRs	Maximum number of DPCH for a UE for 1.28Mcps TDD.
maxnoofRLs	Maximum number of RLs for one UE
maxnoofDPCHs768	Maximum number of DPCH for a UE for 7.68Mcps TDD.

9.1.13 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	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	М		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 Reconfiguration Failure		0 <maxnoof RLs></maxnoof 			EACH	ignore
>>>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			
maxnoofRLs	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	М		9.2.1.59		_	

9.1.16 RADIO LINK RECONFIGURATION REQUEST

9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	•
Allowed Queuing Time	0		9.2.1.2		YES	reject
UL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the UL.	-	,
>UL DPDCH Indicator For E-DCH Operation	0		9.2.2.52A		YES	reject
DL DPCH Information		01			YES	reject
>TFCS	0		9.2.1.63	TFCS for the DL.	_	
>TFCI Signalling Mode	0		9.2.2.46		_	
>Limited Power Increase	0		9.2.2.21A		_	
DCHs To Modify	0		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	0		DCH FDD Information 9.2.2.4A		YES	reject
DCHs To Delete		0 <maxno ofDCHs></maxno 			GLOBAL	reject
>DCH ID	M		9.2.1.16		_	
Transmission Gap Pattern Sequence Information	0		9.2.2.47A		YES	reject
RL Information		0 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	M		9.2.1.49		1	
>RL Specific DCH Information	0		9.2.1.49A		I	
>RL specific E-DCH Information	0		9.2.2.35a		YES	reject
>E-DCH RL Indication	0		9.2.2.4E		YES	reject
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	0		9.2.2.24e		_	
>Puncture Limit	0		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 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
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 <maxno ofHSDSC H-1></maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	reject
>HS-PDSCH RL ID	M		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 Unsynchronised	0		9.2.2.19bc		_	
>HS-DSCH Secondary Serving Remove	0		NULL		_	

Range Bound	Explanation				
maxnoofDCHs	Maximum number of DCHs for one UE.				
maxnoofRLs	Maximum number of RLs for a UE.				
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH				
	cells 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		0 <maxnoof< td=""><td></td><td></td><td>EACH</td><td>notify</td></maxnoof<>			EACH	notify
Modify		CCTrCHs>				
>CCTrCH ID	M		9.2.3.2		ı	
>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 <maxnoof CCTrCHs></maxnoof 			EACH	notify
>CCTrCH ID	M		9.2.3.2		ı	
DL CCTrCH Information To Modify		0 <maxnoof CCTrCHs></maxnoof 			EACH	notify
>CCTrCH ID	M		9.2.3.2		_	
>TFCS	0		9.2.1.63			
DL CCTrCH Information to Delete		0 <maxnoof CCTrCHs></maxnoof 			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 <maxnoof DCHs></maxnoof 			GLOBAL	reject
>DCH ID	M		9.2.1.16		_	
RL Information		0 <maxnoof RLs></maxnoof 			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	M		9.2.3.13J		_	
>Uplink Synchronisation Frequency	M		9.2.3.131		_	
HS-DSCH Information	0		HS-DSCH TDD Information 9.2.3.3aa		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 9.2.1.49		YES	reject
E-DCH Information		01		3.84Mcps TDD only	YES	reject

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
>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		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	j	_	
>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		01	+	1.28Mcps	YES	reject
1.28Mcps		0		TDD only		10,000
>E-PUCH Information LCR	0		9.2.3.36a	122 01119	_	
>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	0		9.2.1.90		_	
Delete >E-DCH TDD Information	0				_	
LCR			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			YES	reject
>Continuous Packet Connectivity DRX Information LCR	0		9.2.3.61		_	
>Continuous Packet Connectivity DRX	0		9.2.3.62		_	
Information To Modify LCR >HS-DSCH Semi-	0		9.2.3.64		_	
Persistent scheduling Information LCR						
>HS-DSCH Semi- Persistent scheduling Information to modify LCR	0		9.2.3.65		_	
>HS-DSCH Semi- Persistent scheduling Deactivate Indicator LCR	0		9.2.2.x10		_	
>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		_	

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofDCHs	Maximum number of DCHs for one UE.
maxnoofRLs	Maximum number of RLs for one UE

9.1.17 RADIO LINK RECONFIGURATION RESPONSE

9.1.17.1 FDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	-		_
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
RL Information Response		0 <maxno ofRLs></maxno 			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
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 <maxno ofHSDSC H-1></maxno 		For secondary serving HS-DSCH cell. Max 1 in this 3GPP release.	EACH	ignore
>HS-PDSCH RL ID	М		RL ID 9.2.1.49		_	
>HS-DSCH-RNTI	M		9.2.1.30P		_	
>HS-DSCH FDD Secondary Serving Information Response	M		9.2.2.19ba		_	

Range Bound	Explanation			
maxnoofRLs	Maximum number of RLs for a UE.			
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.			

9.1.17.2 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 <maxno ofRLs></maxno 		See note 1 below	YES	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		-	
>DCH Information Response	0		9.2.1.16A		YES	ignore
>DL CCTrCH Information		0 <maxno ofCCTrCH s></maxno 		For DCH	GLOBAL	ignore
>>CCTrCH ID	М		9.2.3.2			
>>DL DPCH To Modify LCR		01		Applicable to 1.28Mcps TDD only	YES	ignore
>>>DL Timeslot Information LCR		0 <maxno OfTSLCR ></maxno 			_	
>>>>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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
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

Note 1: This information element is a simplified representation of the ASN.1. Repetition 1 and repetition 2 through maxnoofRLs are represented by separate ASN.1 structures with different criticalities.

Range bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofTSLCRs	Maximum number of Timeslots for a UE for 1.28Mcps
	TDD.
maxnoofRLs	Maximum number of RLs for one UE

9.1.18 RADIO LINK FAILURE INDICATION

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		_	
CHOICE Reporting Object	M			Object for which the Failure shall be reported.	YES	ignore
>RL					1	
>>RL Information		1 <maxnoofrl s></maxnoofrl 			EACH	ignore
>>>RL ID	M		9.2.1.49		-	
>>>Cause	M		9.2.1.5		_	
>RLS				FDD only	_	
>>RL Set Information		1 <maxnoofrl Sets></maxnoofrl 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		ı	
>>>Cause	M		9.2.1.5		-	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.49		-	
>>CCTrCH List		1 <maxnoc CTrCHs></maxnoc 			EACH	ignore
>>>CCTrCH ID	M		9.2.3.2		1	
>>>Cause	M		9.2.1.5		_	

Range bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE.
maxnoofRLSets	Maximum number of RL Sets for one UE.
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.19 RADIO LINK RESTORE INDICATION

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
CHOICE Reporting Object	M			Object for which the Restoration shall be	YES	ignore
				reported.		
>RL				TDD only	_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>RLS				FDD only	_	
>>RL Set Information		1 <maxno ofRLSet s></maxno 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		_	
>CCTrCH				TDD only		
>>RL ID	M		9.2.1.49		_	
>>CCTrCH List		1 <max noCCTr CHs></max 			EACH	ignore
>>>CCTrCH ID	М		9.2.3.2		ı	

Range bound	Explanation
maxnoofRLs	Maximum number of RLs for one UE.
maxnoofRLSets	Maximum number of RL Sets for one UE.
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.20 DL POWER CONTROL REQUEST [FDD]

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		_	
Power Adjustment Type	M		9.2.2.28		YES	ignore
DL Reference Power	C-		DL Power		YES	ignore
	Common		9.2.1.21A			
Inner Loop DL PC Status	0		9.2.2.21a		YES	ignore
DL Reference Power	C-	1 <maxnoo< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnoo<>			EACH	ignore
Information	Individual	fRLs>				
>RL ID	M		9.2.1.49		-	
>DL Reference Power	M		DL Power		-	
			9.2.1.21A			
Max Adjustment Step	C-		9.2.2.23		YES	ignore
	CommonO					
	rIndividual					
Adjustment Period	C-		9.2.2.B		YES	ignore
	CommonO					
	rIndividual					
Adjustment Ratio	C-		9.2.2.C		YES	ignore
	CommonO					
	rIndividual					

Condition	Explanation
Common	The IE shall be present if the Power Adjustment Type IE is set to
	"Common".
Individual	The IE shall be present if the Power Adjustment Type IE is set to
	"Individual".
CommonOrIndividual	The IE shall be present if the Power Adjustment Type IE is set to
	"Common" or "Individual".

Range Bound	Explanation			
maxnoofRLs	Maximum number of RLs for one UE.			

9.1.21 PHYSICAL CHANNEL RECONFIGURATION REQUEST

9.1.21.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		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		_	•
>DL Code Information	М		FDD DL Code Information 9.2.2.14A		YES	notify
>F-DPCH Slot Format	0		9.2.2.85		YES	lanore

9.1.21.2 TDD 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		_	
RL Information		1			YES	reject
>RL ID	M		9.2.1.49		_	
>UL CCTrCH Information		0 <maxnoof CCTrCHs></maxnoof 			GLOBAL	reject
>>CCTrCH ID	М		9.2.3.2		_	
>>UL DPCH Information		1			YES	notify
>>>Repetition Period	0		9.2.3.7		_	
>>>Repetition Length	Ō		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A		_	
>>>UL Timeslot Information		0 <maxno OfTS></maxno 	0.2.0.0	Applicable to 3.84Mcps TDD only	-	
>>>Time Slot	М		9.2.1.56	j	_	
>>>Midamble Shift And Burst Type	O		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 <maxno OfTSLCR ></maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>>Time Slot LCR	M		9.2.3.12a		-	
>>>Midamble Shift LCR	0		9.2.3.4C		I	
>>>TFCI Presence	0		9.2.1.55		1	
>>>>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 <maxno OfTS></maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	reject
>>>>Time Slot	M		9.2.1.56		1	
>>>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		TDD UL Code Information 9.2.3.27		_	
>DL CCTrCH Information		0 <maxno ofCCTrCH s></maxno 			GLOBAL	reject
>>CCTrCH ID	М		9.2.3.2		_	
>>DL DPCH Information		1			YES	notify
>>>Repetition Period	0	1	9.2.3.7		_	,
>>>Repetition Length	Ō		9.2.3.6		_	
>>>TDD DPCH Offset	0		9.2.3.8A			
>>>DL Timeslot		0 <maxno< td=""><td>J.2.J.JA</td><td>Applicable to</td><td>_</td><td></td></maxno<>	J.2.J.JA	Applicable to	_	
Information		OfTS>		3.84Mcps TDD only	_	
>>>>Time Slot	М		9.2.1.56		_	
>>>>Midamble Shift	0		9.2.3.4		_	

And Burst Type						
>>>TFCI Presence	0		9.2.1.55		_	
>>>DL Code Information	0		TDD DL Code Information 9.2.3.8C		_	
>>>DL Timeslot Information LCR		0 <maxno OfTSLCR ></maxno 		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		_	
>>>>DL Code Information LCR	0		TDD DL Code Information LCR 9.2.3.8D		_	
>>>DL Timeslot Information 7.68Mcps		0 <maxno OfTS></maxno 		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 <maxno ofDLts></maxno 		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 <maxno ofDLtsLCR ></maxno 		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>Time Slot LCR	М		9.2.3.12a		_	
>>Midamble Shift LCR	M		9.2.3.4C		-	
>HS-PDSCH Timeslot Specific Information 7.68Mcps		0 <maxno ofDLts></maxno 		Applicable to 7.68Mcps TDD only.	GLOBAL	reject
>>Time Slot	M		9.2.1.56	•	_	
>>Midamble Shift And Burst Type 7.68Mcps	M		9.2.3.23		_	
>UARFCN	0		9.2.1.66	Applicable to 1.28Mcps TDD only.	YES	ignore

Range bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or
	7.68Mcps TDD.
maxnoofTSLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxnoofDLts	Maximum number of downlink time slots per Radio Link for
	3.84Mcps TDD or 7.68Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for
	1.28Mcps TDD.

9.1.22 PHYSICAL CHANNEL RECONFIGURATION COMMAND

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	-
CFN	M		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		_	
UC-ID	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.53		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	М		9.2.2.2		YES	ignore
Indicator						_
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	0		9.2.2.56		YES	ignore
Indicator						
Common Transport Channel	0		9.2.1.12F		YES	Ignore
Resources Initialisation Not						
Required						

			1		
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 noofActiv eMBMS ></max 		GLOBAL	ignore
>TMGI	M		9.2.1.80	_	
>Transmission Mode	M		9.2.1.81	_	
Inter-frequency Cell List		0 <max CellsMe as></max 		GLOBAL	ignore
>DL UARFCN	М		UARFCN 9.2.1.66	-	
>UL UARFCN	0		UARFCN 9.2.1.66	-	
>Primary Scrambling Code	M		9.2.1.45	_	
Extended Propagation Delay	0		9.2.2.33a	YES	ignore
HS-DSCH-RNTI	0		9.2.1.30P	YES	ignore
Multiple PLMN List	0		9.2.1.117	YES	ignore
E-RNTI	0		9.2.1.94	YES	ignore

Range bound	Explanation
maxnoofActiveMBMS	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	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
UC-ID	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	0		9.2.1.5A		YES	Ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.53		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 noofActiv eMBMS ></max 			GLOBAL	ignore
>TMGI	M		9.2.1.80		_	
>Transmission Mode	М		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

Range bound	Explanation
maxnoofActiveMBMS	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	Semantics description	Criticality	Assigned Criticality
			reference	•		,
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
UC-ID	M		9.2.1.71	UC-ID may be a GERAN	YES	ignore
				cell identifier.		
SAI	M		9.2.1.52		YES	ignore
S-RNTI	M		9.2.1.53		YES	ignore
D-RNTI	0		9.2.1.24		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	URA information may be GRA information	YES	ignore

9.1.25 DOWNLINK SIGNALLING TRANSFER REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
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 <maxno ofMBMS></maxno 			GLOBAL	ignore
>TMGI	M		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
maxnoofMBMS	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 Information	0		9.2.1.47		YES	ignore

9.1.27 PAGING REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
CHOICE Paging Area	M				YES	ignore
>URA					ı	
>>URA-ID	М		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	- ig. reve un	YES	ignore
IMSI	М		9.2.1.31		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	M		9.2.1.41E		_	
>CN Domain Type	M		9.2.1.11A		-	
>Paging Record Type	M		9.2.1.41F		-	
Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject
Enhanced PCH Capability	0		9.2.1.132	FDD and 1.28Mcps TDD only	YES	Ignore

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	M				YES	reject
>RL					1	
>>RL Information		1 <maxn oofRLs></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 oofHSSI CHs></maxn 		TDD only	GLOBAL	reject
>>>HS-SICH ID	M		9.2.3.3ad		_	
>RLS				FDD only	-	
>>RL Set Information		1 <maxn oofRLSet s></maxn 			EACH	reject
>>>RL-Set-ID	M		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
maxnoofRLs	Maximum number of individual RLs a measurement can be started on.
maxnoofRLSets	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	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	10,000
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE Dedicated	O		9.2.1.37	Dedicated	YES	ignore
Measurement Object Type	O			Measurement Object Type the measurement was initiated with	113	ignore
>RL or ALL RL				See Note 1	_	
>>RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	М		9.2.1.49		-	
>>>DPCH ID	0		9.2.3.3	TDD only	_	
>>>DPCH ID 7.68Mcps	0		9.2.3.34	7.68Mcps TDD only	-	
>>>Dedicated	М		9.2.1.19	Oy	_	
Measurement Value >>>CFN	O		9.2.1.19	Dedicated	_	
>>>GFIN	O			Measuremen t Time Reference	1	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only	YES	reject
>>>Multiple Dedicated Measurement Value Information		0 <maxno ofDPCHsP erRL-1></maxno 		Applicable to 3.84Mcps TDD only	GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		1	
>>>Dedicated Measurement Value	М		9.2.1.19		1	
>>>Multiple Dedicated Measurement Value Information LCR		0 <maxno ofDPCHsL CRPerRL- 1></maxno 		Applicable to 1.28McpsTD D only	GLOBAL	ignore
>>>DPCH ID	М		9.2.3.3		-	
>>>>Dedicated	M		9.2.1.19			
	IVI		9.2.1.19		_	
Measurement Value						
>>>Multiple HS-SICH Measurement Value Information		0 <maxno ofHSSICHs -1></maxno 		TDD only	GLOBAL	ignore
>>>HS-SICH ID	М		9.2.3.3ad		_	
>>>>Dedicated Measurement Value	М		9.2.1.19		-	
>>>Multiple Dedicated Measurement Value Information 7.68Mcps		0 <maxno ofDPCHs7 68PerRL- 1></maxno 		Applicable to 7.68Mcps TDD only	GLOBAL	ignore
>>>DPCH ID 7.68Mcps	М		9.2.3.34		_	
>>>Dedicated	М		9.2.1.19		_	
Measurement Value >RLS or ALL RLS				FDD only See Note 2	_	
>>RL Set Information		1 <maxno ofRLSets></maxno 		555 11010 2	EACH	ignore
>>>RL Set ID	М		9.2.2.35		ı	
>>>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
maxnoofRLs	Maximum number of individual RLs the measurement can be started on.
maxnoofRLSets	Maximum number of individual RL Sets the measurement can be started on.
maxnoofDPCHsPerRL	Maximum number of DPCHs per RL a measurement can be started on for 3.84Mcps TDD
maxnoofDPCHsLCRPerRL	Maximum number of DPCHs per RL a measurement can be started on for 1.28Mcps TDD
maxnoofHSSICHs	Maximum number of HSSICHs per RL a measurement can be started on
maxnoofDPCHs768PerRL	Maximum number of DPCHs per RL a measurement can be started on for 7.68Mcps TDD

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	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
CHOICE Dedicated Measurement Object Type	0			Dedicated Measuremen t Object Type the measuremen t was initiated with	YES	ignore
>RL or ALL RL					ı	
>>Unsuccessful RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	
>>Successful RL		0 <maxno< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxno<>			EACH	ignore
Information		ofRLs-1>				_
>>>RL ID	M		9.2.1.49		ı	
>>>DPCH ID	0		9.2.3.3	TDD only	-	
>>>Dedicated Measurement Value	M		9.2.1.19		ı	
>>>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 <maxno ofrlsets=""></maxno>			EACH	ignore
>>>RL Set ID	M		9.2.2.35		ı	
>>>Individual Cause	0		Cause 9.2.1.5		ı	
>>Successful RL Set Information		0 <maxno ofRLSets- 1></maxno 			EACH	ignore
>>>RL Set ID	M		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
maxnoofRLs	Maximum number of individual RLs the measurement can be started on.
maxnoofRLSets	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	M		9.2.1.59		_	
Measurement ID	M		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 <maxnoo fRLs></maxnoo 			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	ı	
>>>Dedicated Measurement Value Information	М		9.2.1.19A		-	
>>>HS-SICH ID	0		9.2.3.3ad	TDD only	YES	ignore
>RLS or ALL RLS				FDD only See Note 2	-	
>>RL Set Information		1 <maxnoo fRLSets></maxnoo 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		-	
>>>Dedicated Measurement Value Information	M		9.2.1.19A		1	
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
maxnoofRLs	Maximum number of individual RLs the measurement can be started
	on.
maxnoofRLSets	Maximum number of individual RL Sets the measurement can be started on.

9.1.32 DEDICATED MEASUREMENT TERMINATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	М		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore

9.1.33 DEDICATED MEASUREMENT FAILURE INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	М		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 <maxnoof RLs></maxnoof 			EACH	ignore
>>>RL ID	M		9.2.1.49		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	
>RLS or ALL RLS				FDD only	_	
>>Unsuccessful RL Set Information		1 <maxnoof RLSets></maxnoof 			EACH	ignore
>>>RL Set ID	M		9.2.2.35		_	
>>>Individual Cause	0		Cause 9.2.1.5		_	

Range bound	Explanation
maxnoofRLs	Maximum number of individual RLs the measurement can be started on.
maxnoofRLSets	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	М		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	М		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 noofMB MS></max 			GLOBAL	notify
>TMGI	M		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

Range bound	Explanation
maxnoofMBMS	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	Semantics Description	Criticality	Assigned Criticality
			Reference	Becomplien		Ormounty
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	Í
S-RNTI	М		9.2.1.53		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		YES	ignore
Binding Identity	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		0 <maxnoo< td=""><td>0.2.1.0</td><td></td><td>GLOBAL</td><td>ignore</td></maxnoo<>	0.2.1.0		GLOBAL	ignore
Service List		fActiveMB MS>			0205/12	ignore
>TMGI	М		9.2.1.80		_	
>Transmission Mode	M		9.2.1.81		-	
Enhanced FACH		0 1			YES	ignore
Information Response						
>Common HS-DSCH- RNTI Priority Queue Information for Enhanced FACH	М		Priority Queue Information for Enhanced FACH/PC H 9.2.2.82		-	
>Dedicated HS-DSCH-	M		Priority		-	
RNTI Priority Queue Information for Enhanced FACH			Queue Information for Enhanced FACH/PC H 9.2.2.82			
>Priority Queue Information for Enhanced PCH	0		Priority Queue Information for Enhanced FACH/PC H 9.2.2.82		-	
>HS-DSCH Initial Capacity Allocation	М		9.2.1.30Na		_	
>HS-DSCH-RNTI	0		9.2.1.30P		_	
Common E-DCH MAC-d	0		9.2.2.93		_	
Flow Specific Information						

Range bound	Explanation
maxnoofActiveMBMS	Maximum number of MBMS bearer services that are active in
	parallel.

9.1.36.2 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		-	10,000
S-RNTI	M		9.2.1.53		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	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	g	YES	ignore
Binding Identity	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 <maxno ofActiveMB MS></maxno 	0.20		GLOBAL	ignore
>TMGI	M		9.2.1.80		-	
>Transmission Mode	M		9.2.1.81		1	
Enhanced FACH Information Response		0 1			YES	ignore
>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	М		9.2.1.30Na		_	
Capacity Allocation						
>HS-DSCH-RNTI	0		9.2.1.30P		_	
Common E-DCH MAC-d Flow Specific Information LCR	0		9.2.3.58		YES	ignore

Range bound	Explanation
maxnoofActiveMBMS	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	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
S-RNTI	M		9.2.1.53		YES	ignore
Cause	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

9.1.38 COMPRESSED MODE COMMAND [FDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Active Pattern Sequence Information	M		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	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	
Cause	0		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore
S-RNTI	0		9.2.1.53		YES	ignore
D-RNTI	0		9.2.1.24		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		ı	
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	<u> </u>	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 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	M		9.2.1.49		_	
>E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows ></maxno 			EACH	ignore
>>E-DCH MAC-d Flow ID	M		9.2.1.91		_	
HS-DSCH MAC-d Flow Specific Information		0 <maxno ofMACdFl ows></maxno 			EACH	ignore
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		_	

Range bound	Explanation			
maxnoofRLs	Maximum number of radio links for one UE			
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows			
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows			

9.1.42 RADIO LINK CONGESTION INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		ı	
Congestion Cause	0		9.2.1.79		YES	ignore
RL Information		1 <maxno ofRLs></maxno 			EACH	ignore
>RL ID	M		9.2.1.49		_	
>DCH Rate Information		1 <maxno ofDCHs></maxno 			EACH	ignore
>>DCH ID	M		9.2.1.16		_	
>>Allowed Rate Information	0		9.2.1.2A		-	
>E-DCH MAC-d Flow Specific Information		0 <maxno ofEDCHM ACdFlows ></maxno 			EACH	ignore
>>E-DCH MAC-d Flow ID	M		9.2.1.91		_	
>DCH Indicator For E- DCH-HSDPA Operation	0		9.2.2.67		YES	ignore

Range bound	Explanation		
maxnoofRLs	Maximum number of Radio Links for one UE		
maxnoofDCHs	Maximum number of DCHs for one UE.		
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows		

9.1.43 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		_	,
Measurement ID	М		9.2.1.37		YES	reject
CHOICE Common	M				YES	reject
Measurement Object Type						
>Cell					_	
>>Reference Cell Identifier	M		UTRAN Cell Identifier 9.2.1.71	May be a GERAN Cell Identifier	_	
>>Time Slot	0		9.2.1.56	3.84Mcps TDD and 7.68 Mcps TDD only	_	
>>Time Slot LCR	0		9.2.3.12a	1.28Mcps TDD only	-	
>>Neighbouring Cell Measurement Information		0 <maxnoof MeasNCells ></maxnoof 		UTRAN only	-	
>>>CHOICE Neighbouring Cell Measurement Information					_	
>>>Neighbourin g FDD Cell Measurement Information				FDD only	_	
>>>>Neighbo uring FDD Cell Measurement Information	М		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 InformationL CR	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 hbouring TDD Cell Measureme nt Information 7.68 Mcps	М	9.2.3.32		YES	reject
>>UARFCN	0	9.2.1.66	Applicable to 1.28Mcps TDD only.	YES	ignore
>>UpPCH Position LCR	0	9.2.3.56	Applicable to 1.28Mcps TDD only.	YES	ignore
Common Measurement Type	М	9.2.1.12C		YES	reject
Measurement Filter Coefficient	0	9.2.1.41	UTRAN only	YES	reject
Report Characteristics	M	9.2.1.48		YES	reject
SFN reporting indicator	M	FN reporting indicator 9.2.1.28A		YES	reject
SFN	0	9.2.1.52A	UTRAN only	YES	reject
Common Measurement Accuracy	0	9.2.1.12A	UTRAN only	YES	reject
Measurement Recovery Behavior	0	9.2.1.38A	UTRAN only	YES	ignore
GANSS Time ID	0	9.2.1.119a	This IE may only be present if the 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 system time.	YES	ignore

Range bound	Explanation					
maxnoofMeasNCell	Maximum number of neighbouring cells on which					
	measurements can be performed.					

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		1	
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

9.1.45 COMMON MEASUREMENT INITIATION FAILURE

IE/Group Name	Presence	Range	IE Type and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	М		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	M		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

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		ı	
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE Common Measurement Object Type	M			Common Measuremen t Object Type that the measuremen t was initiated with.	YES	ignore
>Cell					-	
>>Common Measurement Value Information	M		9.2.1.12E		-	
SFN	0		9.2.1.52A	Common Measuremen t Time Reference, UTRAN only.	YES	ignore
Measurement Recovery Reporting Indicator	0		9.2.1.38B	UTRAN only	YES	ignore

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	М		9.2.1.37		YES	ignore

9.1.48 COMMON MEASUREMENT FAILURE INDICATION

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		_	
Measurement ID	M		9.2.1.37		YES	ignore
Cause	M		9.2.1.5		YES	ignore

9.1.49 INFORMATION EXCHANGE INITIATION REQUEST

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		I	
Information Exchange ID	М		9.2.1.31A		YES	reject
CHOICE Information	M				YES	reject
Exchange Object Type						
>Cell					_	
>>C-ID	M		9.2.1.6	May be a GERAN cell identifier	-	
>Additional Information Exchange Object Types					_	
>>GSM Cell					_	
>>>CGI	М		9.2.1.5D		_	
>>MBMS Bearer					_	
Service						
>>>MBMS Bearer Service List		1 <maxno ofMBMS></maxno 			GLOBAL	reject
>>>>TMGI	М	OIIVIDIVIO	9.2.1.80		_	
>>MBMS Bearer	IVI		3.2.1.00	FDD only	GLOBAL	reject
Service in MBMS Cell				1 DD only	GEODAE	roject
>>>MBMS Cell List		1 <maxno ofcell></maxno 			_	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure	-	
>>>>MBMS Bearer		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Service List		ofMBMS>				
>>>>TMGI	М		9.2.1.80		-	
>>MBMS Cell				FDD only	GLOBAL	reject
>>>MBMS Cell List		1 <maxno ofcell=""></maxno>			I	
>>>>C-ID	M		9.2.1.6	Cell identifier of cell in receiving RNC not initiating Information Exchange Initiation procedure	-	
Information Type	M	ļ	9.2.1.31E		YES	reject
Information Report Characteristics	M		9.2.1.31C		YES	reject

Range bound	Explanation
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can join.
Maxnoofcell	Maximum number of cells that can be indicated in the corresponding
	IE.

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		ı	
Information Exchange ID	M		9.2.1.31A		YES	ignore
CHOICE Information	0				YES	ignore
Exchange Object Type						
>Cell >>Requested Data	M		9.2.1.48A		-	
Value	IVI		9.2.1.40A		-	
>Additional Information						
Exchange Object Types						
>>MBMS Bearer					-	
Service						
>>>MBMS Bearer		1 <maxno< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxno<>			GLOBAL	ignore
Service List		ofMBMS>				
>>>TMGI	M		9.2.1.80		-	
>>>Requested	M		9.2.1.48A		_	
Data Value					01.0541	
>>MBMS Bearer				FDD only	GLOBAL	ignore
Service in MBMS Cell >>>MBMS Cell List		1 <maxno< td=""><td></td><td></td><td></td><td></td></maxno<>				
>>>WIDING CEIL LIST		ofcell>			_	
>>>>C-ID	М		9.2.1.6	Cell identifier of cell in RNC initiating Information Exchange Initiation procedure	-	
>>>>MBMS Bearer Service List		1 <maxno ofMBMS></maxno 			_	
>>>>TMGI	М		9.2.1.80		_	
>>>>Requested Data Value	M		9.2.1.48A		-	
>>MBMS Cell				FDD only	GLOBAL	ignore
>>>MBMS Cell List		1 <maxno ofcell></maxno 			_	
>>>C-ID	M		9.2.1.6	Cell identifier of cell in sending RNC not initiating Information Exchange Initiation procedure	-	
>>>>Requested Data Value	М		9.2.1.48A		-	
Criticality Diagnostics	0		9.2.1.13		YES	ignore

Range bound	Explanation
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can join.
maxnoofcell	Maximum number of cells that can be indicated in the corresponding

9.1.51 INFORMATION EXCHANGE 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		-	
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 Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		-	ignore
Information Exchange ID	M		9.2.1.31A		YES	ignore
CHOICE Information Exchange Object Type	М				YES	ignore
>Cell					ı	
>>Requested Data Value Information	М		9.2.1.48B		-	
>Additional Information Exchange Object Types					_	
>>MBMS Bearer Service in MBMS Cell				FDD only	GLOBAL	ignore
>>>MBMS Cell List		1 <maxno ofcell></maxno 			_	
>>>C-ID	M		9.2.1.6	Cell identifier of cell in receiving RNC initiating Information Exchange Initiation procedure	-	
>>>>MBMS Bearer		1 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
Service List		ofMBMS>	0.04.00			
>>>>TMGI	M		9.2.1.80		_	
>>>>Requested Data Value Information	M		9.2.1.48B		_	
>>MBMS Bearer Service				FDD only	GLOBAL	ignore
>>>MBMS Cell List		1 <maxno ofcell></maxno 			-	
>>>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		-	

Range bound	Explanation
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can join.
maxnoofcell	Maximum number of cells that can be indicated in the corresponding IE.

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	M		9.2.1.59		-	
Information Exchange ID	М		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	М		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	М		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			J	YES	reject
>Context					_	-
>>Context Information		1 <maxre setContext</maxre 			EACH	reject
>>>CHOICE Context Type	М				-	
>>>SRNTI					-	
>>>>S-RNTI	M		9.2.1.53		1	
>>>DRNTI					1	
>>>>D-RNTI	М		9.2.1.24		_	
>All Contexts			NULL		-	
>Context Group						
>>Context Group Information		1 <maxre setContext Groups></maxre 			EACH	reject
>>>S-RNTI Group	М		9.2.1.53a		ı	
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

Range bound	Explanation
maxResetContext	Maximum number of contexts that can be reset by
	one RESET message.
maxResetContextGroups	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		9.2.1.46		YES	ignore
Transaction ID	М		9.2.1.62		_	
Delayed activation Information		1 <maxnoofrl s></maxnoofrl 			EACH	ignore
>RL ID	М		9.2.1.49		_	
>Delayed Activation Update	М		9.2.1.19Ab		_	

9.1.57.2 TDD Message

IE/Group Name	Presence	Range	IE Type and	Semantics	Criticality	Assigned
			Reference	Description		Criticality
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		_	
Delayed activation		1 <maxnoofrl< td=""><td></td><td></td><td>EACH</td><td>ignore</td></maxnoofrl<>			EACH	ignore
Information		S>				
>RL ID	M		9.2.1.49		_	
>Delayed Activation	М		9.2.1.19Ab		-	
Update						

9.1.58 RADIO LINK PARAMETER UPDATE INDICATION

9.1.58.1 FDD Message

IE/Group name	Presence	Range	IE Type and	Semantic Description	Criticality	Assigned Criticality
			Reference			
Message type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
HS-DSCH FDD Update	0		9.2.2.19c		YES	ignore
Information						
RL Information		0 <max noofRLs ></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 noofHS DSCH- 1></max 		For secondary serving HS- DSCH cell. Max 1 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		_	

Range bound	Explanation				
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.				

9.1.58.2 TDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message type	М		9.2.1.40		YES	ignore
Transaction ID	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 Queing 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	M		9.2.1.59		_	
Measurement ID	M		9.2.1.37		YES	ignore
Measurement Filter Coefficient	0		9.2.1.36		YES	reject
UE Measurement Report Characteristics	0		9.2.3.13Fc		YES	reject
Criticality Diagnostics	0		9.2.1.13		YES	ignore

9.1.61 UE MEASUREMENT INITIATION FAILURE [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	reject
Transaction ID	М		9.2.1.59		-	
Measurement ID	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore
Criticality Diagnostics	0		9.2.1.13		YES	ignore

9.1.62 UE MEASUREMENT REPORT [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	М		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		_	
Measurement ID	М		9.2.1.37		YES	ignore
UE Measurement Value Information	М		9.2.3.13Fj		YES	ignore

9.1.63 UE MEASUREMENT TERMINATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		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	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	М		9.2.1.37		YES	ignore
Cause	М		9.2.1.5		YES	ignore

9.1.65 IUR INVOKE TRACE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	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	М		9.2.1.58b		YES	ignore
List Of Interfaces To Trace		0maxnoo fInterfaces			EACH	ignore
>Interface	M		ENUMERA TED (lub, lur,)		-	
Trace Depth	M		9.2.1.58a		YES	ignore

Range bound	Explanation
maxnoofInterfaces	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		1	
MBMS Bearer Service List		1 <maxno ofMBMS></maxno 			GLOBAL	ignore
>TMGI	M		9.2.1.80		_	
CHOICE UE State	0				YES	ignore
>CELL_FACH/CELL_PCH					ı	
>>D-RNTI	M		9.2.1.24		1	
>URA_PCH					1	
>>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.	-	
>>URA-ID	M		9.2.1.70		_	
>>Extended SRNC-ID	0		Extended RNC-ID 9.2.1.50a	The Extended SRNC-ID IE shall be used if the RNC identity has a value larger than 4095.	YES	reject

Range bound	Explanation
maxnoofMBMS	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 <maxno ofMBMS></maxno 			GLOBAL	ignore
>TMGI	M		9.2.1.80		_	
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		_	
>>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				
maxnoofMBMS	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		_	
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	Semantics Description	Criticality	Assigned Criticality
			Reference	2 cooring ion		Chillounty
Message Type	М		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		YES	reject
RANAP Enhanced Relocation Information Request	М		9.2.1.124		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 and	Semantics Description	Criticality	Assigned Criticality
			Reference			
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		_	
Cause	M		9.2.1.24		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		9.2.1.24		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	M		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	M		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	М		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 <maxno ofMCCHM essages></maxno 			YES	reject
>L3 Information	М		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< maxNrOf MBMSL3>			YES	ignore
>TMGI	М		9.2.1.80		_	
>MBSFN Scheduling Transmission Time Interval	М		9.2.1.129		_	

Note 1: The IE Contains one of the following messages defined in ref. [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
maxnoofMCCHMessages	Maximum number of MCCH Messages simultaneous sent on MCCH
maxNrOfMBMSL3	Maximum number of MBMS service in L3 information

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,
			.maxTFcount	"2": TFI 1,
)	"3": TFI 2,
Allowed DL Rate	0		INTEGER(1.	"1": TFI 0,
			.maxTFcount	"2": TFI 1,
)	"3": TFI 2,

9.2.1.2B Altitude and Direction

This IE contains a description of Altitude and Direction.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Direction of Altitude	M		ENUMERAT ED(Height, Depth)	
Altitude	M		INTEGER(02 ¹⁵ -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2<sup">15-1 for which the range is extended to include all 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 Reporting Indicator			ENUMERAT ED (Alternative	
			format is allowed,)	

9.2.1.3 Binding ID

The Binding ID is the identifier of a user data stream.

In case of transport bearer establishment with ALCAP [3][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 [33], this IE contains the UDP port [34] intended to be used for the user plane transport.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Binding ID			OCTET	If the Binding ID includes an
			STRING	UDP port, the UDP port is
			(14,)	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(-	Step 0.1. (Range –6.30).
			630)	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 [10] and [22]
Burst Length	М		INTEGER(1 025)	See [10] and [22]
Burst freq	М		INTEGER(116)	See [10] and [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	М			2000p
>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 not Supported, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed, Number of DL Codes Not Supported, Dedicated Transport Channel Type not Supported, UL Shared Channel Type not Supported, UL Shared Channel Type not Supported, Common Transport 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 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 with Current Measurements, UE not Capable to Implement Measurement,	Semantics Description
			Delayed Activation not Supported, RL Timing Adjustment Not Supported, Unknown RNTI, Measurement Repetition Rate not Compatible with Current Measurements, UE not Capable to Implement Measurement, F-DPCH not supported,	
			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, 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)
>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	M	ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
Cell not Available	The concerned cell is not available
Cell reserved for operator use	The concerned cell is reserved for operator use
CM not Supported	The concerned cell(s) do not support Compressed Mode
Combining not Supported	The DRNS does not support the RL combining for the concerned cells
Combining Resources Not	The value of the received <i>Diversity Control Field</i> IE was set to "Must",
Available	but 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	CPC resources for DTX-DRX operation not available in the concerned
DTX-DRX operation not available	cell(s).

Continuous Packet Connectivity	HSPA resources for DRX operation not available in the concerned
DRX not available	cell(s). (for 1.28Mcps TDD only)
Continuous Packet Connectivity	The concerned cell(s) do not support the Continuous Packet Connectivity
DRX not supported	DRX operation (for 1.28Mcps TDD only)
Continuous Packet Connectivity	The concerned cell(s) do not support the Continuous Packet Connectivity
DTX-DRX operation not	DTX-DRX operation
Supported	
Continuous Packet Connectivity HS-SCCH less operation not	The concerned cell(s) do not support the Continuous Packet Connectivity HS-SCCH less operation
Supported	
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
**	The concerned calle do not support the DDC and a share and
DPC Mode Change not Supported	The concerned cells do not support the DPC mode changes
E-DCH MAC-d PDU Size Format	The selected E-DCH MAC-d PDU Size Format is not available in the
not available	concerned cell(s).
E-DCH not supported	The concerned cell(s) do not support E-DCH
E-DCH TTI2ms not supported	The concerned cell(s) do not support the E-DCH 2ms TTI operation
E-DPCCH Power Boosting not	The concerned cell(s) do not support the E-DPCCH Power Boosting.
supported	
F-DPCH not supported	The concerned cell(s) do not support the Fractional DPCH
F-DPCH Slot Format operation not	The concerned cell(s) do not support the F-DPCH Slot Format operation
supported	(*)
HS-DSCH MAC-d PDU Size	The concerned cell(s) do not support the selected HS-DSCH MAC-d
Format not supported	PDU Size Format
Information Provision not	The RNS doesn"t support provision of the requested information for the
supported for the object	concerned object types
Information temporarily not	The RNS can temporarily not provide the requested information
available	The RIVO 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 value
Available	
MIMO not available	MIMO resources not available in the concerned cell(s).
MIMO not supported	The concerned cell(s) do not support the MIMO operation
Multi Cell operation not available	Multi Cell operation resources not available in the concerned cell(s).
Multi Cell operation not available	The concerned cell(s) do not support Multi Cell operation
No Iu CS UP relocation	The relocation is triggered by CS call and the source RNC has no Iu CS
110 Iu CB OI ICIOCAUOII	user plane.
Number of DL Codes not	The concerned cell(s) do not support the requested number of DL codes
Supported	2.1.2 concerned con(s) as not support the requested number of DD codes
Number of UL Codes not	The concerned cell(s) do not support the requested number of UL codes
	The concerned cen(s) do not support the requested number of OL codes
Supported	The second design and the CDMC's and
Power Balancing status not	The power balancing status in the SRNC is not compatible with that of
compatible	the DRNC.
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not
	support
Reconfiguration CFN not Elapsed	The requested action cannot be performed due to that a COMMIT

	CEN has not not
	message was received previously, but the concerned CFN has not yet
December and Allered	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.
Reasons	
Requested Configuration not	The concerned cell(s) do not support the requested configuration i.e.
Supported	power levels, Transport Formats, physical channel parameters,
Requested Tx Diversity mode not	The concerned cell(s) do not support the requested transmit diversity
Supported	mode
Resource Optimisation Relocation	The reason for requesting relocation is resource optimisation.
RL Already Activated/ Allocated	The DRNS has already allocated an RL with the requested RL ID for this UE Context
RL Timing Adjustment not Supported	The concerned cell(s) do not support adjustments of the RL timing
Semi-Persistent scheduling not	The concerned cell(s) do not support the Semi-Persistent scheduling
supported	operation (for 1.28Mcps TDD only)
SixteenQAM UL not Supported	The concerned cell(s) do not support the 16 QAM UL
SixtyfourQAM DL and MIMO	SixtyfourQAM DL and MIMO Combined not available in the concerned
Combined not available	cell(s)
Synchronisation Failure	Loss of UL Uu synchronisation
Time Critical Relocation	Relocation is requested for time critical reason i.e. this cause value is
Time Critical Relocation	reserved to represent all critical cases where the connection is likely to be
	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 _{RELOCprep} Expiry	Relocation Preparation procedure is cancelled when timer $T_{RELOCprep}$
RELOCPIED EMPTY	expires.
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	and the second of the second o
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	The contestined con(s) do not support the opinic ontined chainer Type
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
Chapterned	Radio Network Layer related
	Tanada Titti ani Zajer relateu

Transport Network Layer cause	Meaning
Transport resource unavailable	The required transport resources are not available
Unspecified	Sent when none of the above cause values applies but still the cause is
	Transport Network Layer related

Protocol cause	Meaning

Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the		
	concerned criticality indicated "reject" (see subclause 10.3)		
Abstract Syntax Error (Ignore and	The received message included an abstract syntax error and the		
Notify)	concerned criticality indicated "ignore and notify" (see subclause 10.3)		
Abstract syntax error (falsely	The received message contained IEs or IE groups in wrong order or with		
constructed message)	too many occurrences (see subclause 10.3)		
Message not Compatible with	The received message was not compatible with the receiver state (see		
Receiver State	subclause 10.4)		
Semantic Error	The received message included a semantic error (see subclause 10.4)		
Transfer Syntax Error	The received message included a transfer syntax error (see subclause		
	10.2)		
Unspecified	Sent when none of the above cause values applies but still the cause is		
	Protocol related		

Miscellaneous cause	Meaning			
Control Processing Overload	DRNS control processing overload			
Hardware Failure	DRNS hardware failure			
Not enough User Plane Processing	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 ref. [25].

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

Range bound	Explanation
maxnoofPoints	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	М		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	М		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.

9.2.1.5D Cell Global Identifier (CGI)

The Cell Global Identifier IE contains the Cell Global Identity as defined in ref. [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	М		OCTET STRING (2)	

9.2.1.6 Cell Identifier (C-ID)

The C-ID (Cell Identifier) is the identifier of a cell in one RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
C-ID			INTEGER	
			(065535)	

9.2.1.7 Cell Individual Offset

Cell individual offset is an offset that will be applied by UE to the measurement results for a Primary-CPICH[FDD]/ Primary-CCPCH[TDD] or for GSM Carrier RSSI according to [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Individual Offset			INTEGER(-20+20)	-20 -> -10dB -19 -> -9.5dB +20 -> +10dB

9.2.1.8 Cell Parameter ID

The Cell Parameter ID identifies unambiguously the [3.84 Mcps TDD and 7.68Mcps TDD - Code Groups, Scrambling Codes, Midambles and Toffset] [1.28 Mcps TDD - SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes] (see ref. [20]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Parameter ID			INTEGER(0.	
			.127,)	

9.2.1.9 CFN

Connection Frame Number for the radio connection, see ref. [17].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CFN			INTEGER(0.	
			. 255)	

9.2.1.10 CFN Offset

Void

9.2.1.11 CN CS Domain Identifier

Identification of the CN node in the CS Domain.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
PLMN Identity	М		OCTET STRING (3)	- 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

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 [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	М		OCTET STRING (1)	

9.2.1.12A Common Measurement Accuracy

The Common Measurement Accuracy IE indicates the accuracy of the common measurement.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Common Measurement Accuracy	М			
>T _{UTRAN-GPS} Measurement Accuracy Class				
>>T _{UTRAN-GPS} Measurement Accuracy Class	М		T _{UTRAN-GPS} Accuracy Class 9.2.1.59B	
>Tutran-ganss Measurement Accuracy Class				
>>T _{UTRAN-GANSS} Measurement Accuracy Class	М		T _{UTRAN-GANSS} 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	UL timeslot ISCP shall only
			(UTRAN GPS	be used by TDD.
			Timing of Cell	For measurements, which are
			Frames for UE	requested on the lur-g
			Positioning , SFN-SFN	interface, only load, RT Load and NRT Load information
			Observed Time	are used.
			Difference,	"UpPTS interference" is used
			load,	by 1.28Mcps TDD only
			transmitted	"UpPTS interference" means
			carrier power,	"UpPCH interference" in the
			received total	whole 25.423, refer to [14]
			wide band	and [22].
			power, UL	
			timeslot ISCP,	
			, RT Load,	
			NRT Load	
			Information,	
			UpPTS	
			interference,	
			UTRAN	
			GANSS Timing	
			of Cell Frames	
			for UE	
			Positioning)	

9.2.1.12D Common Measurement Value

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common Measurement Value	М				_	
> T _{UTRAN-GPS} Measurement Value Information				UTRAN only	_	
>>T _{UTRAN-GPS} Measurement Value Information	М		9.2.1.59D		-	
> SFN-SFN Measurement Value Information				UTRAN only	_	
>>SFN-SFN Measurement Value Information	M		9.2.1.52C		_	
>Load Value					_	
>>Load Value	M	ļ	9.2.1.33A		_	
>Transmitted Carrier Power Value				UTRAN only	_	
>>Transmitted Carrier Power Value	М		Transmitted Carrier Power 9.2.1.59A		_	
>Received Total Wide Band Power Value				UTRAN only	_	
>>Received Total Wide Band Power Value	M		Received Total Wide Band Power 9.2.2.35A		-	
>UL Timeslot ISCP Value				TDD Only	_	
>>UL Timeslot ISCP Value	М		UL Timeslot ISCP 9.2.3.13A		_	
>Additional Common Measurement Values					-	
>>RT Load Value						
>>>RT Load Value	М		9.2.1.50B		YES	ignore
>>NRT Load Information Value					_	
>>>NRT Load Information Value	M		9.2.1.411		YES	ignore
>>UpPTS interference				1.28Mcps TDD Only	_	
>>>UpPTS interference Value	M		INTEGER (0127,)	According to mapping in [24]	YES	reject
>> T _{UTRAN-GANSS} Measurement Value Information				UTRAN only	-	
>>>T _{UTRAN-GANSS} Measurement Value Information	М		9.2.1.114		YES	reject

9.2.1.12E Common Measurement Value Information

The *Common Measurement Value Information* IE provides information both on whether the Common Measurement Value is provided in the message or not and if provided also the Common Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
CHOICE Measurement	M			
Availability				
>Measurement Available				
>>Common Measurement	M		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	caacea the error	_	
>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 noof errors></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	М	ENUMERATED(not understood, missing,)		YES	ignore

Range bound	Explanation
maxnooferrors	Maximum number of IE errors allowed to be reported with a single
	message.

9.2.1.14 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 [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 ref. [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 <maxno ofDCHs></maxno 		Several DCHs belonging to the same set of coordinated DCHs may be included.	-	
>DCH ID	M		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
maxnoofDCHs	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	Semantics Description
			Reference	
Dedicated Measurement			ENUMERAT	RSCP and HS-SICH
Туре			ED(SIR, SIR	Receptions Quality are used
			Error,	by TDD only, Rx Timing
			Transmitted	Deviation and Rx Timing
			Code Power,	Deviation 384 Extended are
			RSCP, Rx	used by 3.84 Mcps TDD only,
			Timing	Rx Timing Deviation LCR is
			Deviation,	used by 1.28 TDD only,
			Round Trip	Round Trip Time, SIR Error
			Time,, Rx	are used by FDD only.
			Timing	Angle Of Arrival LCR is used
			Deviation	by 1.28Mcps TDD only.
			LCR, Angle	Rx Timing Deviation 768 is
			Of Arrival	used by 7.68Mcps TDD only.
			LCR,	
			HS-SICH	
			Reception	
			Quality, Rx	
			Timing	
			Deviation	
			768, Rx	
			Timing	
			Deviation	
			384	
			Extended)	

NOTE: For definitions of the measurement types refer to ref. [11] and [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	N/A		INITECED/	A a a a valina su t a	_	
>>SIR Value	M		INTEGER(063)	According to mapping in ref. [23] and [24]	_	
>SIR Error Value				FDD Only	_	
>>SIR Error Value	M		INTEGER(0125)	According to mapping in [23]	1	
>Transmitted Code Power Value					П	
>>Transmitted Code Power Value	M		INTEGER(0127)	According to mapping in ref. [23] and [24] Values 0 to 9 and 123 to 127 shall not be used.	-	
>RSCP				TDD Only	_	
>>RSCP	М		INTEGER(0127)	According to mapping in ref. [24]	-	
>Rx Timing Deviation Value				3.84Mcps TDD Only	-	
>>Rx Timing Deviation	М		INTEGER(08191)	According to mapping in [24]	-	
>Round Trip Time				FDD Only	_	
>>Round Trip Time	M		INTEGER(032767)	According to mapping in [23]	-	
>Additional Dedicated Measurement Values					-	
>>Rx Timing Deviation Value LCR				1.28Mcps TDD Only	YES	reject
>>>Rx Timing Deviation LCR	M		INTEGER(0511)	According to mapping in [24]	-	
>>Angle of Arrival Value LCR				1.28Mcps TDD only	YES	reject
>>>AOA LCR	М		INTEGER(0719)	According to mapping in [24]	-	
>>>AOA LCR Accuracy Class	M		ENUMER ATED(A, B, C, D, E, F, G, H,)	According to mapping in [24]	_	
>>HS-SICH reception quality				Applicable to TDD only	_	
>>>HS-SICH reception quality Value		1			YES	reject
>>>>Failed HS-SICH	М		INTEGER (020)	According to mapping in [24]	_	
>>>Missed HS-SICH	М		INTEGER (020)	According to mapping in [24]	-	
>>>Total HS-SICH	М		INTEGER (020)	According to mapping in [24]	_	
>>Rx Timing Deviation				7.68Mcps	YES	reject

Value 7.68Mcps			TDD Only		
>>>Rx Timing Deviation 7.68Mcps	М	INTEGER(065535)	According to mapping in [24]	-	
>>Rx Timing Deviation Value 3.84Mcps Extended			3.84 Mcps TDD Only	YES	reject
>>>Rx Timing Deviation 3.84Mcps Extended	М	INTEGER(032767)	According to mapping in [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 [23].	-	

9.2.1.19A Dedicated Measurement Value Information

The *Dedicated Measurement Value Information* IE provides information both on whether or not the Dedicated Measurement Value is provided in the message and if provided also the Dedicated Measurement Value itself.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Measurement Availability Indicator	М				_	
>Measurement Available					_	
>>Dedicated Measurement Value	М		9.2.1.19		_	
>>CFN	0		9.2.1.9	Dedicated Measuremen t Time Reference	_	
>Measurement not Available			NULL		_	

9.2.1.19Aa Delayed Activation

The *Delayed Activation* IE indicates that the activation of the DL power shall be delayed until an indicated CFN or until a separate activation indication is received.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Delayed Activation	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 Update	М			
> Activate				
>> CHOICE Activation Type	M			
>>> Synchronised				
>>>> Activation CFN	M		CFN 9.2.1.7	
>>> Unsynchronised			NULL	
>> Initial DL TX Power	M		DL Power	
			9.2.1.21	
>> First RLS Indicator	0		9.2.2.16A	FDD Only
>> Propagation Delay	0		9.2.2.35	FDD Only
>>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 [31].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GPS TOW	М		INTEGER(0604799)	Time in seconds. This field indicates the baseline time for which the corrections are valid
Status/Health	M		ENUMERAT ED (UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.1, no data, invalid data)	This field indicates the status of the differential corrections
Satellite DGPS Corrections Information		1 <maxnosat></maxnosat>		
>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 eightbit IE is incremented for each new set of ephemeris for the satellite and may occupy the numerical range of [0, 239] during normal operations.
>UDRE	M		ENUMERAT ED (UDRE ≤1.0m, 1.0m < UDRE ≤ 4.0m, 4.0m < UDRE ≤ 8.0m, 8.0m < UDRE,)	User Differential Range Error. This field provides an estimate of the uncertainty (1- o) in the corrections for the particular satellite. The value in this field shall be multiplied by the UDRE Scale Factor in the common Corrections Status/Health field to determine the final UDRE estimate for the particular satellite
>PRC	М		INTEGER(-20472047)	Scaling factor 0.32 meters
>Range Correction Rate	М		INTEGER(- 127., 127)	Scaling factor 0.032 m/s

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

9.2.1.19C 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	Semantics Description
			Reference	
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(02^20 -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 Coefficient			INTEGER (39)	Refers to 'k' in the formula as specified in ref. [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 [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 <maxnb MAC- c/shSDUL ength></maxnb 			-	
>>MAC-c/sh SDU Length	M		9.2.1.34		_	
>FACH Initial Window Size	M		9.2.1.27		_	

Range bound	Explanation
maxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths.

9.2.1.27 FACH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before an acknowledgement is received from the DRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FACH Initial Window Size			INTEGER(0255)	Number of frames (MAC-c/sh SDUs.) 255 = Unlimited number of FACH data frames.

9.2.1.28 FACH Priority Indicator

Void

9.2.1.28A FN Reporting Indicator

Frame Number reporting indicator.

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
FN reporting indicator			ENUMERAT	
			ED(FN	
			reporting	
			required, FN	
			reporting not	
			required)	

9.2.1.29 Frame Handling Priority

This parameter indicates the priority level to be used during the lifetime of the DCH, [TDD - DSCH] for temporary restriction of the allocated resources due overload reason.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Frame Handling Priority			INTEGER (015)	0=Lowest Priority,
			, ,	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 Reference	Semantics Description
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 ¹⁶ -1)	The relation between the value (N) and the radius (r) in meters it describes is 5N≤ r <5(N+1), except for N=2 ¹⁶ -1 for which the range is extended to include all grater values of (r).
Uncertainty radius	М		INTEGER(0127)	The uncertainty "r" is derived from the "uncertainty code" k by r = 10x(1.1 ^k -1)
Offset angle	М		INTEGER(0179)	The relation between the value (N) and the angle (a) in degrees it describes is 2N≤ 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	М		INTEGER(0127)	

9.2.1.30F Geographical Coordinates

This IE contains the description of geographical coordinates.

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

9.2.1.30Fa 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	M		OCTET STRING	Contents defined in [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></maxnrofger 	Reference	
>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 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
WN_a	М		BIT STRING(8)	
Satellite Almanac Information	M	1 <maxno OfSatAlma nac></maxno 		See Note 1.
>DataID	М		INTEGER (03)	
>SatID	М		SAT ID 9.2.1.50A	
> e	М		BIT STRING(16)	
>t _{oa}	М		BIT STRING(8)	
> δi	М		BIT STRING(16)	
>OMEGADOT	М		BIT STRING(16)	
>SV Health	М		BIT STRING(8)	
>A ^{1/2}	М		BIT STRING(24)	
>OMEGA ₀	М		BIT STRING(24)	
>M ₀	М		BIT STRING(24)	
>0)	М		BIT STRING(24)	
>af ₀	М		BIT STRING(11)	
>af₁	М		BIT STRING(11)	
SV Global Health	0		BIT STRING(364)	

Note 1: This information element is a simplified representation of the ASN.1 description. Repetitions 1 through maxNoSat and repetitions maxNoSat+1 through maxNoOfSatAlmanac are represented by separate ASN.1 structures with different criticality.

Range Bound	Explanation
maxNoOfSatAlmanac	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 [30].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
α_0	M		BIT	
			STRING(8)	
α_1	M		BIT	
			STRING(8)	
α_2	M		BIT	
			STRING(8)	
0(3	M		BIT	
			STRING(8)	
βο	M		BIT	
			STRING(8)	
β1	M		BIT	
			STRING(8)	
β_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 [30].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Navigation Message 1to3		1 <maxnosat></maxnosat>	Reference	Description
>Transmission TOW	М	TH STIANT VOCALE	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 (C)	M		BIT STRING(2)	
>HO-Word	M		BIT STRING(22)	
>WN	M		BIT STRING(10)	
>C/A or P on L2	M		BIT STRING(2)	
>User Range Accuracy	M		BIT STRING(4)	
Index				
>SV Health	M		BIT STRING(6)	
>IODC	M		BIT STRING(10)	
>L2 P Data Flag	M		BIT STRING(1)	
>SF 1 Reserved	M		BIT STRING(87)	
>T _{GD}	M		BIT STRING(8)	
>t _{oc}	M		BIT STRING(16)	
>af ₂	M		BIT STRING(8)	
>af₁	M		BIT STRING(16)	
>af ₀	M		BIT STRING(22)	
>C _{rs}	M		BIT STRING(16)	
>∆n	M		BIT STRING(16)	
>M ₀	M		BIT STRING(32)	
>C _{uc}	М		BIT STRING(16)	
>e	M		BIT STRING(32)	
>C _{us}	M		BIT STRING(16)	
>C _{us} >(A) ^{1/2}	M		BIT STRING(32)	
>t _{oe}	M		BIT STRING(16)	
>Fit Interval Flag	M		BIT STRING(1)	
>AODO	M		BIT STRING(5)	
>C _{ic}	М		BIT STRING(16)	
>OMEGA ₀	М		BIT STRING(32)	
>C _{is}	M		BIT STRING(16)	
>i ₀	M		BIT STRING(32)	
>C _{rc}	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 [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	M		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 [30].

IE/Group name	Presence	Range	IE Type and Reference	Semantics Description
A ₁	M		BIT STRING(24)	
A ₀	М		BIT STRING(32)	
tot	M		BIT STRING(8)	
Δt_{LS}	M		BIT STRING(8)	
WNt	M		BIT STRING(8)	
WN _{LSF}	M		BIT STRING(8)	
DN	M		BIT STRING(8)	
Δt_{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. .maxTFcount	"1": TFI 0, "2": TFI 1, "3": TFI 2,
Guaranteed DL Rate	0		INTEGER(1. .maxTFcount	"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 [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 oofMACd Flows></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 oofPrioQ ueues></maxn 			_	
>Priority Queue ID	M		9.2.1.45A		_	
>Scheduling Priority Indicator	0		9.2.1.51A		-	
>Discard Timer	0		9.2.1.19C		_	
>MAC-hs Guaranteed Bit Rate	0		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

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< maxnoof PrioQueu es>			_	
>Scheduling Priority Indicator	M		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
maxnoofPrioQueuess	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		1 <maxn< td=""><td>11010101100</td><td>2 document</td><td>_</td><td>Cinicanty</td></maxn<>	11010101100	2 document	_	Cinicanty
Specific Information		oofMACd Flows>				
>HS-DSCH MAC-d Flow ID	М		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	О		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>TNL QoS	0		9.2.1.56A	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>TrCH Source Statistics Descriptor	0		9.2.1.65		YES	ignore
Priority Queue		1 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Information		oofPrioQ ueues>				
>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	M		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	М О		9.2.1.34C 9.2.1.34Aa			
>MAC-d PDU Size Index		1 <maxn oofMACd PDUinde xes></maxn 			_	
>>SID	М	7.007	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	_	

			Size extended IE is present.		
>RLC Mode	M	9.2.1.48D	•	_	
>Maximum MAC-d PDU Size extended	0	MAC PDU Size Extended 9.2.1.34D		YES	reject
>DL RLC PDU Size Format	0	9.2.1.136		YES	ignore

Range Bound	Explanation
maxnoofMACdFlows	Maximum number of HS-DSCH MAC-d flows
maxnoofPrioQueues	Maximum number of Priority Queues
maxnoofMACdPDUindexes	Maximum number of different MAC-d PDU SIDs

9.2.1.30OB 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 <maxno ofMACdFl ows></maxno 		
>HS-DSCH MAC-d Flow ID	M		9.2.1.300	

Range Bound	Explanation
maxnoofMACdFlows	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 [32] and [41].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH MAC-d PDU Size Format			ENUMERATED (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 [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 oofMACd Flows></maxn 			-	
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	M		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 oofPrioQ ueues></maxn 			_	
>CHOICE Priority Queue	М				_	
>>Add Priority Queue					_	
>>>Priority Queue ID	M		9.2.1.45A		_	
>>>Associated HS-DSCH MAC-d Flow	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.	-	
>>>Scheduling Priority Indicator					_	
>>>T1	M O	+	9.2.1.54A		_	
>>>Discard Timer >>>MAC-hs Window Size	M		9.2.1.19C 9.2.1.34C		_	
>>>MAC-ns Window Size >>>MAC-hs Guaranteed Bit Rate	О		9.2.1.34Aa		_	
>>>MAC-d PDU Size Index		1 <maxn oofMACd PDUinde xes></maxn 			-	
>>>SID	М		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	_	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				Maximum		
				MAC-d PDU		
				Size extended		
>>>RLC Mode	M		9.2.1.48D	IE is present.		
>>> Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size		123	reject
			Extended			
			9.2.1.34D			
>>>DL RLC PDU Size	0		9.2.1.136		Yes	ignore
Format						
>>Modify Priority Queue	N 4		0.04.454	Chall ank	_	
>>>Priority Queue ID	М		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 >>>T1	0		9.2.1.54A			
>>>11 >>>Discard Timer	0		9.2.1.54A 9.2.1.19C			
>>>MAC-hs Window Size	0		9.2.1.19C		_	
>>>MAC-hs Guaranteed	0		9.2.1.34Aa		_	
Bit Rate			0.2			
>>>MAC-d PDU Size		0 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Index		oofMACd				
		PDUinde				
>>>SID	M	xes>	9.2.1.52D	Shall be		
>>>>0	IVI		9.2.1.520	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		
				Size extended		
				IE is present.		
>>>Maximum MAC-d	0		MAC PDU		YES	reject
PDU Size extended			Size			•
			Extended			
DI DI O DDI I O			9.2.1.34D			
>>>DL RLC PDU Size Format	0		9.2.1.136		Yes	ignore
>>Delete Priority Queue					_	
>>>Priority Queue ID	M		9.2.1.45A	Shall only	_	
, 23000.2				refer to a		
				Priority Queue		
				already		
				existing in the		
				old configuration.		
MAC-hs Reordering Buffer Size	0		9.2.1.34Ab	comiguration.	_	
for RLC-UM			0.2.7.0			
CQI Feedback Cycle k	0		9.2.2.24a	For FDD only	_	
CQI Repetition Factor	0		9.2.2.24c	For FDD only	_	
ACK-NACK Repetition Factor	0		9.2.2.a	For FDD only	_	
CQI Power Offset	0		9.2.2.24b	For FDD only	_	
ACK Power Offset	0		9.2.2.b	For FDD only	_	
NACK Power Offset	0		9.2.2.26a	For FDD only	_	

IE/Group Name	Presence	Range	IE Type	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
HS-SCCH Power Offset	0		9.2.2.19d	For FDD only	_	
HS-SCCH Code Change Grant	0		9.2.1.30S		_	
TDD ACK NACK Power Offset	0		9.2.3.71	For TDD only	-	
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, One-six carrier, Tree-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier that UE can support at the same time,where " One-three carrier" means the number of supported carrier is one for the uplink,and three for the downlink.	YES	reject
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.30O a	Applicable to 1.28Mcps TDD only	YES	ignore
>MIMO SF Mode Supported For HS-PDSCH dual stream	0		ENUMER ATED (SF1, SF1/SF16)	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

Range bound	Explanation
maxnoofMACdFlows	Maximum number of MAC-d flows.
maxnoofPrioQueues	Maximum number of Priority Queues.
maxnoofMACdPDUindexes	Maximum number of MAC-d PDU Size Indexes
	(SIDs).

9.2.1.30R HS-SCCH Code Change Indicator

The HS-SCCH Code Change Indicator indicates whether the HS-SCCH Code change is needed or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-SCCH Code Change Indicator			ENUMERAT ED (HS- SCCH Code	
			Change needed)	

9.2.1.30S HS-SCCH Code Change Grant

The HS-SCCH Code Change Grant IE indicates that modification of HS-SCCH Codes is granted.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Code Change			ENUMERAT	
Grant			ED(Change	
			Granted)	

9.2.1.30T IMEI

The IMEI is a permanent UE Equipment Identity, see ref. [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 ref. [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 Reference	Semantics Description
HS-PDSCH Code Change Indicator			ENUMERATED (HS- PDSCH Code	
maidator			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 Grant			ENUMERATED(Chan ge Granted)	

9.2.1.31 IMSI

The IMSI is the permanent UE user Identity, see ref. [1].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IMSI			OCTET STRING (SIZE(38))	-Decimal digits coded in BCD -"1111" used as filler -bit 4 to 1 of octet n is encoding digit 2n-1 -bit 8 to 5 of octet n is encoding digit 2n

9.2.1.31A Information Exchange ID

The Information Exchange ID uniquely identifies any requested information per RNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Exchange ID	M		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	М		INTEGER (160,)	
>>>hour				
>>>Report	M		INTEGER	
Periodicity Value			(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 Transmission Mode, MBMS Neighbouring Cell Information, MBMS RLC Sequence Number)	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.	_	
	C-GPS	1 <maxn oofGPST ypes></maxn 			_	
>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	0.4			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 Orientation Parameters	0		Earth Orientation Parameters Request 9.2.1.122e		YES	Ignore

>GANSS Generic		0 <maxn< th=""><th></th><th></th><th>_</th><th></th></maxn<>			_	
Data		oofGANS S>				
>>GANSS ID	0	<u> </u>	9.2.1.119		_	
>>GANSS	0		BOOLEAN	True means	_	
Navigation Model And Time Recovery				requested		
>>GANSS Time	0		BIT STRING(9)	Defines the time	_	
Model GNSS- GNSS				model required.		
				Bit 1 is the MSB and bit 9 is the LSB (see section 9.2.0).		
				Bit 1:GPS, Bit 2:Galileo, Bit 3:QZSS, Bit 4:GLONASS.		
				Other bits are reserved.		
>>GANSS UTC	0		BOOLEAN	True means		
Model	~		DOOLL/ (IV	requested		
>>GANSS	0		BOOLEAN	True means	_	
Almanac				requested		
>>GANSS Real Time Integrity	0		BOOLEAN	True means requested	_	
>>GANSS Data		01		roquodicu	_	
Bit Assistance						
>>>GANSS	M		INTEGER	The GANSS Time Of	_	
TOD			(086399)	Day for which the data bits are requested		
>>>Data Bit		1			_	
Assistance						
>>>DGANS S Signal ID	M		BIT STRING(8)	Defined in [16]	_	
>>>GANSS Data Bit Interval	М		INTEGER (015)	Defined in [16]	-	
>>>Satellite Information		0 <max GANSS Sat></max 			-	
>>>Sat ID	M		INTEGER(063)	Identifies the satellite and is equal to (SV ID No - 1)	-	
>>GANSS Additional Navigation Models And Time Recovery	0		GANSS Additional Navigation Models And Time Recovery Request 9.2.1.122f		YES	Ignore
>>GANSS Additional UTC Models	0		GANSS Additional UTC Models Request 9.2.1.122g		YES	Ignore
>>GANSS Auxiliary Information	0		GANSS Auxiliary Information Request 9.2.1.122h		YES	Ignore
>>SBAS ID	C-GANSS- ID		9.2.1.122h		YES	Ignore
DGANSS Corrections Req	C- DGANSS Correction s	1			YES	ignore

>DGANSS Signal ID	М		BIT STRING(8)	Defined in [16]	_	
>GANSS ID	0		9.2.1.119		YES	Ignore
MBMS RLC	C-			FDD only	YES	Ignore
Sequence Number	MBMSRL			-		-
Information	CSequenc					
	eNumber					
>MBMS Cell List		1 <max noofcell</max 			1	
>>C-ID	M		9.2.1.6		_	
>>MBMS Bearer Service List		1 <max noofMB MS></max 			ı	
>>>TMGI	M		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 <i>Information Type Item</i> IE indicates "GPS Information".
GANSS	This IE shall be present if the <i>Information Type Item</i> 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 <i>Information Type Item</i> IE indicates " MBMS RLC Sequence Number ".

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the
	IE .
maxnoofGPSTypes	Maximum number of GPS Information Types supported in one
	Information Exchange.
maxnoofGANSS	Maximum number of GANSS Systems.
maxnoofMBMS	Maximum number of MBMS bearer services that a UE can
	join.
Maxnoofcell	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	М		Integer(01)	Value tag in 10.3.7.45 in [16] with the same IE name.
>Inter-frequency Cell List in SIB11		0 <maxcellsib11 OrSIB12></maxcellsib11 		
>>Inter-frequency Cell Id	М		Integer(031)	The order of the inter- frequency cell in SIB11.
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>UL UARFCN	0		UARFCN 9.2.1.66	If this IE is not present, the default duplex distance defined for the operating frequency band shall be used [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 [16] with the same IE name.
>Inter-frequency Cell List in SIB12		0 <maxcellsib11 OrSIB12></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 [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 ref. [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
L3 Information			BIT STRING	The content is defined in ref. [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	Semantics Description
			Reference	
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	In case of E-DCH, value 8
			(15000,)	and values not multiple of 8
				shall not be used.

9.2.1.34Aa MAC-hs Guaranteed Bit Rate

The MAC-hs Guaranteed Bit Rate IE indicates the guaranteed number of bits per second that Node B should deliver over the air interface under normal operating conditions (provided there is data to deliver). If the MAC-hs Guaranteed Bit Rate IE is received with the value set to 0 during RL set up or modification, no guarantee is applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-hs Guaranteed Bit Rate			INTEGER (02^24-1,, 2^24256,000, 000)	Unit: bit/s

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 Size for RLC-UM			INTEGER (0300,)	Unit: kBytes And N kBytes = N*1024
Size for INEC-OW			(0300,)	Bytes.
				The DRNS shall use this
				value to avoid the overflow of the UE buffer.

9.2.1.34B MAC-hs Reset Indicator

The MAC-hs Reset Indicator IE indicates that a reset of the MAC-hs is not required.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-hs Reset Indicator			ENUMERATED (MAC-hs	
			Not Reset)	

9.2.1.34C MAC-hs Window Size

The MAC-hs Window Size IE is used for MAC-hs PDU retransmission as defined in [41].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-hs Window Size			ENUMERAT ED (4, 6, 8, 12, 16, 24,	
			32,)	

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,)	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			INTEGER(-	dBm
Power			50+33)	

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	Semantics Description
			Reference	
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 Threshold	М				-	
>SIR						
>>SIR	М		INTEGER(062)	0: 0 dB 1: 0.5 dB 2: 1 dB	_	
· CID Freeze				62: 31dB		
>SIR Error >>SIR Error	M		INTEGER(0124	FDD Only 0: 0 dB 1: 0.5 dB 2: 1 dB	_	
				 124: 62 dB		
>Transmitted Code Power						
>>Transmitted Code Power	M		INTEGER(0112 ,)	0: 0 dB 1: 0.5 dB 2: 1 dB	_	
				112: 56 dB		
>RSCP				TDD Only		
>>RSCP	M		INTEGER(0126)	0: 0 dB 1: 0.5 dB 2: 1 dB	_	
				126: 63 dB		
>Round Trip Time				FDD Only		
>>Round Trip Time	М		INTEGER(0327 66)	0: 0 chips 1: 0.0625 chips 2: 0.1250 chips 32766: 2047.875	_	
>Additional Measurement Thresholds				chips		
>>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	М		INTEGER(0100)	According to mapping in [23] and [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	M	INTEGER(0100)	Units are the same as for the <i>Uplink RT</i> Load Value IE and Downlink RT Load Value 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 [24]	YES	reject

9.2.1.38A Measurement Recovery Behavior

This IE controls the Measurement Recovery Behavior.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Behavior			NULL	

9.2.1.38B Measurement Recovery Reporting Indicator

This IE indicates the Measurement Recovery Reporting.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Reporting Indicator			NULL	

9.2.1.38C Measurement Recovery Support Indicator

This IE indicates the Measurement Recovery Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Measurement Recovery Support Indicator			NULL	

9.2.1.39 Measurement Threshold

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE					-	
Measurement Threshold						
>SIR						
>>SIR	М		INTEGER(063)	According to mapping in ref. [23] and [24].	_	
>SIR Error				FDD Only		
>>SIR Error	М		INTEGER(0125)	According to mapping in [23]	_	
>Transmitted Carrier Power						
>>Transmitted Code Power	М		INTEGER(0127	According to mapping in ref. [23] and [24].	-	
>RSCP				TDD Only		
>>RSCP	М		INTEGER(0127)	According to mapping in ref. [24]	_	
>Rx Timing Deviation				Applicable to 3.84Mcps TDD Only		
>>Rx Timing Deviation	М		INTEGER(0819 1)	According to mapping in [24]	_	
>Round Trip Time			INITEGED/S SSE	FDD Only		
>>Round Trip Time	М		INTEGER(0327 67)	According to mapping in [23]	_	
>Additional Measurement Thresholds						
>>T _{UTRAN-GPS} Measurement Threshold Information						
>>>Tutran-gps Measurement Threshold Information	М		9.2.1.59C		YES	reject
>>SFN-SFN Measurement Threshold Information						
>>>SFN-SFN Measurement Threshold Information	M		9.2.1.52B		YES	reject
>>Load >>>Load	M		INTEGER(0100)	0 is the minimum indicated load, and 100 is the maximum	YES	reject
>>Transmitted				indicated load.		
Carrier Power >>>Transmitted	M		INTEGER(0100	According to mapping	YES	reject
Carrier Power >>Received Total Wide Band)	in [23] and [24].		
Power >>>Received Total Wide Band Power	M		INTEGER(0621	According to mapping in [23] and [24].	YES	reject
>>UL Timeslot ISCP				TDD Only		
>>>UL Timeslot ISCP	М		INTEGER(0127	According to mapping in [24]	YES	reject
>>RT Load			,			
>>>RT Load	М		INTEGER(0100		YES	reject
>>NRT Load			,			

Information					
>>>NRT Load Information	М	INTEGER(03)		YES	reject
>>Rx Timing Deviation LCR			Applicable to 1.28Mcps TDD Only		
>>>Rx Timing Deviation LCR	М	INTEGER(0511)	According to mapping in [24]	YES	reject
>>HS-SICH reception quality			Applicable to TDD Only		
>>>HS-SICH reception quality	М	INTEGER (020)	According to mapping in [24]	YES	reject
>>UpPTS interference			1.28Mcps TDD Only		
>>>UpPTS interference Value	M	INTEGER (0127,)	According to mapping in [24]	YES	reject
>>Rx Timing Deviation 768			Applicable to 7.68Mcps TDD Only		
>>>Rx Timing Deviation 768	М	INTEGER(0655 35)	According to mapping in [24]	YES	reject
>>Rx Timing Deviation 384 Extended			Applicable to 3.84Mcps TDD Only		
>>>Rx Timing Deviation 384 Extended	M	INTEGER(0327 67)	According to mapping in [24]	YES	reject
>>Extended Round Trip Time			FDD Only		
>>>Extended Round Trip Time Value	М	INTEGER (32767103041)	Continuation of intervals with step size as defined in [23].	YES	reject
>>T _{UTRAN-GANSS} Measurement Threshold Information					
>>>T _{UTRAN} . GANSS Measurement Threshold Information	M	9.2.1.113		YES	reject

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 <maxnoo flevels></maxnoo 		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
maxnooflevels	Maximum no. of message levels to report. The value for
	maxnooflevels is 256.

9.2.1.40 Message Type

The Message Type uniquely identifies the message being sent.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Procedure ID		1	I CHEIGHIUG	
>Procedure Code	M		INTEGER (0255)	"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 Initiation "9" = Dedicated Measurement Reporting
				"10" = Dedicated Measurement Termination "11" = Paging "12" = Physical Channel Reconfiguration "14" = Radio Link Addition "15" = Radio Link Peletion "16" = Radio Link Failure "17" = Radio Link Preemption "18" = 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 "25" = Uplink Signalling Transfer "26" = Common Measurement Failure "27" = Common Measurement Initiation
				"28" = Common Measurement Reporting "29" = Common Measurement Termination "30" = Information Exchange Failure "31" = Information Exchange Initiation "32" = Information Reporting "33" = Information Exchange Termination "34" = Radio Link Congestion "35" = Reset "36" = Radio Link Activation "37" = GERAN Uplink Signalling Transfer "38" = Radio Link Parameter Update "39" = UE Measurement Failure "40" = UE Measurement Initiation "41" = UE Measurement Reporting "42" = UE Measurement Termination "43" = Iur Deactivate Trace "44" = Iur Invoke Trace "45" = MBMS Attach "46" = MBMS Detach "48" = Direct Information Transfer "49" = Enhanced Relocation "50" = Enhanced Relocation Cancel "51" = Enhanced Relocation Signalling
>Ddmode	M		ENUMERATED(FDD,	Transfer "52" = Enhanced Relocation Release Common = common to FDD and TDD.
>Duilloue	171	l	LINUIVILITATED(FDD,	Common – common to FDD and TDD.

		TDD, Common,)	
Type of Message	M	ENUMERATED(Initiati	
		ng Message,	
		Successful	
		Outcome,	
		Unsuccessful	
		Outcome, Outcome)	

9.2.1.41 Multiple URAs Indicator

The Multiple URAs Indicator indicates whether the accessed cell has multiple URAs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiple URAs Indicator			ENUMERAT ED(Multiple URA s exist, Single URA Exists)	

9.2.1.41a NACC Related Data

The NACC related data IE provides NACC related information for the indicated GSM cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE GERAN System Info Type	M			
>SI				
>>SI	M		9.2.1.30Fc	GERAN system information SI3, SI13, SI1 [47]
>PSI				
>>PSI	М		9.2.1.30Fc	GERAN system information PSI1, PSI2, PSI4 [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 <maxnoof neighbourin gRNCs></maxnoof 			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
maxnoofneighbouringRNCs	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 noofFDD neighbou rs></max 	Reference	Description	-	Criticality
>C-ID	М		9.2.1.6		_	
>UL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	-	
>DL UARFCN	М		UARFCN 9.2.1.66	Corresponds to Nd in ref. [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

Range bound	Explanation
maxnoofFDDneighbours	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".

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 noofGS Mneighb ours></max 			GLOBAL	ignore
>CGI		1		Cell Global Identity as defined in ref. [1].	_	
>>LAI		1		as acimica in roi. [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	М		OCTET STRING (2)	0000 and FFFE not allowed	_	
>>Cl	M		OCTET STRING (2)		_	
>Cell Individual Offset	0		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.	-	
>BSIC		1		Base Station Identity Code as defined in ref. [1].	_	
>>NCC	М		BIT STRING(3)	Network Colour Code.	_	
>>BCC	М		BIT STRING(3)	Base Station Colour Code.	_	
>Band Indicator	M		ENUMERAT ED(DCS 1800 band, PCS 1900 band,)	Indicates whether or not the BCCH ARFCN belongs to the 1800 band or 1900 band of GSM frequencies.	-	
>BCCH ARFCN	М		INTEGER(01023)	BCCH Frequency as defined in ref. [29].	_	
>Coverage Indicator	0		9.2.1.12G		YES	ignore
>Antenna Co-location Indicator	0		9.2.1.2C		YES	ignore
>HCS Prio	0		9.2.1.30N		YES	ignore

> SNA Information	0	9.2.1.52Ca		YES	ignore	
>GERAN Cell Capability	0	9.2.1.30Fa		YES	ignore	
>GERAN Classmark	0	9.2.1.30Fb		YES	ignore	
>Extended GSM Cell Individual Offset	0	9.2.1.26Bb	The Extended GSM Cell Individual Offset to be used for UEs using DCHs, for values that exceed the range of the Cell Individual Offset IE.	YES	ignore	٠

Range bound	Explanation
maxnoofGSMneighbours	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 <maxnoo fTDDneighb ours></maxnoo 			_	
>C-ID	M		9.2.1.6		_	
>UARFCN	M		9.2.1.66	Corresponds to Nt in ref. [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
maxnoofTDDneighbours	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 [15]
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	Semantics	Criticality	Assigned
-			Reference	Description	_	Criticality
Neighbouring E-UTRA Cell Information		1 <max noofEUT RAneigh bours></max 			-	
>ECGI		1		EUTRAN Cell Global Identity as defined in ref. [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.	-	
>CHOICE EARFCN Information	M				_	
>>FDD						
>>>EARFCN-FDD		1				
>>>UL EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NuL in [62]	_	
>>>DL EARFCN	M		9.2.1.41Df EARFCN	Corresponds to NdL in [62]	_	
>>TDD						
>>> EARFCN	М		9.2.1.41Df EARFCN	Corresponds to NdL in [62]	_	

Range bound	Explanation
maxnoofLTEneighbours	Maximum number of neighbouring LTE cells for one cell.

9.2.1.41Df EARFCN

The EARFCN (E-UTRA Absolute Radio Frequency Channel Number) defines the carrier.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
EARFCN			INTEGER	Defined in [62].
			(0maxEAR	
			FCN)	

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 [16]

9.2.1.41F Paging Record Type

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Paging Record Type			ENUMERAT	See ref. [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 Reference	Semantics Description
UTRAN Cell Identifier	M		9.2.1.71	
UARFCN	M		9.2.1.66	Corresponds to Nd [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	M		9.2.1.66	Corresponds to Nt [15]
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	M		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	M		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 Reference	Semantics Description
Payload CRC Presence			ENUMERAT	
Indicator			ED(CRC	
			Included,	
			CRC not	
			included)	

9.2.1.43 PCCPCH Power

Primary CCPCH power is the power that shall be used for reference power value in a TDD cell. The reference point is the antenna connector. If Transmit Diversity is applied to the Primary CCPCH, the PCCPCH Power is the linear sum of the power that is used for transmitting the PCCPCH on all branches.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
PCCPCH Power			NTEGER (-	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 [9] or [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 (015)	0: 40% 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 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Relocation			BIT STRING	The content is defined in ref.
Information				[2].

9.2.1.48 Report Characteristics

The Report Characteristics, defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Report Characteristics	М				-	
>On Demand			NULL		_	
>Periodic						
>>Report Periodicity >Event A	M		9.2.1.48a	The periodicity with which the DRNS shall send measuremen t reports.	-	
>>Measurement Threshold	М		9.2.1.39	The threshold for which the DRNS shall trigger a measuremen t report.	-	
>>Measurement Hysteresis Time	0		9.2.1.36A		ı	
>Event B >>Measurement Threshold	M		9.2.1.39	The threshold for which the DRNS shall trigger a measuremen t report.	Ι	
>>Measurement Hysteresis Time	0		9.2.1.36A		-	
>Event C >>Measurement Increase/Decrease Threshold	M		9.2.1.38		-	
>>Measurement Change Time	M		9.2.1.35B	The time within which the measuremen t entity shall rise, in order to trigger a measuremen t report.	Γ	
>Event D		+		тторота.		
>>Measurement Increase/Decrease Threshold	М		9.2.1.38		-	
>>Measurement Change Time	M		9.2.1.35B	The time within which the measuremen t entity shall fall, in order to trigger a measuremen t report.	1	
>Event E						
>>Measurement Threshold 1	М		Measureme nt Threshold 9.2.1.39		-	
>>Measurement Threshold 2	0		Measureme nt Threshold		-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			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 measuremen t reports.	-	
>Event F						
>>Measurement Threshold 1	М		Measureme nt Threshold 9.2.1.39		-	
>>Measurement Threshold 2	0		Measureme nt Threshold 9.2.1.39		_	
>>Measurement Hysteresis Time	0		9.2.1.36A	The hysteresis time in ms	_	
>>Report Periodicity	0		9.2.1.48a	The periodicity with which the DRNS shall send measuremen t reports.	-	
>Additional Report Characteristics				•		
>>On Modification						
>>> On Modification		1			YES	reject
>>>>Measure ment Threshold	M		9.2.1.39			

9.2.1.48a Report Periodicity

The Report Periodicity defines the frequency at which the Node B shall send measurement reports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Report Periodicity Scale	М			
>millisecond				
>>Report Periodicity Value	M		INTEGER (16000,)	Unit: ms Range: 1060000 ms Step: 10 ms
>minute				·
>>Report Periodicity Value	М		INTEGER (160,)	Unit: min Range: 160 min Step: 1 min

9.2.1.48A Requested Data Value

The Requested Data Value contains the relevant data concerned the ongoing information exchange. *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type 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		9.2.1.301		_	
Time Recovery						
GPS Ionospheric Model	0		9.2.1.30H		_	
GPS UTC Model	0		9.2.1.30L		_	
GPS Almanac	0		9.2.1.30G		_	
GPS Real-Time Integrity	0		9.2.1.30J		_	
GPS RX Pos	0		9.2.1.30K		_	
SFN-SFN Measurement Reference Point Position	0		9.2.1.74		_	
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	0		9.2.1.41a		YES	
Address						ignore
Inter-frequency Cell Information	0		9.2.1.31G		YES	ignore
GANSS Common Data		01			YES	ignore
>GANSS Ionospheric Model	0		9.2.1.105		_	<u> </u>
>GANSS RX Pos	0		9.2.1.109		_	
>GANSS Additional	0		9.2.1.105 9.2.1.105a		YES	Ignore
Ionospheric Model						ignore
>GANSS Earth Orientation Parameters	0		9.2.1.122a		YES	Ignore
GANSS Generic Data		0 <maxno ofGANSS ></maxno 			GLOBAL	ignore
>GANSS ID	0		9.2.1.119		_	
>DGANSS Corrections	0		9.2.1.102		_	
>GANSS Navigation Model And Time Recovery	0		9.2.1.120		-	
>GANSS Time Model	0		9.2.1.110		_	
>GANSS UTC Model	0		9.2.1.111		_	
>GANSS Almanac	0		9.2.1.103		_	
>GANSS Real Time	0		9.2.1.108		_	
Integrity						
>GANSS Data Bit Assistance	0		9.2.1.118		_	
>GANSS Additional Time Models	0		9.2.1.110a		YES	Ignore
>GANSS Additional Navigation Models And Time Recovery	0		9.2.1.120a		YES	Ignore
>GANSS Additional UTC Models	0		9.2.1.111a		YES	Ignore
>GANSS Auxiliary Information	0		9.2.1.122c		YES	Ignore
>SBAS ID	C-GANSS- ID		9.2.1.122b		YES	Ignore
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 Sequene Number	0		9.2.2.97	FDD only	YES	ignore

Condition	Explanation
GANSS-ID	This IE shall be present if the GANSS ID IE indicates "SBAS".

Range Bound	Explanation
maxnoofGANSS	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	M				_	
Availability Indicator						
>Information Available					1	
>>Requested Data	M		9.2.1.48A		_	
Value						
>Information not			NULL		_	
Available						

9.2.1.48C Restriction State Indicator

The Restriction state indicator is the identifier indicates whether the cell is "Cell Reserved for Operator Use" or not. It is provided by DRNS and reported to SRNC.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
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 <maxno ofDCHs></maxno 			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		9.2.2.4\$	FDD Only	YES	Ignore

Range bound	Explanation
maxnoofDCHs	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 09665535)	Note: Application of the Extended RNC-ID IE to very
			Í	large networks is FFS.

9.2.1.50A SAT ID

The SAT ID indicates the identity of the satellite.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SAT ID			INTEGER(0.	Identifies the satellite and is
			.63)	equal to (SV ID No - 1) where SV ID No is defined in [30].

9.2.1.50B RT Load Value

The *RT Load Value* IE indicates in percents the ratio of the load generated by Real Time traffic, relative to the measured Load Value. Real Time traffic corresponds to the Conversational and Streaming traffic classes.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uplink RT Load Value	М		INTEGER(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 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
SAC	М		OCTET STRING (2)	

9.2.1.52A SFN

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
SFN			INTEGER(04095)	

9.2.1.52B 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 <maxnoofmeasn Cell></maxnoofmeasn 		
>UTRAN Cell Identifier	М		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 μ = $E[x]$ 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 <maxnoofmeasn Cell-1></maxnoofmeasn 		
>UTRAN Cell Identifier	М		9.2.1.71	

Range bound	Explanation
maxnoofMeasNCell	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 [1]) which a certain cell belongs to. For a broader description of the SNA access control see [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 <maxnoofsnas< td=""><td></td><td></td></maxnoofsnas<>		
> SNAC	М		INTEGER (0 65535)	

Range bound	Explanation
maxnoofSNAs	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	Semantics Description
			Reference	
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 ref [41] subclause 11.6.2.3.

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
T1			ENUMERAT	Unit: ms
			ED (10, 20,	Node B may use this value to
			30, 40, 50,	stop the re-transmission of
			60, 70, 80,	the corresponding MAC-hs
			90, 100, 120,	PDU.
			140, 160,	
			200, 300,	
			400,)	

9.2.1.55 TFCI Presence

The TFCI Presence parameter indicates whether the TFCI shall be included. [TDD - If it is present in the timeslot, it will be mapped to the channelisation code defined by [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 [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	М		BIT STRING (8)	DS field as defined in [44]. Typically used when the DRNS and its SRNC are in the same DS domain as defined in [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
Г	ToAWS			INTEGER	Unit: msec.
				(01279)	

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	Semantics Description
			Reference	
Trace Depth			ENUMERATED (Meaning of this parameter is
			Minimum,	described in [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	М		INTEGER (0127)	
>Long				
>>Transaction ID Value	М		INTEGER (032767)	

9.2.1.59A Transmitted Carrier Power

The Transmitted Carrier Power IE contains the Transmitted Carrier Power in a cell, as defined in [11] & [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmitted Carrier Power			INTEGER(0100)	According to mapping in [23] and [24].

9.2.1.59B T_{UTRAN-GPS} Accuracy Class

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T _{UTRAN-GPS} Accuracy Class			ENUMERAT	More information about
			ED(Accuracy	Measurement Accuracy Class is
			Class A,	included in [23].
			Accuracy	
			Class B,	
			Accuracy	
			Class C,)	

9.2.1.59C T_{UTRAN-GPS} Measurement Threshold Information

The $T_{UTRAN-GPS}$ Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frames for UE Positioning measurements shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
T _{UTRAN-GPS} Change Limit	0		INTEGER(1256)	Change of T _{UTRAN-GPS} value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T _{UTRAN-GPS} Deviation Limit	0		INTEGER(1256)	Deviation of the Predicted T _{UTRAN-GPS} from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.59D T_{UTRAN-GPS} Measurement Value Information

The T_{UTRAN-GPS} *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frames for UE Positioning measurements.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Tutran-gps		1		Indicates the UTRAN GPS Timing of Cell Frames for UE Positioning. According to mapping in [23] and [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 μ = $E[x]$ is the expectation value of x.
T _{UTRAN-GPS} Drift Rate	М		INTEGER(- 5050)	Indicates the T _{UTRAN-GPS} drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
T _{UTRAN-GPS} Drift Rate Quality	0		INTEGER(050)	Indicates the standard deviation (std) of the $T_{UTRAN-GPS}$ drift rate measurements in 1/256 chip per second. $T_{UTRAN-GPS}$ Drift Rate Quality = $\sqrt{E[(x-\mu)^2]}$ = std of reported $T_{UTRAN-GPS}$ Drift Rate, where x is the reported $T_{UTRAN-GPS}$ Drift Rate and μ = $E[x]$ 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 [3] [35], this IE contains the address to be used for Transport Network Control Plane signalling to establish the transport bearer according to [3] [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 [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	M			
>Always Used				This choice is always made.
>>TFČS		1 <maxnooftfcs ></maxnooftfcs 		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 Factors	C- PhysChan			
>>>Signalled Gain Factors				
>>>>Gain Factor β _C	М		INTEGER(0 15)	[FDD - For UL DPCCH or control part of PRACH ref. [21].] [TDD - β for UL DPCH mapping in accordance to [13].]
>>>>Gain Factor β _D	М		INTEGER(0 15)	[FDD - For UL DPDCH or data part of PRACH ref. [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	M		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
maxnoofTFCs	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 <maxtfcount></maxtfcount>		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	М		INTEGER (0512)	
>Transport Block Size	C – Blocks		INTEGER (05000)	Unit: Bits
>CHOICE Mode	M			
>>TDD				
>>>Transmission Time Interval Information	C- TTIdynamic	1 <maxttlcount></maxttlcount>		
>>>Transmission Time Interval	M		ENUMERAT ED(10, 20, 40, 80,)	Unit: msec
Semi-static Transport Format Information		1		
>Transmission Time Interval	М		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	М		INTEGER (1maxRM)	
>CRC size	М		ENUMERAT ED (0, 8, 12, 16, 24,)	
>CHOICE Mode >>TDD	М			
>>>2 nd Interleaving Mode	М		ENUMERAT ED(Frame related, Timeslot related,)	

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

Range bound	Explanation
maxTFcount	The maximum number of different transport formats that can be
	included in the Transport format set for one transport channel.
maxRM	The maximum number that could be set as rate matching attribute
	for a transport channel.
maxTTlcount	The amount of different TTI that are possible for that transport
	format 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 ref. [6] and ref. [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	M			
>IMSI				
>>IMSI	M		9.2.1.31	
>IMEI				
>>IMEI	M		9.2.1.30T	
>IMEISV				
>>IMEISV	М		9.2.1.30U	

9.2.1.67 UL FP Mode

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL FP Mode			ENUMERAT	
			ED(Normal,	
			Silent,)	

9.2.1.68 UL Interference Level

Void

9.2.1.68A Uncertainty Ellipse

This IE contains the uncertainty ellipse used to describe a possible shape of the geographical area of a cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Uncertainty semi-major	M		INTEGER(0127)	The uncertainty "r" is derived from the "uncertainty code" k by r = 10x(1.1 ^k -1)
Uncertainty semi-minor	М		INTEGER(0127)	The uncertainty "r" is derived from the "uncertainty code" k by r = 10x(1.1 ^k -1)
Orientation of major axis	М		INTEGER(0179)	The relation between the IE value (N) and the angle (a) in degrees it describes is 2N≤ 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 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²³ X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	М		INTEGER(-2 ²³ 2 ²³ -1)	The IE value (N) is derived by this formula: N≤2 ²⁴ X /360 < N+1 X being the longitude in degree (-180°+180°)

9.2.1.70B 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	M		9.2.1.70		_	
Multiple URAs Indicator	М		9.2.1.41		_	
RNCs with Cells in the Accessed URA		0 <maxrncin URA-1></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 [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	M		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 <maxno ofLCRTDD neighbour s></maxno 	Reference		-	
>C-ID	M		9.2.1.6		_	
>UARFCN	М		9.2.1.66	Corresponds to Nt in ref. [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

Range bound	Explanation		
maxnoofLCRTDDneighbours	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	М		9.2.1.56	Indicates the Time Slot of the reference cell at which this measurement has been performed.

9.2.1.77 SFN-SFN Value

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Mode	M			
>FDD				
>>SFN-SFN	M		INTEGER(0. . 614399)	According to mapping in [23].
>TDD				1.28Mcps or 3.84Mcps TDD
>>SFN-SFN	M		INTEGER(0. . 40961)	According to mapping in [24].
>TDD 7.68Mcps				
>>SFN-SFN	M		INTEGER(0. . 81923)	According to mapping in [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 ref.[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	М		OCTET STRING (3)	

9.2.1.81 Transmission Mode

The Transmission Mode IE indicates the transmission mode used for MBMS data transmission in one cell.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Mode			ENUMERAT ED(PTP, PTM, Not Provided).	PTP: The MBMS data is transmitted through point to point channel. PTM: The MBMS data is transmitted through point to multipoint channel. Not Provided: The MBMS data is not transmitted in the DRNC.

9.2.1.82 Access Point Name

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
APN	M		OCTET STRING (1255)	

9.2.1.83 IP Multicast Address

The APN and IP Multicast Address uniquely identify an MBMS bearer service.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
IP Multicast Address	M		OCTET STRING (416)	

9.2.1.84 MBMS Bearer Service Full Address

This IE provides the full address of an MBMS Bearer Service otherwise identified by its TMGI.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Access Point Name	М		9.2.1.82	
IP Multicast Address	М		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

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	Semantics Description
-			Reference	•
TMGI	М		9.2.1.80	
PTM Cell List		0 <maxnoofcells></maxnoofcells>		
>C-ID	M		9.2.1.6	
>Affected UE Information		0 <maxnoofues></maxnoofues>		
for MBMS				
>>S-RNTI	M		9.2.1.53	
PTP Cell List		0 <maxnoofcells></maxnoofcells>		
>C-ID	M		9.2.1.6	
>Affected UE Information		0 <maxnoofues></maxnoofues>		
for MBMS				
>>S-RNTI	M		9.2.1.53	
Not Provided Cell List		0 <maxnoofcells></maxnoofcells>		
>C-ID	M		9.2.1.6	
>Affected UE Information		0 <maxnoofues></maxnoofues>		
for MBMS				
>>S-RNTI	M		9.2.1.53	

Range Bound	Explanation
maxnoofCells	Maximum number of cells that can be indicated in the corresponding IE.
maxnoofUEs	Maximum number of S-RNTIs that can be indicated per cell in the respective IEs.

9.2.1.87 MBMS Preferred Frequency Layer Information

This IE contains the preferred frequency layer of a MBMS Bearer Service indicated by *TMGI* IE in one or more cells that host at least one CELL_DCH UE whose UE Link contains the concerned MBMS Bearer Service and whose SRNC is different from the CRNC.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TMGI	М		9.2.1.80	
Preferred Frequency Layer Information				
>Default Preferred	М		UARFCN	
Frequency			9.2.1.66	
>Additional Preferred Frequency		0 <maxnoofaddfr eq></maxnoofaddfr 		Preferred frequencies different from default preferred frequency
>>DL UARFCN	М		UARFCN 9.2.1.66	
>>Corresponding Cells		1 <maxnoofcellsp erFreq></maxnoofcellsp 		
>>>C-ID	М		9.2.1.6	

Range Bound	Explanation
maxnoofAddFreq	Maximum number of additional preferred frequencies different from
	default preferred frequency in an RNC.
maxnoofCellsPerFreq	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 Semantics Descrip	
E-DCH MAC-d Flow Multiplexing List			BIT STRING (8)	The first Bit corresponds to E-DCH MAC-d flow 0, the second bit corresponds to E-DCH MAC-d flow 1, etc.

9.2.1.90 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 Prese		Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows To		1 <maxnoofedch< td=""><td></td><td></td></maxnoofedch<>		
Delete		MACdFlows>		
>E-DCH MAC-d Flow ID	М		9.2.1.91	

Range Bound	Explanation
maxnoofEDCHMACdFlows	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	
			maxnoofEDC	
			HMACdFlow	
			s-1)	

Range Bound	Explanation
maxnoofEDCHMACdFlows	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 [24] and [32].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d PDU Size			ENUMERATED	
Format			(Fixed MAC-d PDU	
			Size, Flexible MAC-d	
			PDU Size)	

9.2.1.92 E-DCH Logical Channel Information

The *E-DCH Logical Channel Information* IE is used for the establishment of E-DCH Logical Channels.

IE/Group Name	Presenc e	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH Logical Channel Information		1 <maxnoofl ogicalchanne ls></maxnoofl 			_	
>Logical Channel ID	M		9.2.1.97		_	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>Scheduling Information	M		9.2.1.101		_	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		_	
>E-DCH DDI Value	М		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	-	
>MAC-d PDU Size List		1< maxnoofMA CdPDUSize			_	
>>MAC-d PDU Size	M		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

Range Bound	Explanation
maxnooflogicalchannels	Maximum number of logical channels
maxnoofMACdPDUSize	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 <maxnoofl ogicalchanne ls></maxnoofl 			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		1	
>MAC-es Guaranteed Bit Rate	0		9.2.1.98		I	
>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	-	
>MAC-d PDU Size List		0< maxnoofMA CdPDUSize			ı	
>>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
maxnoofMACdPDUSize	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 ref. [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 Level			INTEGER (010,)	Number of consecutive TTIs. The value "0" is a special value, that means infinity, i.e. when this value is used, the DRNS shall never
				indicate processing issue to the RNC.

9.2.1.96 E-DCH Power Offset for Scheduling Info

The E-DCH Power Offset for Scheduling Info is used to calculate the [FDD - E-DPDCH][TDD – E-PUCH] power for transmision of scheduling information without any MAC-d PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Power Offset for			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	Unit: bit/s
			(02^24-1,,	
			2^24256,000,	
			000)	

9.2.1.99 MAC-e Reset Indicator

Indicates the MAC-e Reset is performed in UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MAC-e Reset Indicator			ENUMERAT	
			ED (MAC-e	
			Reset)	

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
DGANSS Reference Time	М		INTEGER(0. .3570 by step of 30)	Seconds. Time in GNSS system time (modulo 3600 s) when the DGANSS corrections were calculated
DGANSS Information		1 to <maxsgnt ype></maxsgnt 		
>GANSS Signal ID	0		9.2.1.121	
>Status/Health	М		ENUMERAT ED(UDRE scale 1.0, UDRE scale 0.75, UDRE scale 0.5, UDRE scale 0.3, UDRE scale 0.2, UDRE scale 0.1, no data, invalid data)	
>DGANSS Signal Information	C- Status/Hea Ith	1 to <maxgan SSSat></maxgan 		If the Cipher information is included these fields are ciphered
>>Sat ID	М		INTEGER(063)	Defined in [16].
>>IOD	M		BIT STRING(10)	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>UDRE	M		ENUMERAT ED(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	M		INTEGER(- 20472047)	Scaling factor 0.32 meters
>>RRC	M		INTEGER(- 127127)	Scaling factor 0.032 meters/sec

Condition	Explanation
Status/Health	This IE shall be present if the Status/Health IE value
	is not equal to "no data" or "invalid data".

Range Bound	Explanation
maxGANSSSat	Maximum number of satellites for which data is included in the IE
maxSgnType	Maximum number of signals for which data is included in the IE

9.2.1.103 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				_	
>Keplerian Parameters >>Toa	M		INTEGER(02	Model 1 Scaling factor 2 ¹² s		
>>1 _{0a}	IVI		55)	Reference time of almanac within week in GANSS TOD time base	_	
>>IOD _a	М		INTEGER(03	Issue-Of –Data, common to all satellites	_	
>>Satellite Information KP		1 to <maxga NSSSatA Imanac></maxga 		Almanacs are in the order of the SV IDs, the smallest ID first.	_	
>>>Sat ID	М		INTEGER(06 3)	Defined in [16].	_	
>>>e	М		BIT STRING(11)	Eccentricity, dimensionless [53]	_	
>>>δi	М		BIT STRING(11)	semi-circles [53]	_	
>>>OMEGADOT	M		BIT STRING(11)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi- circles/sec) [53]	_	
>>>SV Health KP	М		BIT STRING(4)	dimensionless	_	
>>delta A ^{1/2}	М		BIT STRING(17)	Semi-Major Axis delta (meters) ^{1/2} [53]	_	
>>>OMEGA ₀	М		BIT STRING(16)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) [53]	_	
>>>M ₀	М		BIT STRING(16)	Mean Anomaly at Reference Time (semi-circles) [53]	-	
>>>(i)	М		BIT STRING(16)	Argument of Perigee (semi-circles) [53]	_	
>>>af ₀	М		BIT STRING(14)	Seconds [53]	_	
>>>af ₁	М		BIT STRING(11)	sec/sec [53]	_	
>NAV Keplerian				Model 2		
Parameters >>Keplerian NAV Almanac	M				YES	ignore
>>>T _{oa}	M		INTEGER(02 55)	Scaling factor 2 ¹² s Reference time of almanac within week in GANSS TOD time base	-	
>>>Satellite information NAV-KP		1 <maxga NSSSatA</maxga 			_	

	1	Imanac>			1	
>>>Sat ID	M	IIIIaiiac>	INTEGER	Defined in [16].	_	
277 Gat 15			(063)	Boilliod in [10].		
>>>e	М		BIT	Eccentricity,	_	
	ļ		STRING(16)	dimensionless [59]		
>>>δi	M		BIT STRING (16)	Correction to inclination,	_	
			(10)	semi-circles [59]		
>>>OMEGADOT	М		BIT STRING	Rate of right	_	
			(16)	ascension,		
>>>SV Health	M		BIT STRING	semi-circles/sec [59] Satellite health [59]		
>>>> Teall1	IVI		(8)	Satellite fleatiff [59]	_	
>>>A ^{1/2}	М		BIT STRING	Square root of the	_	
			(24)	semi-major axis, meters ^{1/2} [59]		
ONATOA	N4		DIT CTDING	meters " ² [59]		
>>>OMEGA ₀	M		BIT STRING (24)	Longitude of ascending node of	_	
			(24)	orbit plane at weekly		
				epoch,		
				semi-circles [59]		
>>>>0	M		BIT STRING (24)	Argument of perigee semi-circles [59]	_	
>>>M ₀	M		BIT STRING	Mean anomaly at	_	
>>>1V10	IVI		(24)	reference time	_	
				semi-circles [59]		
>>>af ₀	М		BIT STRING	Apparent satellite	_	
			(11)	clock correction		
>>>af ₁	M		BIT STRING	seconds [59] Apparent satellite		
>>>ai1	IVI		(11)	clock correction	_	
			,	sec/sec [59]		
>Reduced Keplerian				Model 3		
Parameters	M				YES	ignoro
>>Keplerian Reduced Almanac	IVI				150	ignore
>>>T _{oa}	М		INTEGER(02	Scaling factor 2 ¹² s	_	
			55)	Reference time of		
				almanac within week		
				in GANSS TOD time base		
>>>Satellite		1		bacc	_	
information RED-KP		<maxga< td=""><td></td><td></td><td></td><td></td></maxga<>				
		NSSSatA				
>>>Sat ID	M	Imanac>	INTEGER	Defined in [16].		
>>>>at 1D	IVI		(063)	Defined in [10].	_	
>>>δ _A	М		BIT	meters [55,56,57,59]	_	
			STRING(8)			
$>>>>\Omega_0$	M		BIT STRING	semi-circles	_	
>>>>Ф ₀	M		(7) BIT STRING	[55,56,57,59] semi-circles		
$>>>\Phi_0$	IVI		(7)	[55,56,57,59]	_	
>>>L1 Health	М		BIT STRING	dimensionless	_	
			(1)	[55,56,57,59]		
>>>L2 Health	M		BIT STRING	dimensionless	_	
>>>L5 Health	M		(1) BIT STRING	[55,56,57,59] dimensionless		
//>とU i leailii	IVI		(1)	[55,56,57,59]	_	
>Midi Keplerian				Model 4		
Parameters						
>> Keplerian Midi	M				YES	ignore
Almanac >>>T _{oa}	M		INTEGER(02	Scaling factor 2 ¹² s		
>>> 1 _{0a}	IVI		55)	Reference time of	_	
				almanac within week		
	1	1	1	in GANSS TOD time	1	

Г	T	1	T	T b		T
>>>Satellite		1		base		
information MIDI-KP		<maxga NSSSatA</maxga 			_	
>>>Sat ID	М	Imanac>	INTEGER (063)	Defined in [16].	_	
>>>e	М		BIT STRING(11)	dimensionless [55,56,57,59]	_	
>>>δ _i	М		BIT STRING (11)	semi-circles [55,56,57,59]	-	
>>>Ω_dot	М		BIT STRING	semi-circles/sec	_	
>>>sqrtA	М		BIT STRING (17)	[55,56,57,59] meters ^{1/2} [55,56,57,59]	_	
>>>Ω ₀	М		BIT STRING (16)	semi-circles [55,56,57,59]	_	
>>>0	М		BIT STRING (16)	semi-circles [55,56,57,59]	_	
>>>M ₀	М		BIT STRING (16)	semi-circles [55,56,57,59]	_	
>>>a _{fo}	М		BIT STRING (11)	seconds [55,56,57,59]	_	
>>>a _{f1}	М		BIT STRING (10)	sec/sec [55,56,57,59]	_	
>>>L1 Health	М		BIT STRING (1)	Dimensionless [55,56,57,59]	-	
>>>L2 Health	М		BIT STRING (1)	dimensionless [55,56,57,59]	-	
>>>L5 Health	М		BIT STRING (1)	dimensionless [55,56,57,59]	_	
>GLONASS Keplerian Parameters				Model 5		
>> Keplerian GLONASS	M				YES	ignore
>>>Satellite information GLO-KP		1 <maxga NSSSatA Imanac></maxga 			_	
>>>N ^A	М	Imanao	BIT STRING(11)	days [60]	_	
>>>n ^A	М		BIT STRÌNG (5)	dimensionless [60]	_	
>>>>H _n ^A	М		BIT STRING (5)	dimensionless [60]	_	
>>>>\lambda_n^A	М		BIT STRING (21)	semi-circles [60]	_	
>>>t _{\(\lambda\)n} A	М		BIT STRING (21)	seconds [60]	-	
>>>Δi _n ^A	М		BIT STRING (18)	semi-circles [60]	_	
>>>>\Delta T_n^A	М		BIT STRING (22)	sec/orbit period [60]	_	
>>>ΔT_DOT _n ^A	М		BIT STRING (7)	sec/orbit period ² [60]	_	
>>>>ε _n ^A	M	1	BIT STRING	dimensionless [60]		
			(15)			
>>>>\omega_A	M		(15) BIT STRING (16)	semi-circles [60]	_	
>>>>τ _n ^A	M		(15) BIT STRING (16) BIT STRING (10)	semi-circles [60]	-	
>>>τ _n ^A >>>>C _n ^A	M M		(15) BIT STRING (16) BIT STRING (10) BIT STRING (1)	semi-circles [60] seconds [60] dimensionless [60]	-	
>>>>\tau_n^A >>>>C_n^A >>>>M_n^A	M		(15) BIT STRING (16) BIT STRING (10) BIT STRING	semi-circles [60] seconds [60] dimensionless [60] dimensionless [60]	- - -	
>>>τ _n ^A >>>>C _n ^A	M M		(15) BIT STRING (16) BIT STRING (10) BIT STRING (1) BIT STRING	semi-circles [60] seconds [60] dimensionless [60]	- - - - YES	ignore

>>>Satellite information SBAS- ECEF		1 <maxga NSSSatA Imanac></maxga 			_	
>>>Data ID	М		BIT STRING(2)	Dimensionless [58]	_	
>>>SV ID	М		INTEGER (063)	Defined in [16].	-	
>>>Health	М		BIT STRING (8)	Dimensionless [58]	-	
>>>X _G	M		BIT STRING (15)	meters [58]	_	
>>>Y _G	M		BIT STRING (15)	meters [58]	_	
>>>Z _G	M		BIT STRING (9)	meters [58]	_	
>>>X _G Rate-of- Change	M		BIT STRING (3)	meters/sec [58]	_	
>>>Y _G Rate-of- Change	M		BIT STRING (3)	meters/sec [58]	_	
>>>Z _G Rate-of- Change	M		BIT STRING (4)	meters/sec [58]	_	
>>>t ₀	M		BIT STRING (11)	seconds [58]	_	

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></maxgan 		Model -1 There may be more than one clock model included if defined in SIS ICD (e.g. two for Galileo)
>t _{oc}	М		BIT STRING(14)	defined in [53]
>a _{i2}	M		BIT STRING(12)	defined in [53]
>a _{i1}	M		BIT STRING(18)	defined in [53]
>a _{i0}	M		BIT STRING(28)	defined in [53]
>T _{GD}	0		BIT STRING(10)	defined in [53]
>Model ID	0		INTEGER(01)	Coded as defined in [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 _{oc}	М		BIT	Time of clock
			STRING(16)	(seconds) [59]
>>af ₂	M		BIT STRÌNG	Clock correction polynomial
			(8)	coefficient
				(sec/sec ²) [59]
>>af ₁	M		BIT STRING	Clock correction polynomial
			(16)	coefficient
				(sec/sec) [59]
>>af ₀	M		BIT STRING	Clock correction polynomial
			(22)	coefficient
	NA		DIT CTDING	(seconds) [59]
>>T _{GD}	М		BIT STRING	Group delay
>CNAV/CNAV-2 Clock Model			(8)	(seconds) [59] Model-3
>>toc	M		BIT STRING	Clock data reference time of
Cod	IVI		(11)	week
			(11)	(seconds) [55, 56, 57, 59]
>>t _{op}	М		BIT STRING	Clock data predict time of
G.p.			(11)	week
			,	(seconds) [55, 56, 57, 59]
>>URA _{oc} Index	M		BIT STRING	SV clock accuracy index
			(5)	(dimensionless) [55, 56, 57,
				59]
>>URA _{oc1} Index	M		BIT STRING	SV clock accuracy change
			(3)	index
				(dimensionless) [55, 56, 57,
IIDA Tador	N4		DIT OTDINO	59]
>>URA _{oc2} Index	М		BIT STRING	SV clock accuracy change rate index
			(3)	(dimensionless) [55, 56, 57,
				59]
>>a _{f2-n}	М		BIT STRING	SV clock drift rate correction
12 11			(10)	coefficient
			(- /	(sec/sec ²) [55, 56, 57, 59]
>>a _{f1-n}	M		BIT STRING	SV clock drift correction
			(20)	coefficient
				(sec/sec) [55, 56, 57, 59]
>>a _{f0-n}	M		BIT STRING	SV clock bias correction
			(26)	coefficient
			DIT OTDINIO	(seconds) [55, 56, 57, 59]
$>>$ T $_{ m GD}$	М		BIT STRING	Group delay correction
>>ISC _{L1CP}	0		(13) BIT STRING	(seconds) [55, 56, 57, 59] Inter signal group delay
>>I3CL1CP			(13)	correction
			(13)	(seconds) [57, 59]
>>ISC _{L1CD}	0		BIT STRING	Inter signal group delay
77 ICCETOD			(13)	correction
			,	(seconds) [57, 59]
>>ISC _{L1C/A}	0		BIT STRING	Inter signal group delay
			(13)	correction
				(seconds) [55, 56, 59]
>>ISC _{L2C}	0		BIT STRING	Inter signal group delay
			(13)	correction
100			DIT OTONIC	(seconds) [55, 56, 59]
>>ISC _{L5I5}	0		BIT STRING	Inter signal group delay
			(13)	correction
>>ISC _{L5Q5}	0		BIT STRING	(seconds) [56, 59] Inter signal group delay
>>13OL5Q5			(13)	correction
			(13)	(seconds) [56, 59]
>GLONASS Satellite Clock	1		1	Model-4
Model				

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
$>\tau_n(t_b)$	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 ₀	М		BIT STRING (13)	(seconds) [58]
>a _{Gfo}	М		BIT STRING (12)	(seconds) [58]
>a _{Gf1}	М		BIT STRING (8)	(sec/sec) [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_{i0}	М		BIT STRING(12)	This parameter is used as defined in [53]
a _{i1}	M		BIT STRING(12)	This parameter is used as defined in [53]
a_{i2}	M		BIT STRING(12)	This parameter is used as defined in [53]
GANSS Ionosphere Regional Storm Flags		01		
>Storm Flag 1	M		BOOLEAN	This parameter is used as defined in [53]
>Storm Flag 2	М		BOOLEAN	This parameter is used as defined in [53]
>Storm Flag 3	M		BOOLEAN	This parameter is used as defined in [53]
>Storm Flag 4	М		BOOLEAN	This parameter is used as defined in [53]
>Storm Flag 5	М		BOOLEAN	This parameter is used as defined in [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	Semantics description
			Reference	_

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	
Data ID	M		BIT	Coded as defined in [16]
			STRING(2)	
α_0	M		BIT STRING	seconds [59]
			(8)	
α_1	M		BIT STRING	sec/semi-circle [59]
			(8)	
α_2	M		BIT STRING	sec/(semi-circle) ² [59]
			(8)	
α_3	M		BIT STRING	sec/(semi-circle) ³ [59]
			(8)	
β_0	M		BIT STRING	seconds [59]
			(8)	
β ₁	M		BIT STRING	sec/semi-circle [59]
			(8)	
β_2	M		BIT STRING	sec/(semi-circle) ² [59]
			(8)	
β_3	M		BIT STRING	sec/(semi-circle) ³ [59]
			(8)	

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	M			
>Keplerian Parameters				Model-1
>>t _{0e}	M		BIT STRING(14)	Time-of-Ephemeris in seconds, scale factor 60 [53]
>>@	M		BIT STRING(32)	Argument of Perigee (semicircles) [53]
>>∆n	M		BIT STRING(16)	Mean Motion Difference From Computed Value (semi- circles/sec) [53]
>>M ₀	M		BIT STRING(32)	Mean Anomaly at Reference Time (semi-circles) [53]
>>OMEGAdot	M		BIT STRING(24)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles/sec) [53]
>>e	М		BIT STRING(32)	Eccentricity, scale factor 2 ⁻³³ [53]
>>ldot	М		BIT STRING(14)	Rate of Inclination Angle (semi-circles/sec) [53]
>>sqrtA	M		BIT STRING(32)	Least significant bits of Semi- Major Axis in (meters) ^{1/2} , scale factor 2 ⁻¹⁹ [53]
>>i ₀	М		BIT STRING (32)	Inclination Angle at Reference Time (semi-circles) [53]
>>OMEGA ₀	M		BIT STRING(32)	Longitude of Ascending Node of Orbit Plane at Weekly Epoch (semi-circles) [53]
>>C _{rs}	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term to the Orbit Radius (meters) [53]
>>C _{is}	М		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Angle Of Inclination (radians) [53]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C _{us}	M		BIT STRING(16)	Amplitude of the Sine Harmonic Correction Term To The Argument Of Latitude (radians) [53]
>>C _{rc}	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term to the Orbit Radius (meters) [53]
>>C _{ic}	M		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Angle Of Inclination (radians) [53]
>>C _{uc}	М		BIT STRING(16)	Amplitude of the Cosine Harmonic Correction Term To The Argument Of Latitude (radians) [53]

9.2.1.107a GANSS Additional Orbit Models

This IE contains information for GANSS orbit model parameters.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional Orbit Models				
>NAV-Keplerian Parameters				Model-2
>>URA Index	М		BIT STRING(4)	SV accuracy (dimensionless) [59]
>>Fit Interval Flag	M		BIT STRING (1)	Fit interval indication (dimensionless) [59]
>>t _{oe}	М		BIT STRING(16)	Time of ephemeris (seconds) [59]
>>0	М		BIT STRING (32)	Argument of perigee (semi-circles) [59]
>>∆n	M		BIT STRING (16)	Mean motion difference from computed value (semi-circles/sec) [59]
>>M ₀	М		BIT STRING (32)	Mean anomaly at reference time (semi-circles) [59]
>>OMEGAdot	М		BIT STRING (24)	Rate of right ascension (semi-circles/sec) [59]
>>e	M		BIT STRING (32)	Eccentricity (dimensionless) [59]
>>ldot	M		BIT STRING (14)	Rate of inclination angle (semi-circles/sec) [59]
>>sqrtA	М		BIT STRING (32)	Square root of semi-major axis (meters ^{1/2}) [59]
>>i ₀	М		BIT STRING (32)	Inclination angle at reference time (semi-circles) [59]
>>OMEGA ₀	М		BIT STRING (32)	Longitude of ascending node of orbit plane at weekly epoch (semi-circles) [59]
>>C _{rs}	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the orbit radius (meters) [59]
>>C _{is}	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [59]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>>C _{us}	М		BIT STRING (16)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [59]
>>C _{rc}	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [59]
>>C _{ic}	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [59]
>>C _{uc}	М		BIT STRING (16)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [59]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>CNAV/CNAV-2 Keplerian Parameters				Model-3
>>t _{op}	M		BIT STRING (11)	Data predict time of week (seconds) [55,56,57,59]
>>URA _{oe} Index	М		BIT STRING (5)	SV accuracy (dimensionless) [55,56,57,59]
>>∆A	М		BIT STRING (26)	Semi-major axis difference at reference time (meters) [55,56,57,59]
>>A_dot	М		BIT STRING (25)	Chane rate in semi-major axis (meters/sec) [55,56,57,59]
>>Δn ₀	М		BIT STRING (17)	Mean motion difference from computed value at reference time (semi-circles/sec) [55,56,57,59]
>>∆n ₀ _dot	М		BIT STRING (23)	Rate of mean motion difference from computed value (semi-circles/sec ²) [55,56,57,59]
>>M _{0-n}	M		Bit String(33)	Mean anomaly at reference time (semi-circles) [55,56,57,59]
>>e _n	M		BIT STRING (33)	Eccentricity (dimensionless) [55,56,57,59]
>>\psi_n	М		Bit String(33)	Argument of perigee (semi-circles) [55,56,57,59]
>>Ω _{0-n}	М		BIT STRING (33)	Reference right ascension angle (semi-circles) [55,56,57,59]
$>>\Delta\Omega_{-}$ dot	M		BIT STRING (17)	Rate of right ascension difference (semi-circles/sec) [55,56,57,59]
>>i _{o-n}	М		BIT STRING (33)	Inclination angle at reference time (semi-circles) [55,56,57,59]
>>l _{0-n} _dot	М		BIT STRING (15)	Rate of inclination angle (semi-circles/sec) [55,56,57,59]
>>C _{is-n}	M		BIT STRING (16)	Amplitude of sine harmonic correction term to the angle of inclination (radians) [55,56,57,59]
>>C _{ic-n}	M		BIT STRING (16)	Amplitude of cosine harmonic correction term to the angle of inclination (radians) [55,56,57,59]
>>C _{rs-n}	M		BIT STRING (24)	Amplitude of sine harmonic correction term to the orbit radius (meters) [55,56,57,59]
>>C _{rc-n}	M		BIT STRING (24)	Amplitude of cosine harmonic correction term to the orbit radius (meters) [55,56,57,59]
>>C _{us-n}	M		BIT STRING (21)	Amplitude of sine harmonic correction term to the argument of latitude (radians) [55,56,57,59]
>>C _{uc-n}	М		BIT STRING (21)	Amplitude of cosine harmonic correction term to the argument of latitude (radians) [55,56,57,59]

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>GLONASS Earth-Centered, Earth-fixed Parameters				Model-4
>>E _n	М		BIT STRING (5)	Age of data (days) [60]
>>P1	М		BIT STRING (2)	Time interval between two adjacent values of t _b (minutes) [60]
>>P2	М		BIT STRING (1)	Change of t₀ 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 _b (kilometers) [60]
$\Rightarrow \dot{x}_n(t_b)$	М		BIT STRING (24)	x-coordinate of satellite velocity at time t _b (kilometers/sec) [60]
$\Rightarrow \ddot{x}_n(t_b)$	М		BIT STRING (5)	x-coordinate of satellite acceleration at time t _b (kilometers/sec ²) [60]
$\Rightarrow y_n(t_b)$	М		BIT STRING (27)	y-coordinate of satellite at time
$\Rightarrow \dot{y}_n(t_b)$	M		BIT STRING (24)	(kilometers) [60] y-coordinate of satellite velocity at time t _b (kilometers/sec) [60]
$\Rightarrow \ddot{y}_n(t_b)$	M		BIT STRING (5)	y-coordinate of satellite acceleration at time t _b (kilometers/sec ²) [60]
$\gg z_n(t_b)$	M		BIT STRING (27)	z-coordinate of satellite at time t _b (kilometers) [60]
$\Rightarrow \dot{z}_n(t_b)$	М		BIT STRING (24)	z-coordinate of satellite velocity at time t _b (kilometers/sec) [60]
$\Rightarrow \ddot{z}_n(t_b)$	М		BIT STRING (5)	z-coordinate of satellite acceleration at time t _b (kilometers/sec ²) [60]
>SBAS Earth-Centered, Earth- fixed Parameters				Model-5
>>t ₀	C-ClockMo del		BIT STRING (13)	Time of applicability (seconds) [58]
>>Accuracy	М		BIT STRING (4)	(dimensionless) [58]
>>X _G	M		BIT STRING (30)	(meters) [58]
>>Y _G	М		BIT STRING (30)	(meters) [58]
>>Z _G	М		BIT STRING (25)	(meters) [58]
>>X _G Rate-of-Change	М		BIT STRING (17)	(meters/sec) [58]
>>Y _G Rate-of-Change	М		BIT STRING (17)	(meters/sec) [58]
>>Z _G Rate-of-Change	М		BIT STRING (18)	(meters/sec) [58]
>>X _G Acceleration	М		BIT STRING (10)	(meters/sec ²) [58]
>>Y _G Acceleration	М		BIT STRING (10)	meters/sec ²) [58]
>>Z _G Acceleration	М		BIT STRING (10)	meters/sec ²) [58]

Condition	Explanation
ClockModel	This IE shall be present if "SBAS Earth-Centered,
	Earth-fixed Parameters" (Model-5) in IE GANSS
	Additional Clock Models is not included in GANSS
	Additional Navigation Models IE.

9.2.1.108 GANSS Real Time Integrity

This IE contains parameters that describe the real-time status of the GANSS constellation.

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
Satellite Information		1 to <maxgan SSSat></maxgan 		
>Bad GANSS Sat ID	M		INTEGER(063)	Defined in [16].
>Bad GANSS Signal ID	0		BIT STRING(8)	Coded as defined in [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	M		ENUMERATED (North, South)	
Degrees of Latitude	М		INTEGER (02 ³¹ -1)	The IE value (N) is derived by this formula: N≤2 ³¹ X /90 < N+1 X being the latitude in degree (0° 90°)
Degrees of Longitude	М		INTEGER (-2 ³¹ 2 ³¹ -1)	The IE value (N) is derived by this formula: N≤2 ³² X /360 < N+1 X being the longitude in degree (-180°+180°)
Direction of Altitude	M		ENUMERATED (Height, Depth)	
Altitude	M		INTEGER (02 ¹⁵ -1)	The relation between the value (N) and the altitude (a) in meters it describes is N≤ a <n+1, except="" for="" n="2<sup">15-1 for which the range is extended to include all greater values of (a).</n+1,>

9.2.1.110 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	Semantics description
			Reference	
GANSS Time Model Reference	M		INTEGER(0.	GANSS reference time
Time			.37799)	(modulo 1 week) in seconds.
				The scale factor is 24
T _{A0}	M		INTEGER(-	Seconds, scale factor 2 ⁻³⁵
			2147483648.	
			.2147483647	
)	
T _{A1}	0		INTEGER (-	sec/sec, scale factor 2 ⁻⁵¹
			838860883	
			88607)	
T _{A2}	0		INTEGER (-	sec/sec ² , scale factor 2 ⁻⁶⁸
			6463)	
GNSS_TO_ID	M		ENUMERAT	
			ED(GPS,,	
			Galileo,	
			QZSS,	
			GLONASS)	
Week Number	0		INTEGER(0.	Reference week of GANSS
			.8191)	Time Model

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></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	Semantics description
			Reference	
A ₁	М		BIT	sec/sec [53]
			STRING(24)	
A ₀	М		BIT	seconds [53]
			STRING(32)	
t _{ot}	М		BIT	seconds [53]
			STRING(8)	
WN _t	M		BIT	weeks [53]
			STRING(8)	
Δt_{LS}	M		BIT	seconds [53]
			STRING(8)	
WN _{LSF}	M		BIT	weeks [53]
			STRING(8)	
DN	M		BIT	days [53]
			STRING(8)	
Δt_{LSF}	М		BIT	seconds [53]
			STRING(8)	

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 [55,56,57,58,59,60].

IE/Group name	Presence	Range	IE Type and	Semantics description
			Reference	

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
CHOICE Additional UTC Models				
>Model Set 1			DIT	D: (5: 1 (ONO) (
>A _{0-n}	M		BIT STRING(16)	Bias coefficient of GNSS time scale relative to UTC time scale (seconds) [55,56,57,59]
>A _{1-n}	M		BIT STRING (13)	Drift coefficient of GNSS time scale relative to UTC time scale (sec/sec) [55,56,57,59]
>A _{2-n}	M		BIT STRING (7)	Drift rate correction coefficient of GNSS time scale relative to UTC time scale (sec/sec ²) [55,56,57,59]
>\Delta t _{LS}	М		BIT STRING (8)	Current or past leap second count (seconds) [55,56,57,59]
>t _{ot}	M		BIT STRING (16)	Time data reference time of week (seconds) [55,56,57,59]
>WN _{ot}	М		BIT STRING (13)	Time data reference week number (weeks) [55,56,57,59]
>WN _{LSF}	М		BIT STRING (8)	Leap second reference week number (weeks) [55,56,57,59]
>DN	M		BIT STRING (4)	Leap second reference day number (days) [55,56,57,59]
$>\Delta t_{LSF}$	M		BIT STRING (8)	Current or future leap second count (seconds) [55,56,57,59]
>Model Set 2				
>N ^A	M		BIT STRING (11)	Callendar day number within four-year period beginning since the leap year (days) [60]
>t _c	M		BIT STRING (32)	GLONASS time scale correction to UTC(SU) (seconds) [60]
>Delta UT1	0			, , , , ,
>>B1	M		BIT STRING (11)	Coefficient to determine ΔUT1 (seconds) [60]
>>B2 >KP	М		BIT STRING (10) BIT STRING	Coefficient to determine ΔUT1 (seconds/msd) [60] Notification of expected leap
	O		(2)	second correction (dimensionless) [60]
>Model Set 3	NA		DIT OTDING	000/000
>A ₁ wnt >A ₀ wnt	M		BIT STRING (24) BIT STRING	sec/sec ([58], Message Type 12) seconds
>A _{0WNT}	M		(32) BIT STRING	([58], Message Type 12) seconds
	141		(8)	([58], Message Type 12)
>WN _t	М		BIT STRING (8)	weeks ([58], Message Type 12)
>∆t _{LS}	М		BIT STRING (8)	seconds ([58], Message Type 12)
>WN _{LSF}	M		BIT STRING (8)	weeks ([58], Message Type 12)
>DN	M		BIT STRING (8)	days ([58], Message Type 12)
$> \Delta t_{LSF}$	М		BIT STRING (8)	seconds ([58], Message Type 12)

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
>UTC Standard ID	М		BIT STRING (3)	dimensionless Coded as defined in [16]

9.2.1.112 Tutran-Ganss Accuracy Class

The $T_{UTRAN-GANSS}$ Accuracy Class IE indicates the accuracy class of the UTRAN GANSS Timing of Cell Frames for UE Positioning measurement.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
T _{UTRAN-GANSS} Accuracy Class			ENUMERAT	More information about
-			ED	Measurement Accuracy Class is
			(Accuracy	included in [23].
			Class A,	
			Accuracy	
			Class B,	
			Accuracy	
			Class C,)	

9.2.1.113 T_{UTRAN-GANSS} 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 _{UTRAN-GANSS} Change Limit	0		INTEGER(1256)	Change of T _{UTRAN-GANSS} value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted T _{UTRAN-GANSS} Deviation Limit	0		INTEGER(1256)	Deviation of the Predicted T _{UTRAN-GANSS} from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.114 T_{UTRAN-GANSS} 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 _{UTRAN-GANSS}	M			Indicates the UTRAN GANSS Timing of Cell Frames for UE Positioning. According to mapping in [23] and [24]; significant values range from 0 to 371589119999 99.	-	
>MS	М		INTEGER(016383)	Most Significant Part	_	
>LS	M		INTEGER(0 42949672 95)	Least Significant Part	_	
T _{UTRAN-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.	-	
T _{UTRAN-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 Tutran-	_	

			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	Semantics Description	Criticality	Assigned Criticality
			Reference	Description		Officiality
CHOICE HARQ Memory		1			-	
Partitioning						
>Implicit >>Number of Processes	M		INTEGER	For HARQ		
>>Ndmiser of Freeciscs			(18,12,1 4,16)	process IDs going from 0 to "Number of Processes" – 1 the Total number of soft channel bits [42] is partitioned equally between all HARQ processes according to the rules in [16].		
>Explicit				raico in [10].	_	
>>HARQ Memory Partitioning Infomation		1 <maxno ofHARQpr ocesses></maxno 		The first instance of the parameter corresponds to HARQ process with identifier 0, the second instance to HARQ process with identifier 1, and so on.	_	
>>>Process Memory Size	M		9.2.1.49D	See [16]	_	
>>HARQ Memory Partitioning Information Extension For MIMO		0, 4, 6 or 8		FDD and 1.28Mcps TDD only The 1 st instance corresponds to HARQ process with identifier set to "maxnoofHARQp rocesses", the 2 nd instance to HARQ process with identifier set to "maxnoofHARQp rocesses+1", and so on.	GLOBAL	ignore
>>>Process Memory Size	М		9.2.1.49D	See [16]		

Range Bound	Explanation
MaxnoofHARQprocesses	Maximum number of HARQ processes for one UE [FDD - per stream
	(the maximum number of HARQ processes per UE is 2 *
	MaxnoofHARQprocesses in dual stream transmission mode)]

9.2.1.117 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 [54]) is the first PLMN.

Presence	Range	IE type and reference	Semantics description
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).
	0 <maxnrofbroadc astPLMNs></maxnrofbroadc 		
М		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
	M	M O <maxnrofbroadc astplmns=""></maxnrofbroadc>	### O Contact

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 [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	M		BIT STRING(11024)	Raw data bits as transmitted from a specific satellite at the time indicated by GANSS_TOD. See [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	М		INTEGER(07 ,)	Defines the GANSS and is coded as defined in [16].

9.2.1.119a GANSS Time ID

This IE defines a particular GANSS system time.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Time ID	M		INTEGER(07 ,)	Defines the GANSS system time for the UTRAN GANSS Timing of Cell Frames for UE Positioning. Coded as defined in [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></maxgan 		
>Sat ID	М		INTEGER(063)	Defined in [16].
>SV Health	М		BIT STRING(5)	Coded as defined in [53]
>IOD	М		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></maxga 		
>Sat ID	M		INTEGER(063)	Defined in [16].
>SV Health	M		BIT STRING(6)	Coded as defined in [16].
>IOD	M		BIT STRING(11)	Coded as defined in [16].
>GANSS Additional Clock Models	М		GANSS Addtional Clock Models 9.2.1.104a	
>GANSS Additional Orbit Models	М		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 [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 _{EOP}	M		BIT STRING(16)	EOP data reference time
				(seconds) [55]
PM_X	M		BIT STRING (21)	X-axis polar motion value at reference time
				(arc-seconds) [55]
PM_X_dot	M		BIT STRING (15)	X-axis polar motion drift at reference time
				(arc-seconds/day) [55]
PM_Y	M		BIT STRING (21)	Y-axis polar motion value at reference time
				(arc-seconds) [55]
PM_Y_dot	M		BIT STRING (15)	Y-axis polar motion drift at reference time
				(arc-seconds/day) [55]
ΔUT1	M		BIT STRING (31)	UT1-UTC difference at reference time
				(seconds) [55]
ΔUT1_dot	М		BIT STRING (19)	Rate of UT1-UTC difference at reference time
				(seconds/day) [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	Semantics description
			Reference	

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></maxgan 		
>>>Sat ID	M		INTEGER(063)	Defined in [16].
>>>Signals Available	M		BIT STRING(8)	Coded as defined in [16].
>GANSS-ID-3				This choice may be present if GANSS ID indicated "GLONASS"
>>Aux Info List		1 <maxgan SSSat></maxgan 		
>>>Sat ID	M		INTEGER(063)	Defined in [16].
>>>Signals Available	M		BIT STRING(8)	Coded as defined in [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	М		BIT STRING(2)	Data ID for GANSS Additional
Request			STRING(2)	Ionospheric Model as defined in [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	M		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	Semantics Description
			Reference	
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	М		BOOLEAN	True means requested.

9.2.1.122h GANSS Auxiliary Information Request

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
GANSS Auxiliary Information Request	М		BOOLEAN	True means requested.

9.2.1.123 SixtyfourQAM DL Support Indicator

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 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation			BIT STRING	The content is defined in ref.
Information Request				[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 [2].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RANAP Enhanced Relocation Information Response			BIT STRING	The content is defined in ref. [2].
illioittation Response				[2].

9.2.1.126 Released CN Domain

The parameter indicates the CD Domain(s) which the RNC shall release the related resource for.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Released CN Domain	М		Reference	
>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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Secondary CCPCH system information MBMS			BIT STRING	The content is defined in ref. [16].

9.2.1.128 MBSFN Cluster Identity

The parameter is the identifier of a MBSFN cluster in one PLMN.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Cluster Identity			INTEGER (065535)	the identifier of a MBSFN cluster in one PLMN

9.2.1.129 MBSFN Scheduling Transmission Time Interval

The parameter is the identifier of an MBSFN Scheduling Transmission Time Interval.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBSFN Scheduling			INTEGER	Number of TTIs
Transmission Time Interval			(4,8,16,32,	
			64,128,256)	

9.2.1.130 MAC-ehs Reset Timer

The MAC-ehs Reset Timer IE is used as Reset Timer(Treset) described in ref [41] subclause 11.6.4.5.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-ehs Reset Timer			ENUMERAT ED (1, 2, 3, 4,)	Timer in multiples of T1 values (milliseconds). Used when MAC-ehs reordering queue is reset in CELL_FACH and CELL_PCH

9.2.1.131 Enhanced FACH Support Indicator

This IE indicates the Enhanced FACH Support. [1. 28Mcps TDD - This IE indicates the Enhanced FACH Support in both downlink and uplink.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced FACH Support Indicator			NULL	

9.2.1.132 Enhanced PCH Capability

This IE indicates the UE is capable of Enhanced PCH or not.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
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 <maxnoo fPrioQueue</maxnoo 		
		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
maxnoofPrioQueues	Maximum number of Priority Queues

9.2.1.134 MIMO Activation Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Activation Indicator	М		NULL	

9.2.1.135 MIMO Mode Indicator

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MIMO Mode Indicator			ENUMERATED (Activate, Deactivate)	

9.2.1.136 DL RLC PDU Size Format

The DL RLC PDU Size Format IE indicates the downlink RLC PDU size format used for a Priority Queue.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
DL RLC PDU Size Format			ENUMERATED (
			Fixed RLC PDU	
			size, Flexible RLC	
			PDU size ,)	

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 ref.
			(08,)	[21] subclause 4.2.1.

9.2.2.A Active Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence activation. For details see ref. [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CM Configuration Change CFN	М		CFN 9.2.1.9	
Transmission Gap Pattern Sequence Status		0 <maxtgps></maxtgps>		If the group is not present, none of the pattern sequences are activated.
>TGPSI Identifier	M		INTEGER(1. . <maxtgps >)</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(0511)	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.

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

9.2.2.B Adjustment Period

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Adjustment Period			INTEGER (1 256)	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 (The value "Bundling" is
			Bundling, No 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 FDD	Presence	Range		Semantics Description 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:Reserved. The second bit: Delayed Activation Support Indicator. The third bit: HS-DSCH Support Indicator. The fourth bit:Reserved. The fifth bit: F-DPCH Support Indicator. The sixth bit: E-DCH Support Indicator. The sixth bit: E-DCH Support Indicator. The eighth bit: E-DCH 2sf2 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 televenth bit: E-DCH sf4 and all inferior SFs Support Indicator. The thirdenth bit: E-DCH sf8 and all inferior SFs Support Indicator. The twelveth bit: E-DCH sf8 and all inferior SFs Support Indicator. The thirteenth bit: E-DCH sf8 and all inferior SFs Support Indicator. The twelveth bit: E-DCH sf8 and all inferior SFs Support Indicator. The twelveth 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 seventeenth bit: Flexible MAC-d PDU Size 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.
	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 [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Portion ID			INTEGER	
			(063,)	

9.2.2.1 Chip Offset

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Chip Offset			INTEGER (038399)	Unit: Chips

9.2.2.2 Closed Loop Mode1 Support Indicator

The Closed Loop Mode1 Support Indicator indicates whether the particular cell is capable to support Closed loop mode1 or not

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Closed Loop Mode1 Support			ENUMERAT	
Indicator			ED(Closed	
			loop mode1	
			Supported,	
			Closed loop	
			mode1 not	
			supported).	

9.2.2.3 Closed Loop Mode2 Support Indicator

Void.

9.2.2.3A Closed Loop Timing Adjustment Mode

Indicates when the phase/amplitude adjustment is performed in the DL in relation to the receipt of the UL feedback command in case of closed loop mode transmit diversity on DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Closed Loop Timing Adjustment			ENUMERAT	According to [10] subclause
Mode			ED(Offset1,	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 <maxno ofDCHs></maxno 			_	
>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 <maxno ofDCHs></maxno 			_	
>>DCH ID	M		9.2.1.16		_	
>>TrCH Source Statistics Descriptor	M		9.2.1.65		_	
>>Transport Format Set	М		9.2.1.64	For the UL.	_	
>>Transport Format Set	М		9.2.1.64	For the DL.	_	
>>BLER	М		9.2.1.4	For the UL.	_	
>>BLER	М		9.2.1.4	For the DL.	_	
>>Allocation/Retention Priority	М		9.2.1.1		_	
>>Frame Handling Priority	M		9.2.1.29		_	
>>QE-Selector	M		9.2.1.46A		_	
>>DRAC control	М		9.2.2.13		_	
>>Guaranteed Rate Information	0		9.2.1.30M		YES	ignore
>>Traffic Class	М		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	0		9.2.1.68B		YES	reject
>TNL QoS	0		9.2.1.56A		YES	ignore

Range bound	Explanation
maxnoofDCHs	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	Semantics Description	Criticality	Assigned Criticality
			Reference	-		_
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 9.2.2.4O	If this IE is not included, scheduled transmission in all HARQ processes is allowed.	I	
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		1	
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		YES	ignore

Condition	Explanation
SixteenQAM UL Operation	The IE shall be present if the SixteenQAM UL Operation Indicator IE is
	set to "Activate".

9.2.2.4C 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 <maxno ofEDCHM ACdFlows ></maxno 	Keterence		-	
>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 9.2.2.4O		-	
>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
maxnoofEDCHMACdFlows	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 And E-HICH FDD Scrambling Code	0		DL Scrambling Code 9.2.2.11	Scrambling code on which E-AGCH, E- RGCH and E- HICH are transmitted. 0= Primary scrambling code of the cell 115 = Secondary scrambling code	-	
E-AGCH Channelisation Code	0		FDD DL Channelisat ion Code Number 9.2.2.14		-	
Primary E-RNTI	0		E-RNTI 9.2.1.94		_	
Secondary E-RNTI	0		E-RNTI 9.2.1.94		-	
E-RGCH and 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)		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 [41]; index 38 means zero grant	-	
Primary/Secondary Grant Selector	0		ENUMERA TED (Primary, Secondary)	Indicates whether the Serving Grant Value is granted with a primary E- RNTI or a secondary E- RNTI	_	
E-RGCH Release Indicator	0		9.2.2.60		_	
E-RGCH and E-HICH Channelisation Code Validity Indicator	0		9.2.2.68	Indicates whether the value of E- RGCH and E- HICH Channelisatio n Code is invalid	YES	ignore
Default Serving Grant in DTX Cycle 2	0		INTEGER (037,38)	Serving Grant value to be	YES	ignore

used in DTX- Cycle-2.	
(037)	
indicates E- DCH serving	
grant index as	
defined in [32];	
index 38	
means zero	
grant	

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	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 	Reference	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	M		9.2.1.61		-	
>TNL QoS	0		9.2.1.56A		-	
>Maximum Number of Retransmissions for E- DCH	0		9.2.1.100		1	
>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		_	
> CHOICE E-DCH grant type	0					
>>E-DCH Non- Scheduled Transmission Grant						
>>>Maximum Number of Bits per MAC-e PDU for Non-scheduled Transmission	M		9.2.2.4N	If the Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored	-	
>>>HARQ Process Allocation For 2ms Non-Scheduled Transmission Grant	0		HARQ Process Allocation for 2ms TTI 9.2.2.40		_	
>>>Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission	0		9.2.2.4R		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			9.2.1.93		_	
To Modify						
>E-DCH Logical Channel		0<			-	
To Delete		maxnooflo				
		gicalchann				
		els>				
>>Logical Channel ID	M		9.2.1.97		_	
HARQ Process Allocation	0		HARQ		_	
For 2ms Scheduled			Process			
Transmission Grant			Allocation			
			for 2ms TTI			
			9.2.2.40			
E-DCH Maximum Bitrate	0		9.2.2.4MG		_	
E-DCH Processing Overload	0		9.2.1.95		_	
Level						
E-DCH Reference Power	0		9.2.2.4MI		_	
Offset						
MAC-e Reset Indicator	0		9.2.1.99			
E-DCH Power Offset for	0		9.2.1.96		YES	ignore
Scheduling Info						
SixteenQAM UL Operation	0		9.2.2.90		YES	reject
Indicator E-DCH MAC-d PDU Size	0		0.04.044		YES	unio nt
	U		9.2.1.91A		YES	reject
Format E-DCH DL Control Channel		0			GLOBAL	:
Grant Information		0 <maxno ofEDCHR</maxno 			GLUBAL	ignore
Grant information		Ls>				
>E-DCH RL ID	M	LS>	RL ID		_	
ZE-DOLLKE ID	IVI		9.2.1.49		_	
E-AGCH Table Choice	C-		9.2.1.49 9.2.2.61A		YES	ignore
L-AGGIT Table Choice	SixteenQA		3.2.2.01A		163	ignore
	M UL					
	Operation					
	I Operation		L	<u> </u>		

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
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnooflogicalchannels	Maximum number of Logical Channels
maxnoofEDCHRLs	Maximum number of E-DCH RLs for one UE

9.2.2.4G E-DCH Transport Format Combination Set Information (E-TFCS Information)

Whereas the related Transport Block sizes are standardised in [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 β_{ec} and β_{ed} defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-TFCI Table Index	M		INTEGER (01,, 27)	Indicates which standardised E-TFCS Transport Block Size Table shall be used. The related tables are specified in [41].	_	
E-DCH Minimum Set E- TFCI	М		INTEGER (0127)	For the concept of "E-DCH Minimum Set of TFCs" see [41] and [16].	ŀ	
Reference E-TFCI Information		1 <maxno ofRefETF Cls></maxno 			_	
>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 Informatiion	0		9.2.2.91		YES	reject
E-DPDCH Power Interpolation	0		BOOLEAN	True means that the E-DPDCH power interpolation formula shall be applied, False means that the E-DPDCH power extrapolation formula shall be applied for the computation of the gain factor β_{ed} according to [10]	YES	reject

Range Bound	Explanation
maxnoofRefETFCIs	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 β_{ec} as defined in [10], whereas β_{ec} is related to the power difference between DPCCH and E-DPCCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DPCCH Power Offset			INTEGER (08)	According to mapping in ref. [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 [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH HARQ Power Offset FDD			INTEGER (06)	According to mapping in ref. [21] subclause 4.2.1.3.

9.2.2.4M Void

9.2.2.4MA Void

9.2.2.4MB Void

9.2.2.4MC E-DCH MAC-d Flows Information

The E-DCH MAC-d Flows Information IE is used for the establishment of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 	Reference		_	
>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	M		9.2.1.100		1	
>Traffic Class	M		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	M		9.2.2.4N	If the Extended Maximum Number of Bits per MAC-e PDU for Non- scheduled Transmission IE is present, this IE shall be ignored	_	
>>>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		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		
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.	1	

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,,	Bitrate on transport block level. Unit is kbits per second.
			574311498)	

9.2.2.4MH Void

9.2.2.4MI E-DCH Reference Power Offset

The E-DCH Reference Power Offset is used to estimate the E-DPDCH power from E-TFCI without decoding MAC-e PDUs.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Reference Power Offset			INTEGER (06)	According to mapping in ref. [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 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	Semantics Description
			Reference	
HARQ Process Allocation For 2ms TTI			BIT STRING (8)	The first Bit corresponds to HARQ process ID = 0, the second bit corresponds to HARQ process ID = 1, etc. The HARQ process ID for 2ms TTI is defined in [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 [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 ref. [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			INTEGER	According to mapping in ref.
Power Offset			(3031,)	[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 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 Bits per MAC-e PDU for Non-			INTEGER (1998322978,)	
scheduled Transmission			(10000010,)	

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	Semantics Description
			Reference	
Transport Bearer Not			ENUMERATED	
Requested Indicator			(Transport Bearer	
			shall not be	
			Established,	
			Transport Bearer	
			may not be	
			Established)	

9.2.2.4T Transport Bearer Not Setup Indicator

The Transport Bearer Not Setup Indicator parameter indicates that a transport bearer will not be established for a DCH or an E-DCH MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Bearer Not Setup			ENUMERATED	
Indicator			(Transport Bearer	
			Not Setup)	

9.2.2.5 D-Field Length

Void

9.2.2.6 Diversity Control Field

Void.

9.2.2.7 Diversity Indication

Void.

9.2.2.8 Diversity Mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Diversity Mode			ENUMERAT	The <i>Diversity Mode</i> 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 ref. [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 <maxnoof RLs></maxnoof 			_	
>RL ID	M		9.2.1.49		_	
>DL Reference Power	М		DL power 9.2.1.21A	Power on DPCH or on F-DPCH	_	
Max Adjustment Step	C- CommonOrIn dividual		9.2.2.23		_	
Adjustment Period	C- CommonOrIn dividual		9.2.2.B		_	
Adjustment Ratio	C- CommonOrIn dividual		9.2.2.C		_	

Condition	Explanation
Common	The IE shall be present if the Power Adjustment Type IE is set to
	"Common".
Individual	The IE shall be present if the Power Adjustment Type IE is set to
	"Individual".
CommonOrIndividual	The IE shall be present if the Power Adjustment Type IE is set to
	"Common" or "Individual".

Range Bound	Explanation
maxnoofRLs	Maximum number of Radio Links for a UE.

9.2.2.10B 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	Semantics	Criticality	Assigned
			and	Description		Criticality
			Reference			
Common DL Reference	0		DL power	Power on	_	
Power			9.2.1.21A	DPCH or on		
				F-DPCH		
Individual DL Reference		0 <maxnoof< td=""><td></td><td></td><td>_</td><td></td></maxnoof<>			_	
Power Information		RLs>				
>RL ID	M		9.2.1.49		_	
>DL Reference Power	M		DL power	Power on	_	
			9.2.1.21A	DPCH or on		
				F-DPCH		

Range bound	Explanation
maxnoofRLs	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 RI

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 [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-	The DRAC Control IE shall never be set to "Not Used".
			Requested)	

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 Reference	Semantics Description	Criticality	Assigned Criticality
FDD DCHs To Modify		1 <maxno ofDCHs></maxno 			_	
>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		ı	
>DCH Specific Info		1 <maxno ofDCHs></maxno 			_	
>>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
maxnoofDCHs	Maximum number of DCHs for one UE.

9.2.2.13D Enhanced DSCH PC

Void.

9.2.2.13E Enhanced DSCH PC Counter

Void.

9.2.2.13F Enhanced DSCH PC Indicator

Void.

9.2.2.13G Enhanced DSCH PC Wnd

Void.

9.2.2.13H Enhanced DSCH Power Offset

Void.

9.2.2.13I Enhanced Primary CPICH Ec/No

Energy per PN chip divided by the total received power spectral density measured on the Primary CPICH by the UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enhanced Primary CPICH Ec/No			INTEGER(0. .49)	According to the mapping of the Primary CPICH Ec/lo UE measurement defined in ref. [23] and [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 [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 <maxnoof DLCodes</maxnoof 			_	
>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
maxnoofDLCodes	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.		19
>Number of Supported Carriers	0		ENUMERATE D (One-one carrier, One- three carrier,	Not to be used.	YES	reject
			Three-three carrier, One-six carrier, Tree-six carrier, Six-six carrier,)			
>Multi-carrier HS-DSCH	0		9.2.1.30Oa	Not to be	YES	ignore
Physical Layer Category				used.		
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.34Ab		-	
CQI Feedback Cycle k	M		9.2.2.24a		_	
CQI Repetition Factor	C- CQICyclek		9.2.2.24c		_	
ACK-NACK Repetition Factor	М		9.2.2.a		_	
CQI Power Offset	М		9.2.2.24b		_	
ACK Power Offset	М		9.2.2.b		_	
NACK Power Offset	M		9.2.2.26a		_	
HS-SCCH Power Offset	0		9.2.2.19d			
HARQ Preamble Mode	0		9.2.2.57		YES	ignore
MIMO Activation Indicator	0		9.2.1.134		YES	reject
HS-DSCH MAC-d PDU Size Format	0		9.2.1.30OC	If not present, "Indexed MAC-d PDU Size" shall be used.	YES	reject
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A		YES	ignore
UE without HS-SCCH constraint indicator	0		NULL		YES	ignore
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

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.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset	0		9.2.2.19d	
Sixtyfour QAM Usage	0		9.2.2.79A	
Allowed Indicator				

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		noofMA				
Information		CdFlow				
Response		S>				
>HS-DSCH MAC-d Flow ID	М		9.2.1.300		_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HS-DSCH Initial Capacity Allocation	0		9.2.1.30Na		-	
HS-SCCH Specific		0 <max< td=""><td></td><td></td><td>_</td><td></td></max<>			_	
Information		noofHS				
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 Offset	0		9.2.2.24d		_	
HARQ Memory Partitioning	0		9.2.1.116		_	
User Plane Congestion Fields Inclusion	0		9.2.1.70C		YES	ignore
HARQ Preamble Mode Activation Indicator	0		9.2.2.58		YES	ignore
MIMO Information	0		9.2.2.78		YES	Ignore
Response					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
SixtyfourQAM DL	0		9.2.2.79B		YES	Ignore
Usage Indicator						
HS-DSCH TB Size	0		9.2.2.19G		YES	ignore
Table Indicator						

Range bound	Explanation		
maxnoofMACdFlows	Maximum number of MAC-d flows.		
maxnoofHSSCCHcodes	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	Semantics
			Reference	Description
HS-SCCH Specific Secondary Serving Information Response		0 <max noofHS SCCHc odes></max 		
>Code Number	М		INTEGER (0127)	
HS-PDSCH And HS- SCCH Scrambling Code	0		DL Scrambling Code 9.2.2.11	
Measurement Power Offset	0		9.2.2.24d	
SixtyfourQAM DL Usage Indicator	0		9.2.2.79B	
HS-DSCH TB Size Table Indicator	0		9.2.2.19G	

Range bound	Explanation		
maxnoofHSSCCHcodes	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 Secondary Serving HS-DSCH information in a UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SCCH Power Offset	0		9.2.2.19d	
HS-SCCH Code Change Grant	0		9.2.1.30S	
Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	

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
HS-SCCH Power Offset	0		9.2.2.19d	
Sixtyfour QAM Usage	0		9.2.2.79A	
Allowed Indicator				

9.2.2.19c HS-DSCH FDD Update Information

The *HS-DSCH FDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		_	
CQI Feedback Cycle k	0		9.2.2.24a		_	
CQI Repetition Factor	0		9.2.2.24c		_	
ACK-NACK Repetition Factor	0		9.2.2.a		_	
CQI Power Offset	0		9.2.2.24b		_	
ACK Power Offset	0		9.2.2.b		_	
NACK Power Offset	0		9.2.2.26a		_	
HS-PDSCH Code Change Indicator	0		9.2.1.30V		YES	ignore

9.2.2.19ca HS-DSCH FDD Secondary Serving Update Information

The *HS-DSCH FDD Secondary Serving Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description
HS-SCCH Code Change Indicator	0		9.2.1.30R	
HS-PDSCH Code Change Indicator	0		9.2.1.30V	

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 [21].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-DSCH Configured Indicator			ENUMERATED (HS- DSCH configured, HS-DSCH not configured)	Indicator of the HS-DSCH configuration for configuration of the E-DPDCHs IQ branch mapping [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	Semantics	Criticality	Assigned
			Reference	Description		Criticality
E-DCH MAC-d Flow		0 <maxn< td=""><td></td><td></td><td>_</td><td></td></maxn<>			_	
Specific Update		oofEDCH				
Information		MACdFlo				
		WS>				
>E-DCH MAC-d Flow	M		9.2.1.91		-	
ID						
>HARQ Process	0		HARQ		-	
Allocation For 2ms			Process			
Non-Scheduled			Allocation for			
Transmission Grant			2ms TTI			
			9.2.2.40			
HARQ Process	0		HARQ		-	
Allocation For 2ms			Process			
Scheduled Transmission			Allocation for			
Grant			2ms TTI			
			9.2.2.40			
E-DCH DL Control		0 <maxn< td=""><td></td><td></td><td>GLOBAL</td><td>ignore</td></maxn<>			GLOBAL	ignore
Channel Change		oofEDCH				-
Information		RLs>				
>E-DCH RL ID	М		RL ID		_	
			9.2.1.49			

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnoofEDCHRLs	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	M		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

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	M		9.2.2.19b		_	
>>HS-DSCH-RNTI	M		9.2.1.30P		_	
>>Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75		YES	Ignore
>Unsuccessful					_	
>>Cause	M		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 [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			Kelelelice	
>Successful				
>>RL Information		0 <maxno< td=""><td></td><td></td></maxno<>		
Response		ofRLs>		
>>>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
maxnoofRLs	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	Semantics Description
			Reference	
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	Semantics Description
			Reference	
Initial DL DPCH Timing			ENUMERATED (
Adjustment Allowed			initial DL DPCH	
•			Timing Adjustment	
			Allowed)	

9.2.2.21A Limited Power Increase

The parameter is used for a more efficient use of the inner loop DL power control for non real time data.

If the limited power increase is used, DRNS shall use the limited power increase algorithm as specified in [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 [10]
IP length	М		ENÚMERAT ED(5,10,)	See [10]
IP offset	М		INTEGER(09)	See [10]
Seed	М		INTEGER(063)	See [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	Semantics Description
			Reference	
CQI Feedback Cycle k			ENUMERAT	Unit ms
			ED (0, 2, 4,	
			8, 10, 20, 40,	
			80, 160,,	
			16, 32, 64)	

9.2.2.24b CQI Power Offset

The *CQI Power Offset* IE indicates Power offset used in the UL between the HS-DPCCH slots carrying CQI information and the associated DPCCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CQI Power Offset			INTEGER (08,)	According to mapping in ref. [21] subclause 4.2.1.

9.2.2.24c CQI Repetition Factor

The CQI Repetition Factor IE indicates the consecutive repetition of the CQI.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CQI Repetition Factor			INTEGER (1,4,)	Step: 1

9.2.2.24d Measurement Power Offset

The Measurement Power Offset IE is used as defined in [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 [9]. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Maximum Set of E-DPDCHs			ENUMERATED	
			(vN256, vN128,	
			vN64, vN32, vN16,	
			vN8, vN4, v2xN4,	
			v2xN2,	
			v2xN2plus2xN4,,	
			v2xM2plus2xM4)	

9.2.2.24f 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	Semantics Description
			Reference	
Min UL Channelisation Code			ENUMERAT	
Length			ED(4,8,16,	
			32,64,128,	
			256)	

9.2.2.26 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Multiplexing Position			ENUMERAT	
			ED(Fixed,	
			Flexible)	

9.2.2.26a NACK Power Offset

The NACK Power Offset IE indicates Power offset used in the UL between the HS-DPCCH slot carrying HARQ NACK information and the associated DPCCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
NACK Power Offset			INTEGER	According to mapping in ref.
			(08,)	[21] subclause 4.2.1.

9.2.2.26A Number of DL Channelisation Codes

This parameter notifies DRNS of the number of DL channelisation codes required for the Radio Link(s).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Number of DL			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 ref. [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	Semantics Description
			Reference	
Phase Reference Update			ENUMERATED	
indicator			(Phase	
			Reference	
			needs to be	
			changed)	

9.2.2.28 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Adjustment Type			ENUMERAT	
			ED(None,	
			Common,	
			Individual)	

9.2.2.29 Power Control Mode (PCM)

Void.

9.2.2.30 Power Offset

This IE defines a power offset relative to the Downlink transmission power of a DPCH in case the UE Context is configured to use DPCH in the downlink.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Offset			INTEGER	Unit dB,
			(024)	Step 0.25 dB,
			, ,	Range 06 dB

9.2.2.31 Power Resume Mode (PRM)

Void.

9.2.2.31A Preamble Signatures

Void.

9.2.2.32 Primary CPICH Ec/No

Energy per chip divided by the power density per band measured on the Primary CPICH by the terminal.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CPICH Ec/No			INTEGER (-30+30)	Unit dB, step 1 dB The value range is typically within the range of -24 dB to 0 dB according to the CPICH Ec/lo UE measurement defined in ref. [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.

Semantics Description

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 Reference	Semantics Description
Extended Propagation Delay			INTEGER (2551023)	Continuation of intervals as defined in [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 <maxnoof EDCHMACd Flows></maxnoof 			_	
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	_	
>Transport Bearer Not Requested Indicator	0		9.2.2.4S		YES	ignore
E-AGCH Power Offset	0		9.2.2.61		_	
E-RGCH Power Offset	0		9.2.2.62		_	
E-HICH Power Offset	0		9.2.2.63		_	

Range Bound	Explanation
maxnoofEDCHMACdFlows	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 ref. [11].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Received Total Wide			INTEGER(0.	According to mapping in [23].
Band Power			.621)	

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	Semantics Description
			Reference	
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 ref. [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.

Presence	Range	IE Type and Reference	Semantics Description
		ENUMERAT ED(Not Used, SSDT not	The SSDT Support Indicator IE shall never be set to "Not Used".
-	Presence	Presence Range	Reference ENUMERAT ED(Not Used, SSDT

9.2.2.44 STTD Indicator

Void.

9.2.2.45 STTD Support Indicator

The STTD Support Indicator indicates whether the STTD can be applied to DL DPCH and F-DPCH in the cell or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
STTD Support Indicator			ENUMERAT	
			ED(STTD	
			Supported,	
			STTD not	
			Supported).	

9.2.2.45A Synchronisation Indicator

The *Synchronisation Indicator* IE indicates that Timing Maintained Synchronisation shall be used at start of Radio Link, see also [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Synchronisation Indicator			ENUMERATED	
			(Timing Maintained	
			Synchronisation,)	

9.2.2.46 TFCI Signalling Mode

This parameter indicates has only one value with any meaning.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TFCI Signalling Mode			ENUMERAT ED(Normal, Not Used)	The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.

9.2.2.46A TFCI PC Support Indicator

Void.

9.2.2.47 Transmission Gap Distance (TGD)

Void.

9.2.2.47A Transmission Gap Pattern Sequence Information

Defines the parameters for the compressed mode gap pattern sequence. For details see [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmission Gap Pattern Sequence Information		1 <maxtgps></maxtgps>		
>TGPSI Identifier	М		INTEGER(1. . <maxtgps >)</maxtgps 	Transmission Gap Pattern Sequence Identifier Establish a reference to the compressed mode pattern sequence. Up to <maxtgps> simultaneous compressed mode pattern sequences can be used.</maxtgps>
>TGSN	M		INTEGER(014)	Transmission Gap Starting Slot Number The slot number of the first transmission gap slot within the TGCFN.
>TGL1	M		INTEGER(1. .14)	The length of the first Transmission Gap within the transmission gap pattern expressed in number of slots.
>TGL2	0		INTEGER(1. .14)	The length of the second Transmission Gap within the transmission gap pattern. If omitted, then TGL2=TGL1.
>TGD	M		INTEGER (0, 15 269)	Transmission gap distance indicates the number of slots between the starting slots of two consecutive transmission gaps within a transmission gap pattern. If there is only one transmission gap in the transmission gap pattern, this parameter shall be set to 0 (0 = undefined).
>TGPL1	М		INTEGER(1144,)	The duration of transmission gap pattern 1 in frames.
>Not-to-be-used-1	0		INTEGER(1144,)	This IE shall never be included in the IE group. If received it shall be ignored.
>UL/DL mode	M		ENUMERAT ED(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		ENUMERAT ED(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		ENUMERAT ED(SF/2, higher layer scheduling,)	Method for generating uplink compressed mode gap.
>Downlink Frame Type	М		ENUMERAT ED(A, B,)	Defines if frame type "A" or "B" shall be used in downlink compressed mode.
>DeltaSIR1	M		INTEGER(030)	Delta in SIR target value to be set in the DRNS during the frame containing the start of the first transmission gap in the transmission gap pattern (without including the effect of the bit-rate increase) Step 0.1 dB, Range 0-3dB
>DeltaSIRafter1	M		INTEGER (030)	Delta in SIR target value to be set in the DRNS one frame after

			the frame containing the start of the first transmission gap in the transmission gap pattern,. Step 0.1 dB, Range 0-3dB
>DeltaSIR2	0	INTEGER (030)	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 ref. [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 ref. [8].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPCCH Slot Format			INTEGER (05,)	Value 5 shall not be used. If value 5 is received, the procedure shall be rejected.

9.2.2.52A UL DPDCH Indicator for E-DCH operation

This IE indicated whether the requested configuration actually contain an UL DPDCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL DPDCH Indicator for E-			ENUMERAT	
DCH operation			ED (UL-	
·			DPDCH	
			present, UL-	
			DPDCH not	
			present)	

9.2.2.53 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UL Scrambling Code	M		INTEGER	
Number			(0 2 ²⁴ -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	
Indicate:			Change	
			Supported)	

9.2.2.57 HARQ Preamble Mode

The HARQ Preamble Mode IE is used as described as described in ref [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HARQ Preamble Mode			ENUMERATED(mod	"mode0" means HARQ
			e0, mode1)	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	Semantics Description
			Reference	
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 [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,)	

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	Unit: dB
			(0255,)	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[9].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH Table Choice	M		ENUMERATED (Table 16B, Table 16B-12,)	Table 16B indicates the Table 16B: Mapping of Absolute Grant Value in [9] and Table 16B-12 indicates the Table 16B.12: Alternative Mapping of Absolute Grant Value in [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 [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 Threshold			INTEGER (037)	Refers to an index in the "SG-Table" (see [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 [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 and 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 ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE DTX DRX Offset	М		INTEGER (0159)	Units of subframes. Offset of the UE DTX and DRX cycles at the given TTI
Enabling Delay	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
DTX Information		1		
>CHOICE E-DCH TTI 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	М		ENUMERATED (5, 10, 20, 40, 80, 160)	Units of subframes
>>>MAC DTX Cycle	М		ENUMERATED (5, 10, 20)	Units of subframes
>Inactivity Threshold for UE DTX Cycle 2	M		ENUMERATED (1, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>UE DTX Long Preamble	М		ENUMERATED (2,4,15)	Units of slots
>MAC Inactivity Threshold	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of E-DCH TTIs
>CQI DTX Timer	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, Infinity)	Units of subframes
>UE DPCCH burst1	М		ENUMERATED (1, 2, 5)	Units of subframes
>UE DPCCH burst2	М		ENUMERATED (1, 2, 5)	Units of subframes
DRX Information		01		
>UE DRX Cycle	М		ENUMERATED (4, 5, 8, 10, 16, 20)	Units of subframes
>Inactivity Threshold for UE DRX Cycle	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes
>Inactivity Threshold for UE Grant Monitoring	М		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>UE DRX Grant Monitoring	M		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		ENUMERATED (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 UE DRX Cycle	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512)	Units of subframes
>>Inactivity Threshold for UE Grant Monitoring	0		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128, 256)	Units of E-DCH TTIs
>>UE DRX Grant Monitoring	0		BOOLEAN	True = DRX Grant Monitoring shall be applied. False = DRX Grant Monitoring shall not be applied.

ſ	>Deactivate		NULL	
	>Deactivate		NOLL	

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 ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1 <maxno ofHS- DSCHTBS sHS- SCCHless ></maxno 		
>Transport Block Size Index	М		INTEGER (1maxnoofHS-DSC HTBSs)	
>HS-PDSCH Second Code Support	М		BOOLEAN	True = The second HS- PDSCH code shall also be used False = The second HS- PDSCH code shall not be used

Range Bound	Explanation
maxnoofHS-DSCHTBSsHS-SCCHless	Maximum number of HS-DSCH Transport Block Sizes used for HS-SCCH-less operation
maxnoofHS-DSCHTBSs	Maximum number of HS-DSCH Transport Block Sizes

9.2.2.75 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 ref. [10]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-PDSCH First Code Index	M		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of first HS-PDSCH code
HS-PDSCH Second Code Index	0		INTEGER (1maxHS-PDSCHC odeNrComp-1)	Index of second HS-PDSCH code. 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				
>>Associated Secondary CPICH	M		Common Physical Channel ID 9.2.1.13	
>Normal and Diversity Primary CPICH			NULL	
MIMO N/M Ratio	М		ENUMERATED (1/2, 2/3, 3/4, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10, 1/1,)	

9.2.2.79 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	Semantics Description
			Reference	
SixtyfourQAM DL Usage			ENUMERATED	
Indicator			(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 [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)	

9.2.2.91 E-TFCI Boost Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-TFCI BetaEC Boost	М		INTEGER (0127,)	E-TFCI threshold beyond which boosting of E-DPCCH is enabled
UL Delta T2TP	C-E- TFClboost 127		INTEGER (06,)	Total E-DPDCH power across all codes to the combined power of DPCCH and E-DPCCH

Condition	Explanation		
E-TFClboost127	The IE shall be present if the E-TFCI BetaEC Boost		
	IE value is not set o 127.		

9.2.2.92 Common E-DCH Support Indicator

This IE indicates the Common E-DCH Support.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH Support Indicator			NULL	

9.2.2.93 Common E-DCH MAC-d Flow Specific Information

The *Common E-DCH MAC-d Flow Specific Information* IE provides information associated to Common E-DCH MAC-d Flow used for Common E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows</maxno 		
>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 oflogicalch annels></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		
maxnoofEDCHMACdFlows	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 <maxno ofFDDneig hbours></maxno 		
>C-ID	M		9.2.1.6	
>Counting Result	М		INTEGER (063)	The number of UEs listen to the MBMS Service. If the number of the UE is more than 63, this IE set to 63.

Range bound	Explanation	
maxnoofFDDneighbours	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
			Reference	
Counting Information		1 <maxno< td=""><td></td><td></td></maxno<>		
		ofFDDneig		
		hbours>		
>C-ID	M		9.2.1.6	
>Transmission Mode	M		9.2.1.81	

Range bound	Explanation
maxnoofFDDneighbours	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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
MBMS Neighbouring Cell Information				
> MBMS Concatenated Service List		1 < maxlengthM BMSconcat servlists >		TMGI shall be uniquely defined by a reference to this index from the MBMS short transmission identity IE [16] in the L3 Information IE.
>>TMGI	M		9.2.1.80	
>L3 Information	0		9.2.1.32	The IE Contains MBMS COMMON P-T-M RB INFORMATION defined in ref. [16].
>L3 Information	0		9.2.1.32	The IE Contains MBMS CURRENT CELL P-T- M RB INFORMATION defined in ref. [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 ref. [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 [18].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Sets of HS-SCCH Codes		1 <maxno ofHSDSCH ></maxno 		Index 1 refers to the primary serving HS-DSCH cell Index 2 <maxnoofhsdsch> refer to secondary serving HS-DSCH cells in the order as listed in 9.2.2.100 HS-DSCH Preconfiguration Setup. Max index is 2 in this 3GPP release.</maxnoofhsdsch>
> HS-SCCH Preconfigured Codes		1 <maxnoo fHSSCCHc odes></maxnoo 		
>> Code Number	М		INTEGER (0127)	
> HS-DSCH-RNTI	M		9.2.1.31J	
> HS-PDSCH And HS- SCCH Scrambling Code	M		DL Scrambling 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	
HARQ Memory Partitioning	M		9.2.1.116	
E-DCH FDD DL Control Channel Information	0		9.2.2.4D	
HARQ Preamble Mode Activation Indicator	0	_	9.2.2.58	
MIMO Information Response	0		9.2.2.78	
Continuous Packet Connectivity HS-SCCH less Information Response	0		9.2.2.75	

Range bound	Explanation
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes
maxnoofHSDSCH	Maximum number of Primary Serving plus Secondary Serving HS- DSCH cells for one UE

9.2.2.100 HS-DSCH Preconfiguration Setup

The *HS-DSCH Preconfiguration Setup* IE indicates that the DRNS shall preconfigure set(s) of HS-SCCH codes and may contain a list of secondary serving HS-DSCH cells to be preconfigured for Enhanced Service Cell Change. The Cell Change procedure for Dual Cell operation is described in [63]

IE/Group Name	Presence	Range	IE Type and	Semantics Description
MAC-hs/ehs reset scheme	M		Reference 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	М		9.2.1.30Oa	<u> </u>
MAC-hs Reordering Buffer Size for RLC-UM	М		9.2.1.34Ab	
Secondary Cells		0 <maxnoo fHSDSCH- 1></maxnoo 		Preconfigured secondary serving HS-DSCH cell. <i>maxnoofHSDSCH-1</i> is max 1 in this 3GPP release.
>Secondary C-ID	М		9.2.1.9	C-ID of the preconfigured secondary serving HS-DSCH cell
>Num Secondary HS-SCCH Codes	0		INTEGER (1 maxnoofHS SCCHcodes)	For the secondary serving HS- DSCH cell
>Sixtyfour QAM Usage Allowed Indicator	0		9.2.2.79A	For the secondary serving HS- DSCH cell
Num Primary HS-SCCH Codes	0		INTEGER (1 maxnoofHS SCCHcodes)	For the primary serving HS-DSCH cell
HARQ Preamble Mode	0		9.2.1.134	
MIMO Activation Indicator	0		9.2.2.76	
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 primary serving HS-DSCH cell
UE without HS-SCCH constraint indicator	0		NULL	
Continuous Packet Connectivity HS-SCCH less Information	0		9.2.2.74	

Range bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE
maxnoofHSSCCHcodes	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 cells for a Multi Cell capable serving Cell.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Possible Secondary Serving		1 <maxno< td=""><td></td><td>For secondary serving HS-</td></maxno<>		For secondary serving HS-
Cell List		ofHSDSC		DSCH cell. Max 1 in this 3GPP
		H-1>		release.
>Possible Secondary	M		C-ID	
Serving Cell			9.2.1.9	

Range bound	Explanation
maxnoofHSDSCH-1	Maximum number of Secondary Serving HS-DSCH cells for one UE.

9.2.2.102 Minimum Reduced E-DPDCH Gain Factor

The minimum gain factor $(\beta_{ed,k,reduced,min})$ defined in [10].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Minimum Reduced E-DPDCH Gain Factor			ENUMERATED (8/15, 11/15, 15/15, 21/15, 30/15, 42/15, 60/15, 84/15,)	

9.2.3 TDD Specific Parameters

This subclause contains parameters that are specific to TDD.

9.2.3.a Alpha Value

Used to support signalling of cell specific Alpha Value to SRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Alpha Value			ENUMERAT ED(0, 1/8, 2/8, 3/8, 4/8, 5/8, 6/8, 7/8, 1)	

9.2.3.A Block STTD Indicator

Void.

9.2.3.1 Burst Type

Void.

9.2.3.1a Cell Capability Container TDD

The Cell Capability Container TDD indicates which functionalities a 3.84Mcps TDD cell supports.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Cell Capability Container TDD			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC-d PDU Size Support Indicator. The fifth: MBMS Support Indicator. Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

9.2.3.1b Cell Capability Container TDD LCR

The Cell Capability Container TDD LCR indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
Cell Capability Container TDD LCR			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator. The second bit: HS-DSCH Support Indicator. The third bit: DSCH Support Indicator. The fourth bit: Flexible MAC-d PDU Size Support Indicator. Note that undefined bits are considered as a spare bit and spare bits shall be intered by the reservices.
				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 <maxno ofDCHs></maxno 			_	
>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 <maxno ofDCHs></maxno 			_	
>>DCH ID	M		9.2.1.16		_	
>>CCTrCH ID	M		9.2.3.2	UL CCTrCH in which the DCH is mapped	_	
>>CCTrCH ID	М		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	M		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
maxnoofDCHs	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 <maxno OfTS></maxno 			_	
>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
maxnoofTSs	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 <maxno< td=""><td></td><td></td><td>_</td><td></td></maxno<>			_	
		ofDLts>				
>Time Slot	М		9.2.1.56		_	
>DL Timeslot ISCP	M		9.2.3.12		_	

Range bound	Explanation				
maxnoofDLts	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 <maxnoof DLtsLCR></maxnoof 			I	
>Time Slot LCR	M		9.2.3.12a		1	
>Midamble Shift LCR	M		9.2.3.4C		1	
>TFCI Presence	М		9.2.1.57		ı	
>DL Code Information LCR	М		TDD DL Code Information LCR 9.2.3.8D		ı	
>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
maxnoofDLtSLCR	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 <maxnooful tsLCR></maxnooful 			-	
>Time Slot LCR	M		9.2.3.12a		_	
>DL Timeslot ISCP	M		9.2.3.12		_	

Range bound	Explanation
maxnoofULtsLCR	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></maxno 			_	
>DSCH ID	M		9.2.3.3ae		-	
>CCTrCH ID	М		9.2.3.2	DL CCTrCH in which the DSCH is mapped.	-	
>TrCH Source Statistics Descriptor	М		9.2.1.65		_	
>Transport Format Set	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	0		ENUMERATE D (One-one carrier, One- three carrier, Three-three carrier, One- six carrier, Tree-six carrier, Six-six carrier,)	Applicable to 1.28Mcps TDD only This IE indicates the number of carrier that UE can support at the same time, where "One-three carrier" means the number of supported carrier is one for the uplink, and three for the downlink.	YES	reject
>Multi-carrier HS-DSCH Physical Layer Category	0		9.2.1.30Oa	Applicable to 1.28Mcps TDD only	YES	ignore
>MIMO SF Mode Supported For HS-PDSCH dual stream	0		Enumerated (SF1, SF1/SF16)	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	M		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		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

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 <maxno ofMACdFl ows></maxno 			-	
>HS-DSCH MAC-d Flow ID	M		9.2.1.300		_	
>Binding ID	0		9.2.1.3		_	
>Transport Layer Address	0		9.2.1.62		_	
>HS-DSCH Initial Capacity	0		9.2.1.30Na		_	
Allocation		0		NI-4	OL ODAL	:
HS-SCCH Specific Information Response		0 <maxno ofHSSCC Hcodes></maxno 		Not applicable to 1.28 Mcps TDD or 7.68Mcps TDD	GLOBAL	reject
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst	M		9.2.3.4		_	
Туре						
>TDD Channelisation Code	M		9.2.3.8		_	
>HS-SICH Information	.	1			_	
>>HS SICH ID	M		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 <maxno ofHSSCC Hcodes></maxno 		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 >Second TDD	M		TDD Channelisa tion Code 9.2.3.8 TDD		_	
Channelisation Code			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	М		9.2.3.8		_	
>Used Frequency	0		UARFCN 9.2.1.66	Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	0		9.2.1.66	Corresponds to Nt (3GPP TS 25.105) Applicable	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 <maxno ofHSSCC Hcodes></maxno 		Applicable to 7.68 Mcps TDD only	YES	ignore
>Time Slot	М	11000632	9.2.1.56	TDD Offig	_	
>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 <maxno ofDLts></maxno 		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 <maxno ofDLtsLCR ></maxno 		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 <maxno ofDLts></maxno 		Applicable to 7.68Mcps TDD only.	YES	Ignore
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	М		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></maxh 		Applicable for 1.28Mcps TDD	GLOBAL	reject
>HS-SCCH Specific Information Response LCR		1 <maxno OfHSSCC Hcodes></maxno 			_	
>>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	ROTOTOTIO		_	
LCR	1.4		0.000-1			
>>>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	М		9.2.3.8		_	
>>Used Frequency	0		UARFCN 9.2.1.66	Applicable for 1.28Mcps TDD when using multiple frequencies. this IE indicates the frequency which is actually used by the HS-SCCH.	YES	reject
>UARFCN	0		9.2.1.66	Corresponds to Nt □3GPP TS 25.105□ Applicable for 1.28Mcps TDD when using multiple frequencies. See note 1 below	YES	ignore
>HARQ Memory Partitioning per UARFCN		0 <maxh SDPAFreq uency-1></maxh 				
>>HARQ Memory Partitioning	0		9.2.1.116		_	
>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
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 <maxno OfHSSCC Hcodes></maxno 		Applicable for 1.28Mcps TDD when MIMO is configured	YES	reject
>HS-SICH Reference Signal Information	М		9.2.3.72		YES	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Note 1: This information element is a simplified representation of the ASN.1 description.						

Range bound	Explanation
maxnoofMACdFlows	Maximum number of MAC-d flows.
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes.
maxnoofDLts	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.
maxHSDPAFrequency	Maximum number of Frequency that UE can support HSDPA

9.2.3.3ac HS-DSCH TDD Update Information

The *HS-DSCH TDD Update Information* IE provides information for HS-DSCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
HS-SCCH Code Change Indicator	0		9.2.1.30R		_	
TDD ACK NACK Power Offset	0		9.2.3.71		_	

9.2.3.3ad HS-SICH ID

The HS-SICH ID identifies unambiguously a HS-SICH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS SICH ID			INTEGER (031)	For 1.28Mcps TDD, the IE is INTEGER (0255). In ASN.1, it is presented by another IE for the value beyond the 31.

9.2.3.3ae DSCH ID

The DSCH ID is the identifier of an active downlink shared channel. It is unique for each active DSCH among the active DSCHs simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DSCH ID			INTEGER (0255)	

9.2.3.3af DSCH Initial Window Size

Indicates the initial number of MAC-c/sh SDUs that may be transmitted before new credits are received from the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DSCH Initial Window Size			INTEGER (1255)	Number of MAC-c/sh SDUs: 255 = Unlimited number of MAC-c/sh SDUs.

9.2.3.3ag DSCH Flow Control Information

The *DSCH Flow Control Information* IE provides flow control information for each scheduling priority class for the DSCH FP over Iur.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
DSCH Flow Control Information		116			_	
>DSCH Scheduling Priority	M		Scheduling Priority Indicator 9.2.1.51A		-	
>MAC-c/sh SDU Length		1 <maxnb MAC- c/shSDUL ength></maxnb 			-	
>>MAC-c/sh SDU Length	М		9.2.1.34		_	
>DSCH Initial Window Size	0		9.2.3.3af		YES	ignore

Range bound	Explanation			
maxNbMAC-c/shSDULength	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 Configuration Burst Type 1 And 3	M		ENUMERATED(4, 8, 16)	As defined in [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 (3, 6)	As defined in [12]
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Short	C-UE		INTEGER (015)	
>Type 3				UL only
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED (4, 8, 16)	As defined in [12]
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

9.2.3.4A 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	M		ENUMERAT ED(30,40,50 , 70, 100,)	See [22]
IP Start	М		INTEGER(04095)	See [22]
IP Slot	М		INTEGER(014)	See [22]
IP P-CCPCH	М		ENUMERAT ED(Switch off 1 frame, Switch off 2 frames)	See [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 [22]
IP Start	M		INTEGER(04095)	See [22]
IP_Sub	М		ENUMERAT ED(First,Sec ond,Both)	See [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	Semantics Description
			Reference	
Midamble Allocation Mode	M		ENUMERAT	
			ED(Default	
			midamble,	
			Common	
			midamble,	
			UE specific	
			midamble,)	
Midamble Shift Long	C-UE		INTEGER(0.	
_			.15)	
Midamble Configuration LCR	M		ENUMERAT	As defined in [12]
			ED (2, 4, 6,	
			8, 10, 12, 14,	
			16,)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

9.2.3.4D 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 ref. [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP			INTEGER(091)	According to mapping of the non-negative values in ref.
				[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 [24].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Primary CCPCH RSCP Delta			INTEGER(If present, the actual value of
			-51,)	Primary CCPCH RSCP =
				Primary CCPCH RSCP Delta

9.2.3.5A PRACH Midamble

Void.

9.2.3.5B RB Identity

The RB Identity is the identifier of a radio bearer. It is unique for each active Radio bearer among the active radio bearers simultaneously allocated for the same UE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
RB Identity			INTEGER (031)	In line with [16], ch. 10.3.4.11

9.2.3.6 Repetition Length

The Repetition Length represents the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel see ref. [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 ref. [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 ref. [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 ref. [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 [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	Description		Criticality
			Reference			
TFCS	M		9.2.1.63	For the DL.	_	
TFCI Coding	M		9.2.3.11		_	
Secondary CCPCH		0 <maxno ofSCCPC</maxno 			_	
		Hs>				
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type	M		9.2.3.4		_	
>TFCI Presence	M		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	M		9.2.3.6		_	
>Repetition Period	M		9.2.3.7		_	
FACH		0maxnoo fFACHs			_	
>TFS	M		9.2.1.64	For the DL.	_	
PCH		01			_	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation		
maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.		
maxnoofFACHs	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 <maxno OfSCCPC Hs></maxno 			-	
>TDD Channelisation Code	М		9.2.3.8		_	

Range bound	Explanation
maxnoofSCCPCHs	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 <maxno ofSCCPC Hs></maxno 			_	
>Time Slot LCR	M		9.2.3.12a		_	
>Midamble Shift LCR	M		9.2.3.4C		_	
>TFCI Presence	M		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 <maxno ofFACHs></maxno 			_	
>TFS	М		9.2.1.64	For the DL.	_	
PCH		01			_	
>TFS	M		9.2.1.64	For the DL.	_	

Range bound	Explanation
maxnoofSCCPCHs	Maximum number of Secondary CCPCHs per CCTrCH.
maxnoofFACHs	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 <maxno OfSCCPC Hs></maxno 			_	
>TDD Channelisation Code LCR	М		9.2.3.8a		_	
>SCCPCH Time Slot Format LCR	М		TDD DL DPCH Time Slot Format LCR 9.2.3.8E		-	

Range bound	Explanation
maxnoofSCCPCHs	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 [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	M		ENUMERAT	Modulation options for
			ED(QPSK,	1.28Mcps TDD in contrast to
			8PSK,)	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 ref. [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Offset Type				
>Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER	
			(0255)	
>No Initial Offset				
>>TDD DPCH Offset Value	M		INTEGER (063)	

9.2.3.8B 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 <maxno ofDCHs></maxno 			_	
>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 <maxno ofDCHs></maxno 			_	
>>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
maxnoofDCHs	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 <maxno OfDPCHs</maxno 			_	
		>				
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code	М		9.2.3.8		_	

Range bound	Explanation
maxnoofDPCHs	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	Semantics Description	Criticality	Assigned Criticality
			Reference			
TDD DL Code Information LCR		1 <maxnoof DPCHLCR</maxnoof 			-	
>DPCH ID	M		9.2.3.5		_	
>TDD Channelisation Code LCR	M		9.2.3.8a		-	
> TDD DL DPCH Time Slot Format LCR	М		9.2.3.8E		-	

Range bound	Explanation
maxnoOfDPCHLCR	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 ref. [12]).

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE Modulation				
> QPSK				
>>QPSK TDD DL DPCH	М		INTEGER	
TimeSlot Format LCR			(024,)	
> 8PSK				
>>8PSK TDD DL DPCH	М		INTEGER	
TimeSlot Format LCR			(024,)	

9.2.3.9 TDD Physical Channel Offset

The TDD Physical Channel Offset represents the phase information for the allocation of a non DPCH physical channel. (CFN mod Repetition Period = TDD Physical Channel Offset) see ref. [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 ref [22]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TDD TPC Downlink Step			ENUMERAT	Unit: dB
Size			ED(1, 2,	
			3,)	

9.2.3.10a TDD TPC Uplink Step Size

This parameter indicates step size for the UL power adjustment (see ref [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 <maxno OfDPCHs</maxno 			_	
		>				
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code	M		9.2.3.8		_	

Range bound	Explanation		
maxnoofDPCHs	Maximum number of DPCHs for one CCTrCH.		

9.2.3.10B TDD UL Code Information LCR

The TDD UL Code Information LCR IE provides information for UL Code to be established for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TDD UL Code Information LCR		1 <maxno OfDPCH LCR></maxno 			-	
>DPCH ID	M		9.2.3.5		_	
>TDD Channelisation Code LCR	М		9.2.3.8a		-	
> TDD UL DPCH Time Slot Format LCR	М		9.2.3.10C		_	

Range bound	Explanation
maxnoOfDPCHLCR	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 ref. [12]).

IE/Group Name	Presence	Range	IE type and	Semantics description
			reference	
CHOICE Modulation				
> QPSK				
>>QPSK TDD UL DPCH	М		INTEGER	
Time Slot Format LCR			(069,)	
> 8PSK				
>>8PSK TDD UL DPCH	М		INTEGER	
Time Slot Format LCR			(024,)	

9.2.3.10D 1.28 Mcps TDD uplink physical channel capability

1.28 Mcps TDD uplink physical channel capability IE defines the UE uplink physical channel capability for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of	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 ref. [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Timeslot ISCP			INTEGER(091)	According to mapping in [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 ref. [14].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UL Timeslot ISCP			INTEGER(0127)	According to mapping in [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	2000ption		or in our it
UL Timeslot Information		1 <maxno OfTS></maxno 			_	
>Time Slot	М		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
maxnoofTSs	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 <maxnoof ULts></maxnoof 			_	
>Time Slot	М		9.2.1.56		_	
>UL Timeslot ISCP	М		9.2.3.13A		_	

Range bound	Explanation
maxnoofULts	Maximum number of uplink time slots per Radio Link.

9.2.3.13E TSTD Indicator

Indicates if TSTD shall be active or not for the DL DPCH.

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
TSTD Indicator			ENUMERAT	
			ED(active,	
			inactive)	

9.2.3.13F TSTD Support Indicator

Indicates if UE support TSTD or not for DL DPCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
TSTD Support Indicator			ENUMERAT ED(TSTD supported, TSTD not supported)	

9.2.3.13Fa UE Measurement Hysteresis Time

The UE Measurement Hysteresis Time provides the duration during which a reporting criterion has to be fulfilled for the UE Measurement Reporting procedure to be triggered, see [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 [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, 2000, 3000,	milliseconds
			4000, 6000,	
			8000, 12000,	
			16000,	
			20000,	
			24000,	
			28000,	
			32000,	
			64000)	
>Event 1h				
>>UE Measurement	M		9.2.3.13Fd	The threshold for which the
Threshold				DRNS shall trigger a
				measurement report.
>>UE Measurement Time	M		9.2.3.13Fg	
to Trigger	+		222425	
>>Hysteresis	M		9.2.3.13Fa	
>Event 1i	N4		0.0.0.4054	The three held for which the
>>UE Measurement Threshold	M		9.2.3.13Fd	The threshold for which the DRNS shall trigger a
mesnoid				measurement report.
>>UE Measurement	M		9.2.3.13Fg	measurement report.
Time to Trigger	141		0.2.0.101 g	
>>Hysteresis	М		9.2.3.13Fa	
>Event 6a	1		0.2.00. 0	
>>UE Measurement	М		9.2.3.13Fd	
Threshold				
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger				
>Event 6b				
>>UE Measurement	M		9.2.3.13Fd	
Threshold				
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger				
>Event 6c				
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger				
>Event 6d	1.4		0.00.405	
>>UE Measurement	M		9.2.3.13Fg	
Time to Trigger				

9.2.3.13Fd UE Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event 1h, 1i, 6a or 6b, see [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE UE Measurement Threshold				
>Timeslot ISCP				
>>Timeslot ISCP	M		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 [16].

IE/Group Name	Presence	Range	IE Type and	Semantics Description
			Reference	
UE Measurement Timeslot Information		1 <maxnoofts></maxnoofts>		
>Time Slot	M		9.2.1.56	
>Burst Type	M		ENUMERAT ED(Type1, Type 2, Type 3,)	

Range bound	Explanation
maxnoofTSs	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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Time Slot Information LCR		1 <maxnooftslcr ></maxnooftslcr 		
>Time Slot LCR	М		9.2.3.12a	

Range bound	Explanation
maxnoOfTSLCR	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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Time to trigger	M		ENUMERAT ED(0, 10, 20, 40, 60, 80, 100, 120, 160, 200,	Time in ms.

	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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Type	M		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 <maxnoofts></maxnoofts>		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 [24] Values 020 are not used
>>UE Transmitted Power list LCR		0< maxnoOfTSLCR>		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
>>>Time Slot LCR	М		9.2.3.12a	
>>>UE Transmitted Power	M		INTEGER (0104)	According to mapping in [24] Values 020 are not used
>>UE Transmitted Power list 768		0 <maxnoofts></maxnoofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD
>>>Time Slot	М		9.2.1.56	
>>>UE Transmitted Power >P-CCPCH RSCP	M		INTEGER (0104)	According to mapping in [24] Values 020 are not used
>>Primary CCPCH RSCP	0		9.2.3.5	According to mapping in [24]
>>Primary CCPCH RSCP Delta	0		9.2.3.5a	According to mapping in [24]
>DL Timeslot ISCP				
>>Timeslot list HCR		0 <maxnoofts></maxnoofts>		Mandatory for 3.84Mcps TDD, not applicable to 1.28Mcps TDD or 7.68Mcps TDD
>>>Time Slot	М		9.2.1.56	
>>>Timeslot ISCP	М		9.2.3.12	

>>Timeslot list LCR		0 <maxnooftsl CR></maxnooftsl 		Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
>>>Time Slot LCR	M		9.2.3.12a	
>>>Timeslot ISCP	М		9.2.3.12	
>>Timeslot list 768		0 <maxnoofts></maxnoofts>		Mandatory for 7.68Mcps TDD, not applicable to 1.28Mcps TDD or 3.84Mcps TDD
>>>Time Slot	M		9.2.1.56	
>>>Timeslot ISCP	М		9.2.3.12	

Range bound	Explanation		
maxnoOfTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD or		
	7.68Mcps TDD.		
maxnoofTSLCR	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 oofULts LCR></maxn 			-	
>Time Slot LCR	М		9.2.3.12a		_	
>Midamble Shift LCR	M		9.2.3.4C		_	
>TFCI Presence	М		9.2.1.57		_	
>UL Code Information LCR	М		TDD UL Code Information LCR 9.2.3.10B			
>PLCCH Information	0		9.2.3.17		YES	ignore

Range bound	Explanation
maxnoofULtsLCR	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 <maxnooful tsLCR></maxnooful 			_	
>Time Slot LCR	M		9.2.3.12a		_	
>UL Timeslot ISCP	M		9.2.3.26A		-	

Range bound	Explanation
maxnoofULtsLCR	Maximum number of Uplink time slots per Radio Link for 1.28Mcps
	TDD

9.2.3.13I 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	М		INTEGER (14)	Maximum number of subframes to wait for transmission of FPACH.
PRXupPCHdes	М		INTEGER (-120 – 58,)	Desired UpPCH receive power. Unit: dBm Step size: 1
SYNC UL procedure		1		
parameters				
>Maximum Sync UL transmissions	М		ENUMERATED (1,2,4,8,)	
>Power Ramp Step	M		INTEGER (03,)	
Mmax	М		INTEGER (132)	Maximum number of synchronisation attempts

9.2.3.14 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)	

9.2.3.15 USCH Information

The 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></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	M		9.2.1.64	For USCH	_	
>Allocation/Retention Priority	М		9.2.1.1		_	
>Scheduling Priority Indicator	М		9.2.1.51A		_	
>RB Info		1 <maxnoof RB></maxnoof 		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.
maxnoofRBs	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	Semantics Description
			Reference	
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* 7.68*Mcps TDD* IE provides information on the Secondary CCPCH that carries the logical channel SHCCH for the UE for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
TFCS	М		9.2.1.63	For the DL.	_	
TFCI Coding	М		9.2.3.11		_	
Secondary CCPCH		0 <maxno ofSCCPC Hs768></maxno 			-	
>Time Slot	М		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	М		9.2.3.23		_	
>TFCI Presence	М		9.2.1.55		_	
>Secondary CCPCH TDD Code Information 7.68Mcps	М		9.2.3.24		_	
>TDD Physical Channel Offset	М		9.2.3.9		_	
>Repetition Length	М		9.2.3.6		_	
>Repetition Period	М		9.2.3.7		_	
FACH		0maxnoo fFACHs			_	
>TFS	М		9.2.1.64	For the DL.	_	
PCH		01		_	_	
>TFS	М		9.2.1.64	For the DL.	_	

Range bound	Explanation			
maxnoofSCCPCHs768	Maximum number of Secondary CCPCHs per CCTrCH.			
maxnoofFACHs	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 [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 [12]
>>Midamble Allocation Mode	М		ENUMERATED(Defa ult midamble, Common midamble, UE specific midamble)	
>>Midamble Shift Short	C-UE		INTEGER (07)	
>Type 3				UL only
>> Midamble Configuration Burst Type 1 And 3	M		ENUMERATED (4, 8, 16)	As defined in [12]
>>Midamble Allocation Mode	M		ENUMERATED(Defa ult midamble, UE specific midamble)	
>>Midamble Shift Long	C-UE		INTEGER(015)	

Condition	Explanation
UE	The IE shall be present if the Midamble Allocation
	Mode IE is set to "UE-specific midamble".

9.2.3.24 Secondary CCPCH TDD Code Information 7.68Mcps

The Secondary CCPCH TDD Code Information 7.68Mcps IE provides TDD Channelisation Code information for all SCCPCHs of one Time Slot for 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Secondary CCPCH TDD Code Information 7.68Mcps		1 <maxno OfSCCPC Hs768></maxno 			_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation
maxnoofSCCPCHs768	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 <maxno OfTS></maxno 			_	
>Time Slot	M		9.2.1.56		_	
>Midamble Shift And Burst Type 7.68Mcps	M		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
maxnoofTSs	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 <maxno OfDPCHs 768></maxno 			_	
>DPCH ID	M		9.2.3.3		_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation
maxnoofDPCHs768	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 <maxno OfTS></maxno 			_	
>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		_	
>DL Code Information 7.68Mcps	M		TDD DL Code Information 7.68Mcps 9.2.3.29		_	

Range bound	Explanation
maxnoofTSs	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 <maxno OfDPCHs 768></maxno 			_	
>DPCH ID	М		9.2.3.3		_	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25		_	

Range bound	Explanation
maxnoofDPCHs768	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 [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	M		9.2.1.66	Corresponds to Nt [15]
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 [16].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
UE Measurement Timeslot Information		1 <maxnoofts></maxnoofts>		
>Time Slot	M		9.2.1.56	
>Burst Type	М		ENUMERATED (Type1, Type 2, Type 3,)	

Range bound	Explanation
maxnoofTSs	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 [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 [8]
N _{E-UCCH}	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	Semantics	Criticality	Assigned
			Reference	Description		Criticality
Minimum code rate	М		INTEGER	Unit: -	_	
			(063)	Range: 0.055		
				1 Step: 0.015		
Maximum code rate	M		INTEGER	Unit: -		
Maximum code rate	IVI		(063)	Range:		
			(000)	0.0551		
				Step: 0.015		
HARQ Info for E-DCH	М		ENUMERAT	"rv0"	_	
			ED (rv0,	indicates that		
			rvtable)	the UE will		
				only use		
				E_DCH RV		
				index 0.		
				"rvtable"		
				indicates that		
				the UE will		
				use an RSN based RV		
				index as		
				specified in		
				[8]		
PRXdes_base	М		INTEGER	dBm.	_	
			(-11250)	Reference		
			(/	Desired RX		
				power level		
				for E-PUCH		
E-PUCH TPC Step Size	M		9.2.3.10a		_	
N _{E-UCCH}	М		INTEGER	Number of E-	_	
			(18)	UCCH and		
				TPC		
				instances		
				within an E-		
				DCH TTI.		
				Details are		
				described in		
E DUCH Davis			INTEGED	[12].	VEO	:
E-PUCH Power Control GAP	0		INTEGER (1255)	Unit: Number of	YES	ignore
Control GAP			(1255)	subframes.		
				Reference to		
				E-PUCH		
				Power		
				Control for		
				1.28Mcps		
				TDD in [22].		
				If it is not		
				present, UE		
				shall deem it		
				to be infinite		
				in which case		
				closed loop		
				power control shall always		
				be used.		
				DE USEU.		

9.2.3.37 E-TFCS Information TDD

Whereas the related E-DCH Transport Block sizes are standardised in [32] this IE gives details on the Reference Betas.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Reference Beta Information QPSK		1 <maxnoofrefbe tas=""></maxnoofrefbe>		
>Reference Code Rate	M		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	М		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB
Reference Beta Information 16QAM		1 <maxnoofrefbe tas=""></maxnoofrefbe>		
>Reference Code Rate	М		INTEGER (010)	Unit: - Range: 01 Step: 0.1
>Reference Beta	М		INTEGER(-1516)	Unit: - Range: -15+16 Step: 1 dB

Range Bound	Explanation		
maxnoofRefbetas	Maximum number of signalled reference betas		

9.2.3.38 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	Semantics	Criticality	Assigned
			Reference	Description	,	Criticality
E-DCH MAC-d Flow Specific Information		1 <maxno ofEDCHM ACdFlows ></maxno 			-	
>E-DCH MAC-d Flow ID	М		9.2.1.91		-	
>Allocation/Retentio n Priority	М		9.2.1.1		_	
>TNL QoS	0		9.2.1.56A		_	
>Binding ID	0		9.2.1.3	Shall be ignored if bearer establishmen t with ALCAP.	-	
>Transport Layer Address	0		9.2.1.62	Shall be ignored if bearer establishmen t with ALCAP.	-	
>Payload CRC Presence Indicator	М		9.2.1.42		_	
>Maximum Number Of Retransmissions For E-DCH	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		-	
>E-DCH Grant Type	М		9.2.3.43		1	
>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
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

9.2.3.39 E-DCH Non-scheduled Grant Information TDD

The *E-DCH Non-scheduled Grant Information TDD* IE is used to specify the details of an non-scheduled grant for 3.84Mcps and 7.68Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information	М		9.2.3.44	
Power Resource Related Information	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.	-	ooum,
E-DCH Processing Overload Level	0		9.2.1.95		-	
E-DCH Power Offset for Scheduling Info	0		9.2.1.96		-	
Extended E-DCH Physical Layer Category LCR	0		9.2.3.54A	The Extended E-DCH Physical Layer Category LCR IE shall be used if the E- DCH Physical Layer Category has a value larger than 5.	YES	reject
Maximum Number of Retransmission for Scheduling Info LCR	0		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

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 <maxnoofedc< td=""><td></td><td></td></maxnoofedc<>		
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 <maxnoofeag< td=""><td></td><td></td></maxnoofeag<>		
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	М		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
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows
maxnoofEAGCHcodes	Maximum number of E-AGCHs assigned to one UE

9.2.3.41a E-DCH TDD Information Response 1.28Mcps

Only for 1.28Mcps TDD. The *E-DCH TDD Information Response 1.28Mcps* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow		0 <maxnoofedc< td=""><td></td><td></td></maxnoofedc<>		
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 <maxnoofeag< td=""><td></td><td></td></maxnoofeag<>		
Information Response		CHcodes>		
>Time Slot LCR	M		9.2.3.12a	
>Midamble Shift LCR	M		9.2.3.4C	
>TDD Channelisation	M		9.2.3.8	
Code				
E-HICH Scheduled		01		
specific Information				
Response				
>Scheduled		0<		
		maxNoOfEHICHc		
		odes>		
>>El	M		INTEGER (03)	E-HICH indication which is used to indicate UE on
				which E-HICH the feedback info is carried.
>>Time Slot LCR	М		9.2.3.12a	
>>Midamble Shift	М		9.2.3.4C	
LCR				
>>TDD Channelisation	М		9.2.3.8	
Code				
>Non-Scheduled		01		
>>Time Slot LCR	M		9.2.3.12a	
>>Midamble Shift LCR	М		9.2.3.4C	
>>TDD Channelisation	М		9.2.3.8	
Code	<u> </u>			
>>Signature Sequence	M		INTEGER	
Group Index			(019)	
>E-HICH time offset LCR	M		9.2.3.48a	
E-DCH Non-scheduled	0		9.2.3.39a	
Grant Information LCR				
TDD				
E-RNTI	0		9.2.1.94	

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of MAC-d flows
maxnoofEAGCHcodes	Maximum number of E-AGCHs assigned to one UE
maxnoofEHICHcodes	Maximum number of E-HICHs assigned to one UE

9.2.3.42 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 <maxno ofEDCHM ACdFlows</maxno 			_	,
>E-DCH MAC-d Flow ID	М		9.2.1.91		_	
>Allocation/Retention Priority	0		9.2.1.1		_	
>Transport Bearer Request Indicator	M		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< maxnooflo gicalchann els>			_	
>>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

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows
maxnooflogicalchannels	Maximum number of logical channels

9.2.3.43 E-DCH Grant Type

The $E\text{-}DCH\ Grant\ Type$ 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			BIT STRING	
Information			(13)	

9.2.3.44a Timeslot Resource Related Information LCR

The *Timeslot Resource Related Information LCR* IE is a bitmap indicating which of the timeslots configured for E-DCH are allocated for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Timeslot Resource Related Information LCR			BIT STRING (5)	

9.2.3.45 Power Resource Related Information

The *Power Resource Related Information* specifies the maximum allowed E-PUCH power resource (dB relative to P_{e-base}) that the UE may use for non-scheduled transmissions.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Power Resource Related			INTEGER	
Information			(132)	

9.2.3.46 E-PUCH Offset

The E-PUCH Offset represents the CFN offset at which an non-scheduled E-DCH grant begins.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-PUCH Offset			INTEGER	
			(0255)	

9.2.3.47 E-DCH TDD Maximum Bitrate

The E-DCH TDD Maximum Bitrate parameter indicates the Maximum Bitrate for an E-DCH in TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH TDD Maximum			INTEGER	Bitrate on transport block
Bitrate			(09201,)	level. Unit is kbits per
				second.

9.2.3.48 E-HICH Time Offset

The E-HICH Time Offset (aka n_{E-HICH} [19])is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset			INTEGER	
			(4 44)	

9.2.3.48a E-HICH Time Offset LCR

The E-HICH Time Offset LCR IE(aka n_{E-HICH} [19]) is determined by the Node B.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-HICH Time Offset LCR			INTEGER (415)	

9.2.3.49 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 ref. [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	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 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 <maxnoofedc HMACdFlows></maxnoofedc 		
>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 Information Response 7.68Mcps		0 <maxnoofeag CHcodes></maxnoofeag 		
>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	М		9.2.3.23	
>TDD Channelisation Code 7.68Mcps	М		9.2.3.25	
>E-HICH Time Offset	M		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		
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows		
maxnoofEAGCHcodes	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 Category LCR			INTEGER (15)	As defined in [42]

9.2.3.54A Extended E-DCH Physical layer Category LCR

Only for 1.28Mcps TDD. The *Extended E-DCH Physical Layer Category LCR* IE parameter indicates the E-DCH physical layer capability of UE in LCR TDD mode.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Extended E-DCH Physical Layer Category LCR			INTEGER(6,)	As defined in [42]

9.2.3.55 UpPCH Information LCR

Only for 1.28Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UpPCH Information LCR		1 <maxfr equencyin Cell></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 Flow ID			INTEGER (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		1 <maxnoofedc HMACdFlowsLCR</maxnoofedc 		
Information LCR		>		
>Common E-DCH MAC- d Flow ID	М		9.2.3.57	
>Maximum Number Of Retransmissions For E- DCH	M		9.2.1.100	
>E-DCH HARQ Power Offset TDD	М		9.2.3.49	
>E-DCH MAC-d Flow Multiplexing List	0		9.2.1.89	
>Common E-DCH Logical Channel information	M	1 <maxnooflogica lchannelsLCR></maxnooflogica 		
>>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		
maxnoofEDCHMACdFlowsLCR	Maximum number of E-DCH MAC-d Flows for 1.28Mcps TDD	
maxnooflogicalchannelsLCR	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. Ref [64].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
K	М		INTEGER (23)	The actual idle interval period = 2 ^k .
Offset	M		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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Enabling Delay	M		ENUMERATED (0, 1, 2, 4, 8, 16, 32, 64, 128)	Units of radio frames
HS-SCCH DRX Information		1		
>UE DRX Cycle	M		ENUMERATED(1,2, 4,8,16,32,64,)	Units of subframes
>Inactivity Threshold for UE DRX Cycle	M		ENUMERATED(1,2, 4,8,16,32,64,)	Units of subframes
>UE DRX Offset	M		INTEGER (063)	Units of subframes. Offset of the UE DRX cycles at the given TTI
E-AGCH DRX Information		1		
CHOICE E-AGCH DRX		1		
information type				
>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
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	М		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
>>E-AGCH DRX Information		01		
>>>CHOICE E-AGCH DRX information type		1		

>>>>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	M	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	M	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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
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
E-AGCH DRX Information		01		
CHOICE <i>E-AGCH DRX</i>		1		
information type				
>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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		1< maxnoofT BSsMappi ng >		
>Transport Block Size maping Index	М		INTEGER (0 maxnoofTBSsMappi ng-1)	Corresponds to the <i>Transport-block size information</i> field carried on HS-SCCH (see ref [34]).
>Transport Block Size Index	M		INTEGER (1 maxnoofHS- DSCHTBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see ref [32]).
Repetition Period list		1 <maxno ofRepetitio nPeriodLC R></maxno 		
>Repetition Period Index	M		INTEGER (0 maxnoofRepetitionP eriodLCR-1)	Corresponds to the Resource repetition period index field carried on HS-SCCH (see ref [34]).
>Repetition Period	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
HS-DSCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the HS-DSCH Semi-Persistent Resource is required to be reserved and be informed via response message.
HS-DSCH Semi-Persistent scheduling operation Indicator		1		
>CHOICE configuration				
>>Logical Channel level			BIT STRING (16)	Available when MAC-ehs is configured. Indicates the logical channels for which the HS-DSCH Semi-Persistent operation is intended to be uses.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi-Persistent operation is intended to be used.

Range Bound	Explanation
maxnoofHS-DSCHTBSsLCR	Maximum number of HS-DSCH Transport Block Sizes
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD
maxnoofTBSsMapping	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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transport Block Size List		0< maxnoofT BSsMappi ng >		
> Transport Block Size maping Index	М		INTEGER (0 maxnoofTBSsMappi	Corresponds to the <i>Transport-</i> block size information field

			ng-1)	carried on HS-SCCH (see ref [34]).
>Transport Block Size Index	М		INTEGER (1 maxnoofHS- DSCHTBSsLCR)	Corresponds to the <i>TB index</i> in the related Transport Block Size table (see ref [32]).
Repetition Period list		0 <maxno ofRepetitio nPeriodLC R></maxno 		
>Repetition Period Index	M		INTEGER (0 maxnoofRepetitionP eriodLCR)	Corresponds to the Resource repetition period index field carried on HS-SCCH (see ref [34]).
>Repetition Period	М		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
HS-DSCH Semi-Persistent Resource Reservation Indicator	0		ENUMERATED(Res erve)	Reserve means the Semi- Persistent HS-DSCH Resource is required to be reserved and be informed via response message.
HS-DSCH Semi-Persistent scheduling operation Indicator		01		
>CHOICE configuration				
>>Logical Channel level			BIT STRING (16)	Available when MAC-ehs is configured. Indicates the logical channels for which the HS-DSCH Semi-Persistent operation is intended to be used.
>> Priority Queue level			BIT STRING (8)	Indicates the Priority Queues for which the HS-DSCH Semi-Persistent operation is intended to be used.

Range Bound	Explanation
maxnoofHS-DSCHTBSsLCR	Maximum number of HS-DSCH Transport Block Sizes
maxnoofRepetitionPeriodLCR	Maximum number of Repetition Period for 1.28Mcps TDD
maxnoofTBSsMapping	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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		1 <maxno< td=""><td></td><td></td></maxno<>		
		ofRepetitio		
		nPeriodL		
		CR>		
>Repetition Period Index	М		INTEGER (0	
			maxnoofRepetitionP	
			eriodLCR-1)	
>Repetition Period	M		ENUMERATED	Units of subframes
			(1, 2, 4, 8, 16, 32,	
			64,)	
>Repetition Length	0		INTEGER	Absence means Repetition
			(163))	Length equal to 1.
E-DCH Semi-Persistent	M		BIT STRING (16)	Indicates the logical channels

scheduling Indicator			for which the E-DCH Semi- Persistent operation is intended to be used.
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
maxnoofRepetitionPeriodLCR	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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Repetition Period list		0 <maxno cr="" nperiodl="" ofrepetitio=""></maxno>		
>Repetition Period Index	М		INTEGER (0 maxnoofRepetitionP eriodLCR-1)	
>Repetition Period	M		ENUMERATED (1, 2, 4, 8, 16, 32, 64,)	Units of subframes
>Repetition Length	0		INTEGER (163))	Absence means Repetition Length equal to 1.
E-DCH Semi-Persistent scheduling Indicator	0		BIT STRING (16)	Indicates the logical channels for which the E-DCH Semi-Persistent operation is intended to be used.
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
maxnoofRepetitionPeriodLCR	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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-SICH information for HS- DSCH Semi-Persistent Scheduling operation		1< maxnoofH S- SICHforSP S>		
>HS-SICH mapping index	M		INTEGER (0 maxnoofHS- SICHforSPS-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	1		0.0.0.40	
>>>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	М		INTEGER (0 maxnoofRepetitionP eriodLCR-1)	
>Repetition Length for HS- PDSCH Semi-persistent Resouce	0		INTEGER (163))	Absence means Repetition Length equal to 1.
>HS-PDSCH offset	M		INTEGER (063))	Units of subframes
>HS-PDSCH Midamble Configuation	М		Midamble Shift LCR 9.2.3.7A	
>Timeslot Resource Related Information	M		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	M		TDD Channelisation Code 9.2.3.19	
>End Code	М		TDD Channelisation Code 9.2.3.19	
>Transport Block Size Index	М		INTEGER (0 maxnoofTBSsMappi ng-1)	
>Modulation type	М		ENUMERATED (QPSK, 16QAM)	
>HS-SICH mapping index	M		INTEGER (0 maxnoofHS- SICHforSPS-1)	
Buffer Size for HS-DSCH Semi-Persistent scheduling	0		ENUMERATED (800304000,)	Indicats the buffer size that shall be reserved for HS-DSCH semi-persistent scheduling operation. 800 16000 by step of 800, 17600 32000 by step of 1600, 36000 80000 by step of 4000, 88000 160000 by step of 8000, 176000 304000 by step of 16000
Number of Processes for HS- DSCH Semi-Persistent scheduling	0		INTEGER (116)	

Range Bound	Explanation
maxnoofHS-SICHforSPS	Maximum number of HS-SICH for HS-DSCH Semi-Persistent scheduling operation
maxnoofTBSsMapping	Maximum number of Transport Block Size mapping index on HS-SCCH.

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 ref. [21]).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Allcoated E-DCH Semi- persistent resource		01		
>Timeslot Resource Related Information LCR	М		9.2.3.54a	
>Power Resource Related Information	М		9.2.3.55	
>Repetition Period Index	M		INTEGER (0 maxnoofRepetitionP eriodLCR-1)	
>Repetition Length	М		INTEGER (163))	Absence means Repetition Length equal to 1.
>Subframe Number	М		ENUMERATED (0,1)	Used to indicate from which subframe of the Radio Frame indicated by TDD E-PUCH Offset IE the physical resources are assigned to the E-DCH Non-scheduled Grant.
>TDD E-PUCH Offset	M		9.2.3.56	
>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 [19].
E-DCH SPS E-HICH information		01		
>CHOICE E-HICH configuration	М			
>>same as scheduled E- HICH				
>>> El			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)	

9.2.3.70 HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR

The *HS-DSCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate HS-DSCH Semi-Persistent scheduling operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
HS-DSCH Semi-Persistent scheduling Deactivate Indicator	M		NULL	

9.2.3.71 E-DCH Semi-Persistent scheduling Deactivate Indicator LCR

The *E-DCH Semi-Persistent scheduling Deactivate Indicator LCR* IE is used to deactivate E-DCH Semi-Persistent schedulung operation for 1.28 Mcps TDD.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH Semi-Persistent scheduling Deactivate	М		NULL	
Indicator				

9.2.3.72 HS-SICH Reference Signal Information

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Midamble	M		ENUMERATE	As defined in [19]		
Configuration LCR			D (2, 4, 6, 8,			
			10, 12, 14, 16,			
)			
Midamble Shift	M		INTEGER			
			(015)			
Time Slot LCR	M		9.2.3.12a			

9.3 Message and Information Element Abstract Syntax (with ASN.1)

9.3.0 General

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 (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list 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.

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.

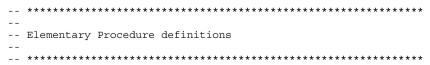
9.3.1 Usage of Private Message Mechanism for Non-standard Use

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



```
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,
    InformationExchangeFailureIndication,
    InformationExchangeInitiationFailure,
    InformationExchangeInitiationRequest,
    InformationExchangeInitiationResponse,
    InformationExchangeTerminationRequest,
```

```
InformationReport,
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,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD.
RelocationCommit,
ResetRequest,
ResetResponse,
UEMeasurementFailureIndication,
UEMeasurementInitiationFailure,
UEMeasurementInitiationRequest,
UEMeasurementInitiationResponse,
UEMeasurementReport,
UEMeasurementTerminationRequest,
```

```
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-iurDeactivateTrace,
    id-iurInvokeTrace.
    id-dedicatedMeasurementFailure,
    id-dedicatedMeasurementInitiation,
    id-dedicatedMeasurementReporting,
    id-dedicatedMeasurementTermination,
    id-directInformationTransfer,
    id-mBMSAttach,
    id-mBMSDetach.
    id-mBSFNMCCHInformation,
    id-paging,
    id-physicalChannelReconfiguration,
    id-privateMessage,
    id-radioLinkActivation,
    id-radioLinkAddition,
    id-radioLinkCongestion,
    id-radioLinkDeletion,
    id-radioLinkFailure,
    id-radioLinkParameterUpdate,
    id-radioLinkPreemption,
    id-radioLinkRestoration.
    id-radioLinkSetup,
    id-relocationCommit,
    id-synchronisedRadioLinkReconfigurationCancellation,
    id-synchronisedRadioLinkReconfigurationCommit,
    id-synchronisedRadioLinkReconfigurationPreparation,
    id-uEMeasurementFailure,
    id-uEMeasurementInitiation,
    id-uEMeasurementReporting,
```

```
id-uEMeasurementTermination,
id-unSynchronisedRadioLinkReconfiguration,
   id-uplinkSignallingTransfer,
   id-gERANuplinkSignallingTransfer
FROM RNSAP-Constants:
    ******************
-- Interface Elementary Procedure Class
__ ********************
RNSAP-ELEMENTARY-PROCEDURE ::= CLASS {
   &InitiatingMessage
   &SuccessfulOutcome
                                 OPTIONAL,
   &UnsuccessfulOutcome
                                    OPTIONAL,
   &Outcome
                             OPTIONAL,
   &procedureID
                         ProcedureID
                                        UNIQUE,
                         Criticality
   &criticality
                                        DEFAULT ignore
WITH SYNTAX {
   INITIATING MESSAGE
                          &InitiatingMessage
                          &SuccessfulOutcome]
    [SUCCESSFUL OUTCOME
                             &UnsuccessfulOutcomel
   [UNSUCCESSFUL OUTCOME
   [OUTCOME
                      &Outcomel
   PROCEDURE ID
                          &procedureID
    [CRITICALITY
                         &criticality]
          -- Interface PDU Definition
RNSAP-PDU ::= CHOICE {
   initiatingMessage InitiatingMessage,
   successfulOutcome SuccessfulOutcome,
   unsuccessfulOutcome UnsuccessfulOutcome,
   outcome
                  Outcome,
   . . .
InitiatingMessage ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                       ({RNSAP-ELEMENTARY-PROCEDURES}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                       ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   transactionID TransactionID,
                                                           ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
   value
              RNSAP-ELEMENTARY-PROCEDURE.&InitiatingMessage
SuccessfulOutcome ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                       ({RNSAP-ELEMENTARY-PROCEDURES}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                       ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   transactionID TransactionID,
```

```
({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
               RNSAP-ELEMENTARY-PROCEDURE. & Successful Outcome
UnsuccessfulOutcome ::= SEQUENCE {
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                          ({RNSAP-ELEMENTARY-PROCEDURES}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
                                                          ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
    transactionID TransactionID,
               RNSAP-ELEMENTARY-PROCEDURE. &UnsuccessfulOutcome ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
    value
Outcome ::= SEQUENCE {
                                                          ({RNSAP-ELEMENTARY-PROCEDURES}),
   procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID
                                                          ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID}),
   criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality
    transactionID TransactionID,
                                                      ({RNSAP-ELEMENTARY-PROCEDURES}{@procedureID})
   value
               RNSAP-ELEMENTARY-PROCEDURE. &Outcome
     ****************
-- 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
    radioLinkDeletion
    {\tt synchronisedRadioLinkReconfigurationPreparationFDD}
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    physicalChannelReconfigurationFDD
    physicalChannelReconfigurationTDD
    dedicatedMeasurementInitiation
    commonTransportChannelResourcesInitialisationFDD
    commonTransportChannelResourcesInitialisationTDD
    commonMeasurementInitiation
    informationExchangeInitiation
    uEMeasurementInitiation
    enhancedRelocation
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
   {\tt gERANuplinkSignallingTransfer}
   radioLinkParameterUpdateFDD
   radioLinkParameterUpdateTDD
   uEMeasurementReporting
   uEMeasurementTermination
   uEMeasurementFailure
   iurInvokeTrace
   iurDeactivateTrace
   mBMSAttach
   mBMSDetach
   directInformationTransfer
   enhancedRelocationCancel
    enhancedRelocationSignallingTransfer
    enhancedRelocationRelease
    mBSFNMCCHInformation
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
                           RadioLinkAdditionFailureFDD
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                       { procedureCode id-radioLinkAddition , ddMode fdd }
    CRITICALITY
                   reject
radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkAdditionFailureTDD
                       { procedureCode id-radioLinkAddition , ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                   reiect
radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME RadioLinkDeletionResponse
                       { procedureCode id-radioLinkDeletion, ddMode common }
    PROCEDURE ID
    CRITICALITY
                   reject
synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyFDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkReconfigurationFailure
                       { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                   reject
synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationPrepareTDD
```

```
SUCCESSFUL OUTCOME RadioLinkReconfigurationReadyTDD
    UNSUCCESSFUL OUTCOME
                           RadioLinkReconfigurationFailure
    PROCEDURE ID
                        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
    CRITICALITY
                   reject
unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestFDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseFDD
    UNSUCCESSFUL OUTCOME
                            RadioLinkReconfigurationFailure
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationRequestTDD
    SUCCESSFUL OUTCOME RadioLinkReconfigurationResponseTDD
                           RadioLinkReconfigurationFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                    reject
physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE PhysicalChannelReconfigurationRequestFDD
    SUCCESSFUL OUTCOME PhysicalChannelReconfigurationCommand
    UNSUCCESSFUL OUTCOME
                            PhysicalChannelReconfigurationFailure
                        { procedureCode id-physicalChannelReconfiguration, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
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
    UNSUCCESSFUL OUTCOME
                           DedicatedMeasurementInitiationFailure
                        { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    reject
commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseFDD
                            CommonTransportChannelResourcesFailure
    UNSUCCESSFUL OUTCOME
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    reject
```

```
commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseTDD
    UNSUCCESSFUL OUTCOME CommonTransportChannelResourcesFailure
    PROCEDURE ID
                        { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
    CRITICALITY
                    reject
uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UplinkSignallingTransferIndicationFDD
                        { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
    PROCEDURE ID
    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
                        { procedureCode id-downlinkSignallingTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RelocationCommit
    PROCEDURE ID
                        { procedureCode id-relocationCommit, ddMode common }
                    ignore
    CRITICALITY
paging RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PagingRequest
    PROCEDURE ID
                        { procedureCode id-paging, ddMode common }
    CRITICALITY
                    ignore
synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCommit
                        { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCancel
    PROCEDURE ID
                        { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    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 }
    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
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementReporting, ddMode common }
    CRITICALITY
dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementTerminationRequest
                        { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    PROCEDURE ID
    CRITICALITY
                    ignore
dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementFailureIndication
    PROCEDURE ID
                        { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY
                    ignore
radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkCongestionIndication
    PROCEDURE ID
                        { procedureCode id-radioLinkCongestion, ddMode common
    CRITICALITY
                    ignore
downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerControlRequest
                        { procedureCode id-downlinkPowerControl, ddMode fdd }
    PROCEDURE ID
    CRITICALITY
                    ignore
downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DL-PowerTimeslotControlRequest
    PROCEDURE ID
                        { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    CRITICALITY
                    ignore
compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE CompressedModeCommand
    PROCEDURE ID
                        { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY
```

```
commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::=
    INITIATING MESSAGE CommonTransportChannelResourcesReleaseRequest
    PROCEDURE ID
                        { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
    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
                            CommonMeasurementInitiationResponse
    SUCCESSFUL OUTCOME
                            CommonMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
    PROCEDURE ID
                            { procedureCode id-commonMeasurementInitiation, ddMode common }
    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
    PROCEDURE ID
                        { procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY
                    ignore
informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeInitiationRequest
                            InformationExchangeInitiationResponse
    SUCCESSFUL OUTCOME
                            InformationExchangeInitiationFailure
    UNSUCCESSFUL OUTCOME
                            { procedureCode id-informationExchangeInitiation, ddMode common }
    PROCEDURE ID
                            reject
    CRITICALITY
informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationReport
                            { procedureCode id-informationReporting, ddMode common }
    PROCEDURE ID
    CRITICALITY
```

```
informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeTerminationRequest
    PROCEDURE ID
                            { procedureCode id-informationExchangeTermination, ddMode common }
    CRITICALITY
informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            InformationExchangeFailureIndication
    PROCEDURE ID
                            { procedureCode id-informationExchangeFailure, ddMode common }
    CRITICALITY
privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PrivateMessage
    PROCEDURE ID
                        { procedureCode id-privateMessage, ddMode common }
    CRITICALITY
                    ignore
reset RNSAP-ELEMENTARY-PROCEDURE ::=
                            ResetRequest
    INITIATING MESSAGE
    SUCCESSFUL OUTCOME
                            ResetResponse
                            { procedureCode id-reset, ddMode common }
    PROCEDURE ID
    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
    PROCEDURE ID
                            { procedureCode id-radioLinkActivation, ddMode tdd
    CRITICALITY
                            ignore
qERANuplinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE GERANUplinkSignallingTransferIndication
    PROCEDURE ID
                        { procedureCode id-gERANuplinkSignallingTransfer, ddMode common }
    CRITICALITY
                    ignore
radioLinkParameterUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            RadioLinkParameterUpdateIndicationFDD
    PROCEDURE ID
                            { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
                            ignore
    CRITICALITY
radioLinkParameterUpdateTDD RNSAP-ELEMENTARY-PROCEDURE ::=
                            RadioLinkParameterUpdateIndicationTDD
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    CRITICALITY
                            ignore
```

```
uEMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementInitiationRequest
    SUCCESSFUL OUTCOME UEMeasurementInitiationResponse
                           UEMeasurementInitiationFailure
    UNSUCCESSFUL OUTCOME
                       { procedureCode id-uEMeasurementInitiation, ddMode tdd }
    PROCEDURE ID
    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
                       { procedureCode id-uEMeasurementTermination, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                   ignore
uEMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UEMeasurementFailureIndication
                       { procedureCode id-uEMeasurementFailure, ddMode tdd }
    PROCEDURE ID
    CRITICALITY
                   ignore
iurInvokeTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE IurInvokeTrace
    PROCEDURE ID
                       { procedureCode id-iurInvokeTrace, ddMode common }
    CRITICALITY
                       ignore
iurDeactivateTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    PROCEDURE ID
                       { procedureCode id-iurDeactivateTrace, ddMode common }
    CRITICALITY
                       ignore
mBMSAttach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBMSAttachCommand
                           { procedureCode id-mBMSAttach, ddMode common }
    PROCEDURE ID
    CRITICALITY
                           ignore
mBMSDetach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           MBMSDetachCommand
    PROCEDURE ID
                           { procedureCode id-mBMSDetach, ddMode common }
    CRITICALITY
                           ignore
directInformationTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                           DirectInformationTransfer
```

```
{ procedureCode id-directInformationTransfer, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
enhancedRelocation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE EnhancedRelocationRequest
    SUCCESSFUL OUTCOME EnhancedRelocationResponse
    UNSUCCESSFUL OUTCOME
                            EnhancedRelocationFailure
    PROCEDURE ID
                        { procedureCode id-enhancedRelocation, ddMode common }
    CRITICALITY
                    reject
enhancedRelocationCancel RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            EnhancedRelocationCancel
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationCancel, ddMode common }
    CRITICALITY
enhancedRelocationSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
                            EnhancedRelocationSignallingTransfer
    INITIATING MESSAGE
    PROCEDURE ID
                            { procedureCode id-enhancedRelocationSignallingTransfer, ddMode common
    CRITICALITY
enhancedRelocationRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            EnhancedRelocationRelease
                            { procedureCode id-enhancedRelocationRelease, ddMode common }
    PROCEDURE ID
    CRITICALITY
                            ignore
mBSFNMCCHInformation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE
                            MBSFNMCCHInformation
    PROCEDURE ID
                            { procedureCode id-mBSFNMCCHInformation, ddMode common }
    CRITICALITY
                            reject
END
```

9.3.3 PDU Definitions

```
-- 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,
   AllowedQueuingTime,
   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,
   CellCapabilityContainer-TDD.
   CellCapabilityContainer-TDD-LCR,
    CellCapabilityContainer-TDD768,
    CellParameterID,
   CellPortionID,
   ChipOffset,
   CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
    CommonMeasurementValueInformation,
    CommonTransportChannelResourcesInitialisationNotRequired.
   Common-EDCH-MAC-d-Flow-Specific-InformationFDD,
   Common-EDCH-Support-Indicator,
   CongestionCause,
    Continuous-Packet-Connectivity-DTX-DRX-Information,
    Continuous-Packet-Connectivity-HS-SCCH-Less-Information,
    Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response,
    CPC-Information,
   CoverageIndicator,
    CriticalityDiagnostics,
```

```
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,
EDCH-Serving-RL,
E-DCH-Serving-cell-change-informationResponse,
EDPCH-Information-FDD,
EDPCH-Information-RLReconfPrepare-FDD,
EDPCH-Information-RLReconfRequest-FDD,
E-DCH-FDD-Update-Information,
```

```
E-DPCCH-PO,
E-RGCH-2-IndexStepThreshold,
E-RGCH-3-IndexStepThreshold,
E-RNTI,
E-TFCS-Information,
E-TTI,
Enhanced-FACH-Support-Indicator,
Enhanced-FACH-Information-ResponseFDD,
Enhanced-PCH-Capability,
ExtendedPropagationDelay,
Extended-RNC-ID,
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-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,
SNA-Information,
SpecialBurstScheduling,
SSDT-SupportIndicator,
STTD-SupportIndicator,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
SRB-Delay,
Support-8PSK,
SyncCase,
SynchronisationConfiguration,
SixtyfourQAM-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,
TnlOos,
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,
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,
Continuous Packet Connectivity - DRX - Information - Response LCR,
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
```

```
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,
    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,
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-AdiustmentRatio,
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-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-CellPortionID,
id-ChipOffset,
id-ClosedLoopMode1-SupportIndicator,
id-CNOriginatedPage-PagingRgst,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectTvpe-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-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-ReconfRqstFDD,
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-ReconfRgstTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRgstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRgstTDD,
id-FDD-DL-CodeInformation.
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRgstFDD,
id-DL-DPCH-Information-RL-ReconfRgstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRgstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfReadvTDD,
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationModifvListIE-RL-ReconfReadvTDD,
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-Rqst,
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,
```

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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-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-Serving-cell-change-CFN,
id-E-DCH-Serving-cell-change-informationResponse,
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-SetupRqstFDD,
id-GA-Cell.
id-GA-CellAdditionalShapes,
id-GSM-Cell-InfEx-Rast,
id-HCS-Prio,
id-HSDSCH-Configured-Indicator,
id-HSDSCH-FDD-Information,
```

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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-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-PhyChReconfRgstTDD,
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRgstTDD,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rgst,
id-HSSICH-Info-DM,
id-IMSI,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationExchangeObjectTvpe-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-Cycle,
id-MBMS-Bearer-Service-List,
id-MBMS-Bearer-Service-List-InfEx-Rsp,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp,
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt,
id-MBMS-Cell-InfEx-Rqst,
id-MBMS-Cell-InfEx-Rsp,
id-MBMS-Cell-InfEx-Rprt,
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,
```

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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-RgstTDD,
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-PhyChReconfRgstFDD,
id-RL-Information-PhyChReconfRgstTDD,
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-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-RL-CongestInd,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-SetupRgstFDD,
id-RL-InformationList-RL-CongestInd,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadvTDD,
id-RL-InformationResponse-RL-ReconfRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRspFDD,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
```

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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-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,
id-TimeSlot-RL-SetupRspTDD,
id-TnlOos,
id-TraceDepth,
id-TraceRecordingSessionReference,
id-TraceReference,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-ContextInfoItem-Reset,
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id-ContextGroupInfoItem-Reset,
id-Transmission-Gap-Pattern-Sequence-Information.
id-UEIdentity.
id-UEMeasurementType,
id-UEMeasurementTimeslotInfoHCR.
id-UEMeasurementTimeslotInfoLCR,
id-UEMeasurementReportCharacteristics.
id-UEMeasurementParameterModAllow,
id-UEMeasurementValueInformation.
id-UE-State,
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD,
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-PhyChReconfRgstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadvTDD,
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,
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-ReconfReadyTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRgstTDD,
id-RL-LCR-InformationResponse-RL-SetupRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
```

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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-ReconfReadvTDD.
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-SetupRqstTDD,
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,
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
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,
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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-ReconfReadyTDD768,
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-Rast,
id-DPCH-ID768-DM-Rprt,
id-RxTimingDeviationForTAext,
id-RxTimingDeviationForTA768,
id-E-DCH-Information,
id-E-DCH-Information-Reconfig,
id-E-DCH-Serving-RL-ID,
id-E-DCH-Information-Response,
id-E-DCH-768-Information,
id-E-DCH-768-Information-Reconfig,
id-E-DCH-768-Information-Response,
id-E-DCH-LCR-Information,
id-E-DCH-LCR-Information-Reconfig.
id-E-DCH-LCR-Information-Response,
id-PowerControlGAP,
id-IdleIntervalInformation,
id-NeedforIdleInterval,
id-IdleIntervalConfigurationIndicator,
id-UARFCNforNt,
id-HS-SICH-ID-Extension,
id-HSSICH-Info-DM-Rqst-Extension,
id-UPPCHPositionLCR,
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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
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 AllowedQueuingTime
                                                                                            PRESENCE optional } |
     ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD
                                                                                                            PRESENCE mandatorv }
                                                                                                            PRESENCE optional } |
     ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD
     ID id-DCH-FDD-Information
                                  CRITICALITY reject TYPE DCH-FDD-Information
                                                                                     PRESENCE mandatory } |
     ID id-RL-Information-RL-SetupRgstFDD
                                              CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD
                                                                                                            PRESENCE mandatory } |
     ID id-Transmission-Gap-Pattern-Sequence-Information
                                                             CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
                                                                                                                                    PRESENCE
    optional }
    { ID id-Active-Pattern-Sequence-Information CRITICALITY reject TYPE Active-Pattern-Sequence-Information PRESENCE optional },
```

```
UL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE
    ul-ScramblingCode
                                   UL-ScramblingCode,
    minUL-ChannelisationCodeLength
                                           MinUL-ChannelisationCodeLength.
    maxNrOfUL-DPCHs
                                   MaxNrOfUL-DPCHs
                                                           OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit
                                   PunctureLimit,
    ull-TFCS
                                   TFCS,
    ul-DPCCH-SlotFormat
                                   UL-DPCCH-SlotFormat,
    ul-SIRTarget
                                   UL-SIR
                                                   OPTIONAL,
    diversityMode
                                   DiversityMode,
    not-Used-sSDT-CellIdLength
                                   NULL
                                                   OPTIONAL,
    not-Used-s-FieldLength
                                   NULL
                                                   OPTIONAL.
    iE-Extensions
                                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRgstFDD-ExtIEs} } OPTIONAL,
UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
     ID id-DPC-Mode
                                   CRITICALITY reject
                                                                                           PRESENCE optional } |
                                                           EXTENSION DPC-Mode
    EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional },
    . . .
DL-DPCH-Information-RL-SetupRgstFDD ::= SEQUENCE {
    t.FCS
                                   TFCS.
    dl-DPCH-SlotFormat
                                   DL-DPCH-SlotFormat,
    nrOfDLchannelisationcodes
                                   NrOfDLchannelisationcodes,
    tFCI-SignallingMode
                                   TFCI-SignallingMode,
                                                           OPTIONAL
    tFCI-Presence
                                   TFCI-Presence
    -- 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-SetupRqstFDD,
                                   FDD-TPC-DownlinkStepSize,
    fdd-dl-TPC-DownlinkStepSize
                                   LimitedPowerIncrease,
    limitedPowerIncrease
                                   InnerLoopDLPCStatus,
    innerLoopDLPCStatus
                                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-SetupRgstFDD ::= SEOUENCE
                                       PowerOffset,
       pol-ForTFCI-Bits
       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-SetupRqstFDD
                                          ::= 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 {
    rI.-ID
                                   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-SetupRgstFDD --,
    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-SetupRgstFDD-ExtIEs} } OPTIONAL.
   iE-Extensions
RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Enhanced-PrimaryCPICH-EcNo
                                              CRITICALITY ignore
                                                                      EXTENSION Enhanced-PrimaryCPICH-EcNo
                                                                                                               PRESENCE optional }
     ID id-RL-Specific-DCH-Info
                                              CRITICALITY ignore
                                                                      EXTENSION RL-Specific-DCH-Info
                                                                                                               PRESENCE optional
     ID id-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
     ID id-EDCH-RL-Indication
                                              CRITICALITY reject
                                                                      EXTENSION EDCH-RL-Indication
                                                                                                               PRESENCE optional
     ID id-ExtendedPropagationDelay
                                              CRITICALITY ignore
                                                                      EXTENSION ExtendedPropagationDelay
                                                                                                               PRESENCE optional }
     ID id-SynchronisationIndicator
                                              CRITICALITY reject
                                                                      EXTENSION SynchronisationIndicator
                                                                                                               PRESENCE optional } |
                                                                      EXTENSION HSDSCH-PreconfigurationSetup
    ID id-HSDSCH-PreconfigurationSetup
                                              CRITICALITY ignore
                                                                                                               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
                                                                                                                            PRESENCE optional |
                                                     CRITICALITY ignore
                                                                         EXTENSION DL-PowerBalancing-Information
     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
                                                     CRITICALITY notify
                                                                         EXTENSION MBMS-Bearer-Service-List
                                                                                                                            PRESENCE
optional }|
    { ID id-EDPCH-Information
                                                     CRITICALITY reject EXTENSION EDPCH-Information-FDD
                                                                                                                            PRESENCE
optional }|
```

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```
{ ID id-EDCH-FDD-Information
                                                       CRITICALITY reject EXTENSION EDCH-FDD-Information
                                                                                                                                PRESENCE
conditional }|
    -- This IE is present if E-DPCH Information IE is present.
    { ID id-Serving-EDCHRL-Id
                                                       CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                                PRESENCE
optional }|
    -- This IE is present if E-DCHInformation IE is present.
    { ID id-F-DPCH-Information-RL-SetupRgstFDD
                                                       CRITICALITY reject EXTENSION F-DPCH-Information-RL-SetupRqstFDD
                                                                                                                                PRESENCE optional
} |
     ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                      CRITICALITY ignore
                                                                            EXTENSION Initial-DL-DPCH-TimingAdjustment-Allowed
                                                                                                                                PRESENCE optional
    { ID id-DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                       CRITICALITY reject
                                                                           EXTENSION DCH-Indicator-For-E-DCH-HSDPA-Operation
                                                                                                                                PRESENCE optional
} |
     ID id-Serving-cell-change-CFN
                                                       CRITICALITY reject EXTENSION CFN
                                                                                                                                PRESENCE optional
    { ID id-Continuous-Packet-Connectivity-DTX-DRX-Information
                                                                    CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-DTX-DRX-
Information
                                                                                                                                     PRESENCE
optional }
    { ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information CRITICALITY reject EXTENSION Continuous-Packet-Connectivity-HS-SCCH-Less-
Information
                                                                                                                                PRESENCE optional
     ID id-Extended-SRNC-ID
                                                       CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                                                                PRESENCE optional
} |
     ID id-Additional-HS-Cell-Information-RL-Setup
                                                      CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Setup-List
                                                                                                                                     PRESENCE
optional },
Additional-HS-Cell-Information-RL-Setup-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Setup-ItemIEs
Additional-HS-Cell-Information-RL-Setup-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID,
                                                    HS-DSCH-FDD-Secondary-Serving-Information,
   hS-DSCH-FDD-Secondary-Serving-Information
                                    ProtocolExtensionContainer { Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs} } OPTIONAL,
Additional-HS-Cell-Information-RL-Setup-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
F-DPCH-Information-RL-SetupRgstFDD ::= SEOUENCE {
    powerOffsetInformation
                                   PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD,
    fdd-dl-TPC-DownlinkStepSize
                                    FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                    LimitedPowerIncrease,
    innerLoopDLPCStatus
                                    InnerLoopDLPCStatus,
                                    ProtocolExtensionContainer { { F-DPCH-Information-RL-SetupRgstFDD-ExtIEs} }
    iE-Extensions
                                                                                                                               OPTIONAL,
F-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
PRESENCE optional } |
     ID id-F-DPCH-SlotFormatSupportRequest
                                               CRITICALITY reject
                                                                           EXTENSION F-DPCH-SlotFormatSupportRequest
     ID id-F-DPCH-SlotFormat
                                           CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                              PRESENCE optional }.
PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD ::= SEQUENCE {
    po2-ForTPC-Bits
                                   PowerOffset,
    -- This IE shall be ignored by DRNS
   iE-Extensions
                                   ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-SetupRqstFDD-ExtIEs} }
                                                                                                                             OPTIONAL,
PowerOffsetInformation-F-DPCH-RL-SetupRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  RADIO LINK SETUP REQUEST TDD
      ************
RadioLinkSetupRequestTDD ::= SEQUENCE {
                                                              {{RadioLinkSetupRequestTDD-IEs}},
    protocolIEs
                                   ProtocolIE-Container
                                   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
    protocolExtensions
                                                                                                                       OPTIONAL
    . . .
RadioLinkSetupReguestTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-SRNC-ID
                                                                                                              PRESENCE mandatory
                                                           CRITICALITY reject TYPE RNC-ID
     ID id-S-RNTI
                                                                                                              PRESENCE mandatory
                                                           CRITICALITY reject TYPE S-RNTI
     ID id-D-RNTI
                                                           CRITICALITY reject TYPE D-RNTI
                                                                                                              PRESENCE optional }
      ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                                  PRESENCE mand
     ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD
                                                                                                                                                  PRESENCE mand
     ID id-AllowedOueuingTime
                                                           CRITICALITY reject TYPE AllowedOueuingTime
                                                                                                              PRESENCE optional }
     ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                           CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                                                                                              PRESENCE optional
}
     ID id-DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                           CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                                                                                                               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-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-UL
                                   MaxNrTimeslots.
    minimumSpreadingFactor-UL
                                   MinimumSpreadingFactor,
    maxNrULPhysicalchannels
                                   MaxNrULPhysicalchannels,
    iE-Extensions
                                   ProtocolExtensionContainer { {UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
```

```
UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-TDD-Support-8PSK
                                CRITICALITY ignore
                                                      EXTENSION Support-8PSK
                                                                                PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
   { ID id-TDD768-minimumSpreadingFactor-UL
                                               CRITICALITY ignore
                                                                        EXTENSION MinimumSpreadingFactor768
                                                                                                           PRESENCE optional },
DL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
   maxNrTimeslots-DL
                                MaxNrTimeslots,
                                MinimumSpreadingFactor,
   minimumSpreadingFactor-DL
   maxNrDLPhysicalchannels
                                MaxNrDLPhysicalchannels,
   iE-Extensions
                                ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRgstTDD-ExtIEs} } OPTIONAL,
DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TDD-maxNrDLPhysicalchannels
                                                                        EXTENSION MaxNrDLPhysicalchannelsTS
                                                                                                              PRESENCE optional }
                                               CRITICALITY ignore
     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
                                                                        EXTENSION MaxNrDLPhysicalchannels768
                                               CRITICALITY ignore
                                                                                                              PRESENCE optional }
     ID id-TDD768-maxNrDLPhysicalchannelsTS
                                               CRITICALITY ignore
                                                                        EXTENSION MaxNrDLPhysicalchannelsTS768
                                                                                                             PRESENCE optional }.
UL-CCTrCH-InformationList-RL-SetupRgstTDD
                                               ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationItemIEs-RL-SetupRgstTDD} }
UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
   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-SetupRgstTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD
                                                      CRITICALITY reject
                                                                            EXTENSION
                                                                                      TDD-TPC-UplinkStepSize-LCR
                                                                                                                   PRESENCE optional \}.
   -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
DL-CCTrCH-InformationList-RL-SetupRgstTDD
                                               ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-SetupRqstTDD} }
DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
```

```
DL-CCTrCH-InformationItem-RL-SetupRgstTDD ::= SEQUENCE {
   cCTrCH-ID
                                CCTrCH-ID.
   dl-TFCS
                                TFCS.
   tFCI-Coding
                                TFCI-Coding
                                PunctureLimit,
   dl-PunctureLimit
                                TDD-TPC-DownlinkStepSize,
   tdd-TPC-DownlinkStepSize
   cCTrCH-TPCList
                                 CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
                                 ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-TPCList-RL-SetupRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRgstTDD
CCTrCH-TPCItem-RL-SetupRgstTDD ::= SEQUENCE {
   cCTrCH-ID
                                    CCTrCH-ID,
   iE-Extensions
                                    ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
CCTrCH-TPCItem-RL-SetupRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
   rL-ID
                                 RL-ID,
   C-TD
                                 C-ID,
   frameOffset
                                 FrameOffset.
                                 SpecialBurstScheduling,
   specialBurstScheduling
                                PrimarvCCPCH-RSCP
   primaryCCPCH-RSCP
                                                       OPTIONAL,
                                DL-TimeSlot-ISCP-Info OPTIONAL.
   dL-TimeSlot-ISCP
   --for 3.84Mcps TDD and 7.68Mcps TDD only
   iE-Extensions
                                ProtocolExtensionContainer { {RL-Information-RL-SetupRgstTDD-ExtIEs} } OPTIONAL,
RL-Information-RL-SetupRqstTDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD
                                                                                            DL-TimeSlot-ISCP-LCR-Information PRESENCE
                                                          CRITICALITY reject
                                                                                 EXTENSION
optional }|
   { ID id-TSTD-Support-Indicator-RL-SetupRgstTDD
                                                          CRITICALITY ignore
                                                                                            TSTD-Support-Indicator
                                                                                 EXTENSION
                                                                                                                          PRESENCE
optional }|
   --for 1.28Mcps TDD only
    EXTENSION RL-Specific-DCH-Info
                                                                                        PRESENCE optional } |
     ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }
    { ID id-UL-Synchronisation-Parameters-LCR
                                                   CRITICALITY reject
                                                                         EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                        PRESENCE
   optional | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    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 }
     ID id-HSDSCH-TDD-Information
                                                              CRITICALITY reject
                                                                                   EXTENSION HSDSCH-TDD-Information
                                                                                                                            PRESENCE optional }
     ID id-HSPDSCH-RL-ID
                                                              CRITICALITY reject
                                                                                                                            PRESENCE conditional
                                                                                   EXTENSION RL-ID
    . This IE shall be present if HS-DSCH Information IE is present.
     ID id-PDSCH-RL-ID
                                                              CRITICALITY ignore
                                                                                   EXTENSION RL-ID
                                                                                                                            PRESENCE optional }
     ID id-MBMS-Bearer-Service-List
                                                              CRITICALITY notify
                                                                                                                            PRESENCE optional }
                                                                                   EXTENSION MBMS-Bearer-Service-List
     ID id-E-DCH-Information
                                                                                   EXTENSION E-DCH-Information
                                                                                                                            PRESENCE optional }
                                                              CRITICALITY reject
                                                                                                                            PRESENCE optional
     ID id-E-DCH-Serving-RL-ID
                                                              CRITICALITY reject
                                                                                   EXTENSION RL-ID
                                                                                                                            PRESENCE optional
     ID id-E-DCH-768-Information
                                                              CRITICALITY reject
                                                                                   EXTENSION E-DCH-768-Information
     ID id-E-DCH-LCR-Information
                                                              CRITICALITY reject
                                                                                   EXTENSION E-DCH-LCR-Information
                                                                                                                            PRESENCE optional }
     ID id-Extended-SRNC-ID
                                                              CRITICALITY reject
                                                                                   EXTENSION Extended-RNC-ID
                                                                                                                            PRESENCE optional }
     ID id-ContinuousPacketConnectivity-DRX-InformationLCR
                                                              CRITICALITY reject
                                                                                   EXTENSION ContinuousPacketConnectivity-DRX-InformationLCR
                                       PRESENCE optional }
    { ID id-HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                                   EXTENSION HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                              CRITICALITY reject
    PRESENCE optional } |
    { ID id-E-DCH-Semi-PersistentScheduling-Information-LCR
                                                              CRITICALITY reject
                                                                                   EXTENSION E-DCH-Semi-PersistentScheduling-Information-LCR
    PRESENCE optional },
     ************************
-- RADIO LINK SETUP RESPONSE FDD
  *****************
RadioLinkSetupResponseFDD ::= SEQUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                              {{RadioLinkSetupResponseFDD-IEs}},
   protocolExtensions
                                   ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}
                                                                                                                       OPTIONAL,
RadioLinkSetupResponseFDD-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
                                                      CRITICALITY ignore
    { ID id-CN-CS-DomainIdentifier
                                                                           TYPE CN-CS-DomainIdentifier
                                                                                                                          PRESENCE optional
    { ID id-RL-InformationResponseList-RL-SetupRspFDD
                                                      CRITICALITY ignore
                                                                           TYPE RL-InformationResponseList-RL-SetupRspFDD
                                                                                                                          PRESENCE mandatory
    { ID id-UL-SIRTarget
                                                       CRITICALITY ignore
                                                                           TYPE UL-SIR
                                                                                                                          PRESENCE optional
    { ID id-CriticalityDiagnostics
                                                      CRITICALITY ignore
                                                                           TYPE CriticalityDiagnostics
                                                                                                                          PRESENCE optional
RL-InformationResponseList-RL-SetupRspFDD
                                               ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-SetupRspFDD} }
```

```
RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD PRESENCE mandatory
RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
                                  RL-ID,
    rL-Set-ID
                                  RL-Set-ID,
   uRA-Information
                                  URA-Information
                                                      OPTIONAL,
    SAT
                                  SAT.
    qA-Cell
                                  GA-Cell
                                              OPTIONAL,
                                  GA-AccessPointPosition
    qA-AccessPointPosition
                                                             OPTIONAL.
    received-total-wide-band-power Received-total-wide-band-power,
    not-Used-secondary-CCPCH-Info
                                          NULL
                                                     OPTIONAL.
    dl-CodeInformation
                                  FDD-DL-CodeInformation.
    diversityIndication
                                  DiversityIndication-RL-SetupRspFDD,
    sSDT-SupportIndicator
                                  SSDT-SupportIndicator,
   maxUL-SIR
                                  UL-SIR,
   minUL-SIR
                                  UL-SIR,
                                  Closedlooptimingadjustmentmode
    closedlooptimingadjustmentmode
                                                                         OPTIONAL,
    maximumAllowedULTxPower
                                  MaximumAllowedULTxPower,
    maximumDLTxPower
                                  DL-Power,
    minimumDLTxPower
                                  DL-Power,
                                  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,
                                  ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                      CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                             PRESENCE optional
     ID id-DL-PowerBalancing-ActivationIndicator
                                                      CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                             PRESENCE optional
} |
    ID id-HCS-Prio
                                                      CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                             PRESENCE optional
    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
} |
    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
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 ::= {
     ID id-DCH-InformationResponse
                                            CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                              PRESENCE optional } |
    { ID id-EDCH-FDD-InformationResponse
                                            CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                              PRESENCE optional },
NonCombiningOrFirstRL-RL-SetupRspFDD ::= 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
                                                                                                                       PRESENCE optional } |
                                                CRITICALITY ignore
                                                                        EXTENSION HSDSCH-RNTI
     ID id-HSDSCH-FDD-Information-Response
                                                CRITICALITY ignore
                                                                                                                       PRESENCE optional }
                                                                        EXTENSION HSDSCH-FDD-Information-Response
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                                           EXTENSION Continuous-Packet-Connectivity-
                                                                                    CRITICALITY ignore
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 },
    . . .
Additional-HS-Cell-Information-Response-List ::= SEQUENCE (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 {
    protocolIEs
                                   ProtocolIE-Container
                                                               {{RadioLinkSetupResponseTDD-IEs}},
                                   ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
    protocolExtensions
                                                                                                                         OPTIONAL,
RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                                                                                                   PRESENCE optional
                                                   CRITICALITY ignore TYPE D-RNTI
                                                   CRITICALITY ignore TYPE CN-PS-DomainIdentifier
     ID id-CN-PS-DomainIdentifier
                                                                                                                   PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                                                                                                   PRESENCE optional
                                                   CRITICALITY ignore TYPE CN-CS-DomainIdentifier
     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.
    qA-Cell
                               GA-Cell
                                           OPTIONAL,
    gA-AccessPointPosition
                               GA-AccessPointPosition OPTIONAL,
    ul-TimeSlot-ISCP-Info
                               UL-TimeSlot-ISCP-Info.
    maxUL-SIR
                               UL-SIR,
    minUL-SIR
                               UL-SIR,
    maximumAllowedULTxPower
                               MaximumAllowedULTxPower,
    maximumDLTxPower
                               DL-Power,
    minimumDLTxPower
                               DL-Power,
    uARFCNforNt
                               UARFCN
                                                   OPTIONAL,
    cellParameterID
                               CellParameterID
                                                   OPTIONAL,
                               SyncCase
                                                   OPTIONAL,
    syncCase
    sCH-TimeSlot
                               SCH-TimeSlot
                                                   OPTIONAL,
```

```
-- This IE shall be present if Sync Case IE is equal to "Case2". --
    sCTD-Indicator
                              SCTD-Indicator OPTIONAL.
    pCCPCH-Power
                              PCCPCH-Power.
    timingAdvanceApplied
                              TimingAdvanceApplied,
    alphaValue
                              AlphaValue,
    ul-PhysCH-SF-Variation
                              UL-PhysCH-SF-Variation,
    synchronisationConfiguration
                                      SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD
                                      Secondary-CCPCH-Info-TDD
                                                               OPTIONAL,
    ul-CCTrCHInformation
                                      UL-CCTrCHInformationList-RL-SetupRspTDD
                                                                                 OPTIONAL,
    dl-CCTrCHInformation
                                      DL-CCTrCHInformationList-RL-SetupRspTDD
                                                                                 OPTIONAL,
    dCH-InformationResponse
                                      DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
                                      DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    dsch-InformationResponse
    usch-InformationResponse
                                      USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformation
                                              Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                              Neighbouring-GSM-CellInformation OPTIONAL,
    iE-Extensions
                                  ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    . . .
RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                  CRITICALITY ignore EXTENSION
                                                                                GA-CellAdditionalShapes
                                                                                                                    PRESENCE optional }
     ID id-HCS-Prio
                                                                                                                    PRESENCE optional }
                                                  CRITICALITY ignore EXTENSION
                                                                                HCS-Prio
    ID id-TimeSlot-RL-SetupRspTDD
                                                                                                                    PRESENCE conditional } |
                                                  CRITICALITY ignore EXTENSION
                                                                                TimeSlot
    -- This IE shall be present if Sync Case IE is Case1. --
    { ID id-Neighbouring-E-UTRA-CellInformation
                                                  CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                    PRESENCE optional },
    . . .
UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory }
UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD
UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
                              CCTrCH-ID,
    cCTrCH-ID
    ul-DPCH-Information
                                  UL-DPCH-InformationList-RL-SetupRspTDD
                                                                            OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD
                                                                 CRITICALITY ignore
                                                                                                            PRESENCE optional }.
                                                                                        EXTENSION UL-SIR
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,
                                 ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
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,
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
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,
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL.
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 ::= {
    DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationList-RL-SetupRspTDD}}
DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
                                                    CRITICALITY ignore TYPE DSCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
    { ID id-DSCH-InformationListIEs-RL-SetupRspTDD
DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-SetupRspTDD
DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
   dsch-ID
                          DSCH-ID,
    dSCH-FlowControlInformation
                                 DSCH-FlowControlInformation,
   bindingID
                 BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
   iE-Extensions
                          ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    . . .
DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationList-RL-SetupRspTDD}}
USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationListIEs-RL-SetupRspTDD
                                                     CRITICALITY ignore TYPE USCH-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-SetupRspTDD
USCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    usch-ID
                              USCH-ID,
   bindingID
                              BindingID OPTIONAL,
    transportLayerAddress
                              TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
   iE-Extensions
                              ProtocolExtensionContainer { {USCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    . . .
USCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-LCR-InformationResponse-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-LCR-InformationResponse-RL-SetupRspTDD
                                                                                                                              PRESENCE
optional}|
    --Mandatory for 1.28Mcps TDD only
    { 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-DSCH-RNTI
                                                         CRITICALITY ignore EXTENSION DSCH-RNTI
                                                                                                                                 PRESENCE optional }
      ID id-Active-MBMS-Bearer-ServiceTDD-PFL
                                                         CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL
                                                                                                                                 PRESENCE optional }
     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
      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
                                                                                                                     EXTENSION
                                                                             CRITICALITY ignore
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 },
RL-LCR-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rI.-ID
                                RL-ID,
    uRA-Information
                                URA-Information,
    SAT
                                SAI,
                                GA-Cell
    qA-Cell
                                            OPTIONAL,
                                GA-AccessPointPosition OPTIONAL,
    qA-AccessPointPosition
    ul-TimeSlot-ISCP-LCR-Info
                                UL-TimeSlot-ISCP-LCR-Info,
    maxUL-SIR
                                UL-SIR,
    minUL-SIR
                                UL-SIR,
    maximumAllowedULTxPower
                                MaximumAllowedULTxPower,
    maximumDLTxPower
                                DL-Power.
    minimumDLTxPower
                                DL-Power.
    uARFCNforNt
                                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-RL-SetupRspTDD
    dsch-LCR-InformationResponse
                                                                                             OPTIONAL.
    usch-LCR-InformationResponse
                                            USCH-LCR-InformationResponse-RL-SetupRspTDD
                                                                                             OPTIONAL,
    neighbouring-UMTS-CellInformation
                                            Neighbouring-UMTS-CellInformation
                                                                                             OPTIONAL,
    neighbouring-GSM-CellInformation
                                            Neighbouring-GSM-CellInformation
                                                                                             OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs} }
                                                                                                                                       OPTIONAL,
    . . .
RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                        PRESENCE optional }
```

```
ID id-HCS-Prio
                                                    CRITICALITY ignore EXTENSION
                                                                                    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-SixtyfourOAM-DL-SupportIndicator
                                                                                    SixtyfourQAM-DL-SupportIndicator PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION
    -- 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 },
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 ::= SEQUENCE {
    cCTrCH-ID
                                CCTrCH-ID.
    ul-DPCH-LCR-Information
                                UL-DPCH-LCR-InformationList-RL-SetupRspTDD
                                ProtocolExtensionContainer { {UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL.
    iE-Extensions
    . . .
UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                        CRITICALITY ignore
    {ID id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
                                                                                                 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}}
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DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::=
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD PRESENCE
mandatory }
DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD ::= SEOUENCE {
    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-TimeslotLCR-Information,
    dL-Timeslot-LCR-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,
```

```
ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
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 {
    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.
    maxUL-SIR
                                UL-SIR,
    minUL-SIR
                                UL-SIR,
    maximumAllowedULTxPower
                                MaximumAllowedULTxPower,
    maximumDLTxPower
                                DL-Power,
    minimumDLTxPower
                                DL-Power,
    uARFCNforNt
                                UARFCN
                                                    OPTIONAL,
    cellParameterID
                                CellParameterID
                                                    OPTIONAL,
    svncCase
                                SvncCase
                                                    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
                                      DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    usch-InformationResponse
                                      USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformation
                                             Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                             Neighbouring-GSM-CellInformation OPTIONAL,
    qA-CellAdditionalShapes
                                             GA-CellAdditionalShapes
                                                                        OPTIONAL,
   hCS-Prio
                                      HCS-Prio
                                                     OPTIONAL,
    timeSlot-RL-SetupRspTDD
                                      TimeSlot
                                                 OPTIONAL,
    -- This IE shall be present if Sync Case IE is Case1. --
    iE-Extensions
                                  ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
RL-InformationResponse-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-Neighbouring-E-UTRA-CellInformation
                                                     CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                            PRESENCE optional
},
UL-CCTrCHInformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD768}}
UL-CCTrCHInformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
    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-InformationList-RL-SetupRspTDD768
   ul-DPCH-Information768
                                                                                    OPTIONAL,
    uL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD768
                                                             UL-SIR
                                                                        OPTIONAL,
                                  ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
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,
   iE-Extensions
                                 ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
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 ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD768
DL-CCTrCHInformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   cCTrCH-ID
                             CCTrCH-ID.
   dl-DPCH-Information768
                                    DL-DPCH-InformationList-RL-SetupRspTDD768
                                                                                OPTIONAL,
   cCTrCH-Maximum-DL-Power
                                    DL-Power
                                                  OPTIONAL, -- this is a DCH type CCTrCH power
   cCTrCH-Minimum-DL-Power
                                    DL-Power
                                                   OPTIONAL, -- this is a DCH type CCTrCH power
                                ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL.
   iE-Extensions
DL-CCTrCHInformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationList-RL-SetupRspTDD768 ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD768} }
DL-DPCH-InformationListIEs-RL-SetupRspTDD768 RNSAP-PROTOCOL-IES ::= {
     ID id-DL-DPCH-InformationItem-RL-SetupRspTDD768
                                                      CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD768 PRESENCE mandatory
DL-DPCH-InformationItem-RL-SetupRspTDD768 ::= SEQUENCE {
   repetitionPeriod
                                 RepetitionPeriod,
   repetitionLength
                                 RepetitionLength,
   tDD-DPCHOffset
                                TDD-DPCHOffset,
   dL-Timeslot-Information768
                                DL-Timeslot-Information768,
                                 ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
DL-DPCH-InformationItem-RL-SetupRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ******************
-- RADIO LINK SETUP FAILURE FDD
```

```
RadioLinkSetupFailureFDD ::= SEQUENCE
    protocolIEs
                                    ProtocolIE-Container
                                                                {{RadioLinkSetupFailureFDD-IEs}},
                                    ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
    protocolExtensions
                                                                                                                         OPTIONAL
RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                                                                                     PRESENCE optional }
                                            CRITICALITY ignore TYPE D-RNTI
                                                                                                     PRESENCE optional
     ID id-CN-PS-DomainIdentifier
                                            CRITICALITY ignore TYPE CN-PS-DomainIdentifier
                                                                                                     PRESENCE optional }
     ID id-CN-CS-DomainIdentifier
                                            CRITICALITY ignore TYPE CN-CS-DomainIdentifier
     ID id-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,
                        RLSpecificCauseList-RL-SetupFailureFDD,
    rLSpecificCause
GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE
    iE-Extensions
                                                ProtocolExtensionContainer { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
                                                                                                                               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
                                                                Successful RL-Information Response List-RL-Setup Failure FDD OPTIONAL,
                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
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 }
                                                                                                           EXTENSION Continuous-Packet-Connectivity-
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                                    CRITICALITY ignore
HS-SCCH-Less-Information-Response
                                       PRESENCE optional }
     ID id-SixtyfourQAM-DL-SupportIndicator CRITICALITY ignore
                                                                        EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                                       PRESENCE optional } |
                                                                            EXTENSION Additional-HS-Cell-Information-Response-List PRESENCE
     ID id-Additional-HS-Cell-Information-Response CRITICALITY ignore
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 ::= {
                                    CRITICALITY ignore
    { ID id-Max-UE-DTX-Cycle
                                                            EXTENSION Max-UE-DTX-Cycle
                                                                                                   PRESENCE conditional },
    -- This IE shall be present if the Cause IE is set to "Continuous Packet Connectivity UE DTX Cycle not Available".
    . . .
SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-1)) OF 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,
    SAT
                                            SAI,
                                                         OPTIONAL,
    qA-Cell
                                            GA-Cell
    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-SIR
                                            UL-SIR,
    closedlooptimingadjustmentmode
                                            Closedlooptimingadjustmentmode
                                                                                 OPTIONAL,
    maximumAllowedULTxPower
                                            MaximumAllowedULTxPower,
    maximumDLTxPower
                                            DL-Power,
    minimumDLTxPower
                                            DL-Power,
    primaryCPICH-Power
                                            PrimaryCPICH-Power,
    primaryScramblingCode
                                            PrimaryScramblingCode
                                                                                 OPTIONAL,
    uL-UARFCN
                                            UARFCN
                                                                                 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
    ID id-HCS-Prio
                                                     CRITICALITY ignore EXTENSION HCS-Prio
                                                                                                                           PRESENCE optional
    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
DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
   combining
                                  Combining-RL-SetupFailureFDD,
   nonCombiningOrFirstRL
                              NonCombiningOrFirstRL-RL-SetupFailureFDD
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
                              ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                         CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                                  PRESENCE optional }
    ID id-EDCH-FDD-InformationResponse
                                         CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                       PRESENCE optional },
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE
    dCH-InformationResponse
                                         DCH-InformationResponse,
   iE-Extensions
                                         ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
```

```
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-FDD-InformationResponse
                                         CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                        PRESENCE optional },
RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK SETUP FAILURE TDD
  ******************
RadioLinkSetupFailureTDD ::= SEQUENCE {
                                                            {{RadioLinkSetupFailureTDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
                                                                                                                   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 {
    cause
   iE-Extensions
                              ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} }
                                                                                                           OPTIONAL,
GeneralCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE
   unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
   iE-Extensions
                                                         ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs} }
   OPTIONAL,
RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-SixtyfourQAM-DL-SupportIndicator
                                             CRITICALITY ignore
                                                                    EXTENSION SixtyfourQAM-DL-SupportIndicator
                                                                                                               PRESENCE optional },
Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD RNSAP-PROTOCOL-IES ::= {
         id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD
                                                                       CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
SetupFailureTDD
                  PRESENCE
                              mandatorv
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
   rL-ID
                              RL-ID.
   cause
   iE-Extensions
                              ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::=
     -- RADIO LINK ADDITION REQUEST FDD
__ *********************
RadioLinkAdditionRequestFDD ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                            {{RadioLinkAdditionRequestFDD-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
                                                                                                                     OPTIONAL.
RadioLinkAdditionRequestFDD-IES RNSAP-PROTOCOL-IES ::= {
     ID id-UL-SIRTarget
                                     CRITICALITY reject TYPE UL-SIR
                                                                                   PRESENCE mandatory }
     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
                                             ::= SEOUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Information-RL-
AdditionRqstFDD-IEs} }
RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-Information-RL-AdditionRqstFDD PRESENCE mandatory
RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
```

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```
rL-ID
                                  RL-ID,
    C-TD
                                  C-ID.
    frameOffset.
                                  FrameOffset.
    chipOffset
                                  ChipOffset,
    diversityControlField
                                  DiversityControlField,
                                  PrimaryCPICH-EcNo
   primaryCPICH-EcNo
                                                         OPTIONAL,
    not-Used-sSDT-CellID
                                  NULL
                                                 OPTIONAL,
    transmitDiversitvIndicator
                                  TransmitDiversitvIndicator
    iE-Extensions
                                  ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
RL-Information-RL-AdditionRgstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DLReferencePower
                              CRITICALITY ignore
                                                     EXTENSION DL-Power
                                                                                PRESENCE optional } |
     ID id-Enhanced-PrimaryCPICH-EcNo
                                                                        EXTENSION Enhanced-PrimaryCPICH-EcNo
                                                                                                                    PRESENCE optional }
                                                 CRITICALITY ignore
     ID id-RL-Specific-DCH-Info
                                                  CRITICALITY ignore
                                                                        EXTENSION RL-Specific-DCH-Info
                                                                                                                    PRESENCE optional
     ID id-DelayedActivation
                                                                        EXTENSION DelayedActivation
                                                 CRITICALITY reject
                                                                                                                    PRESENCE optional
     ID id-RL-Specific-EDCH-Information
                                                                        EXTENSION RL-Specific-EDCH-Information
                                                                                                                    PRESENCE optional }
                                                  CRITICALITY reject
     ID id-EDCH-RL-Indication
                                                  CRITICALITY reject
                                                                        EXTENSION EDCH-RL-Indication
                                                                                                                    PRESENCE optional }
     ID id-SynchronisationIndicator
                                                                        EXTENSION SynchronisationIndicator
                                                                                                                    PRESENCE optional |
                                                  CRITICALITY ignore
     ID id-HSDSCH-PreconfigurationSetup
                                                  CRITICALITY ignore
                                                                        EXTENSION HSDSCH-PreconfigurationSetup
                                                                                                                    PRESENCE optional },
    . . .
RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DPC-Mode
                                                     CRITICALITY reject EXTENSION DPC-Mode
                                                                                                                             PRESENCE optional
} |
    ID id-Permanent-NAS-UE-Identity
                                                     CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                                            PRESENCE optional
} |
        ID id-Serving-EDCHRL-Id
                                                     CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                            PRESENCE
optional }
    { ID id-Initial-DL-DPCH-TimingAdjustment-Allowed
                                                     CRITICALITY 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 }
    { ID id-EDCH-FDD-Information
                                                     CRITICALITY reject EXTENSION EDCH-FDD-Information
                                                                                                                            PRESENCE
optional }
    optional },
    -- This IE shall be present if E-DPCH Information is present
    . . .
Additional-HS-Cell-Information-RL-Addition-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Addition-ItemIEs
Additional-HS-Cell-Information-RL-Addition-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                             RL-ID,
                                             C-ID,
    c-ID
```

```
hs-DsCH-FDD-secondary-serving-Information Hs-DsCH-FDD-secondary-serving-Information,
   iE-Extensions
                                 ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs} } OPTIONAL,
   . . .
Additional-HS-Cell-Information-RL-Addition-ItemIEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDPCH-Information-RLAdditionReg-FDD::= SEQUENCE
   maxSet-E-DPDCHs
                                            Max-Set-E-DPDCHs,
   ul-PunctureLimit
                                            PunctureLimit,
   e-TFCS-Information
                                            E-TFCS-Information,
   e-TTI
                                            E-TTI.
   e-DPCCH-PO
                                            E-DPCCH-PO,
   e-RGCH-2-IndexStepThreshold
                                            E-RGCH-2-IndexStepThreshold,
                                            E-RGCH-3-IndexStepThreshold,
   e-RGCH-3-IndexStepThreshold
   hARO-Info-for-E-DCH
                                            HARO-Info-for-E-DCH,
   iE-Extensions
                                            EDPCH-Information-RLAdditionReq-FDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
                                    CRITICALITY reject EXTENSION HSDSCH-Configured-Indicator
{ ID id-HSDSCH-Configured-Indicator
                                                                                                           PRESENCE mandatory |
-- This shall be present for EDPCH configuration with HSDCH
{ ID id-MinimumReducedE-DPDCH-GainFactor
                                            CRITICALITY ignore EXTENSION MinimumReducedE-DPDCH-GainFactor
                                                                                                           PRESENCE optional },
      *****************
-- RADIO LINK ADDITION REQUEST TDD
__ *******************************
RadioLinkAdditionRequestTDD ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{RadioLinkAdditionRequestTDD-IEs}},
                                 ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}
   protocolExtensions
                                                                                                                   OPTIONAL,
RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-AdditionRqstTDD CRITICALITY reject TYPE RL-Information-RL-AdditionRqstTDD
                                                                                                     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
```

```
ProtocolExtensionContainer { {RL-Information-RL-AdditionRgstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
RL-Information-RL-AdditionRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRgstTDD CRITICALITY reject
                                                                                       EXTENSION DL-TimeSlot-ISCP-LCR-Information
                                                                                                                                  PRESENCE
optional }|
    --for 1.28Mcps TDD only
     ID id-RL-Specific-DCH-Info
                                                   CRITICALITY ignore
                                                                           EXTENSION RL-Specific-DCH-Info
                                                                                                                          PRESENCE optional }
     ID id-DelayedActivation
                                                   CRITICALITY reject
                                                                           EXTENSION DelayedActivation
                                                                                                                          PRESENCE optional
    { ID id-UL-Synchronisation-Parameters-LCR
                                                   CRITICALITY reject
                                                                           EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                          PRESENCE optional }
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-PrimaryCCPCH-RSCP-Delta
                                                   CRITICALITY ignore
                                                                           EXTENSION PrimaryCCPCH-RSCP-Delta
                                                                                                                          PRESENCE optional } |
    { ID id-IdleIntervalConfigurationIndicator
                                                   CRITICALITY ignore
                                                                           EXTENSION NULL
                                                                                                                          PRESENCE optional },
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-AdditionRqstTDD PRESENCE
optional }|
     ID id-HSDSCH-TDD-Information
                                                         CRITICALITY reject
                                                                                EXTENSION HSDSCH-TDD-Information
                                                                                                                       PRESENCE optional
                                                                                                                       PRESENCE optional
     ID id-HSPDSCH-RL-ID
                                                         CRITICALITY reject
                                                                                EXTENSION RL-ID
     ID id-E-DCH-Information
                                                         CRITICALITY reject
                                                                                EXTENSION E-DCH-Information
                                                                                                                       PRESENCE optional
     ID id-E-DCH-Serving-RL-ID
                                                                                                                       PRESENCE optional
                                                         CRITICALITY reject
                                                                                EXTENSION RL-ID
     ID id-E-DCH-768-Information
                                                         CRITICALITY reject
                                                                                EXTENSION E-DCH-768-Information
                                                                                                                       PRESENCE optional
                                                                                                                       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 }.
UL-CCTrCH-InformationList-RL-AdditionRgstTDD
                                              ::= SEQUENCE (SIZE (1..maxNrofCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationItemIEs-RL-AdditionRgstTDD} }
UL-CCTrCH-InformationItemIEs-RL-AdditionRgstTDD RNSAP-PROTOCOL-IES ::= {
    optional},
    . . .
UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                              CCTrCH-ID,
                              TDD-TPC-UplinkStepSize-LCR
    uplinkStepSizeLCR
                                                           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-AdditionRgstTDD
                                        ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-AdditionRqstTDD} }
DL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= {
   optional},
   . . .
DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE
   cCTrCH-ID
                           CCTrCH-ID,
                            TDD-TPC-DownlinkStepSize OPTIONAL,
   downlinkStepSize
   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 ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{RadioLinkAdditionResponseFDD-IEs}},
                               ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
   protocolExtensions
                                                                                                              OPTIONAL,
RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationResponseList-RL-AdditionRspFDD
                                                     CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD
                                                                                                                      PRESENCE
mandatory } |
   { ID id-CriticalityDiagnostics
                                      CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                      PRESENCE optional },
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-Set-ID
                                   RL-Set-ID,
    uRA-Information
                                   URA-Information
                                                       OPTIONAL.
                                   SAI.
    gA-Cell
                                   GA-Cell
                                               OPTIONAL,
    qA-AccessPointPosition
                                   GA-AccessPointPosition OPTIONAL,
    received-total-wide-band-power Received-total-wide-band-power,
    not-Used-secondary-CCPCH-Info
                                                       OPTIONAL,
                                           NULL
    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,
    maximumDI.TxPower
                                       DL-Power,
    minimumDLTxPower
                                       DL-Power,
    neighbouring-UMTS-CellInformation
                                       Neighbouring-UMTS-CellInformation OPTIONAL,
                                       Neighbouring-GSM-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                       PC-Preamble,
    pC-Preamble
    sRB-Delay
                                       SRB-Delay,
    primaryCPICH-Power
                                       PrimaryCPICH-Power,
    iE-Extensions
                                       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    . . .
RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                   CRITICALITY ignore EXTENSION GA-CellAdditionalShapes
                                                                                                                          PRESENCE optional }
     ID id-DL-PowerBalancing-ActivationIndicator
                                                   CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator
                                                                                                                          PRESENCE optional }
                                                                                                                          PRESENCE optional
     ID id-HCS-Prio
                                                   CRITICALITY ignore EXTENSION HCS-Prio
     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
                                                   CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
     ID id-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 },
    . . .
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
    iE-Extensions
                               ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
```

```
CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-DCH-InformationResponse
                                       CRITICALITY ignore EXTENSION DCH-InformationResponse
                                                                                             PRESENCE optional }
    ID id-EDCH-FDD-InformationResponse
                                       CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                  PRESENCE optional },
NonCombining-RL-AdditionRspFDD ::= SEQUENCE
   dCH-InformationResponse
                                       DCH-InformationResponse,
                                           ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-EDCH-FDD-InformationResponse
                                       CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                  PRESENCE optional },
RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-DSCH-serving-cell-change-informationResponse CRITICALITY ignore EXTENSION HS-DSCH-serving-cell-change-informationResponse
   PRESENCE optional }
   PRESENCE optional } |
   { ID id-MAChs-ResetIndicator
                                                     CRITICALITY ignore EXTENSION MAChs-ResetIndicator
   PRESENCE optional }
   { ID id-Additional-HS-Cell-Change-Information-Response CRITICALITY ignore EXTENSION Additional-HS-Cell-Change-Information-Response-List
   PRESENCE optional },
Additional-HS-Cell-Change-Information-Response-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Change-Information-Response-
ItemIEs
Additional-HS-Cell-Change-Information-Response-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                                         RL-ID,
   hSDSCH-RNTI
                                                         HSDSCH-RNTI,
   hS-DSCH-Secondary-Serving-Cell-Change-Information-Response HS-DSCH-Secondary-Serving-Cell-Change-Information-Response,
   iE-Extensions
                                ProtocolExtensionContainer { Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIEs} } OPTIONAL,
   . . .
Additional-HS-Cell-Change-Information-Response-ItemIEs-ExtIES RNSAP-PROTOCOL-EXTENSION ::=
    ****************
-- RADIO LINK ADDITION RESPONSE TDD
  ******************
```

```
RadioLinkAdditionResponseTDD ::= SEQUENCE {
    protocolIEs
                                    ProtocolIE-Container
                                                                {{RadioLinkAdditionResponseTDD-IEs}},
    protocolExtensions
                                    ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
                                                                                                                              OPTIONAL.
RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-RL-InformationResponse-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD PRESENCE optional }
    --Mandatory for 3.84Mcps TDD only
    { ID id-CriticalityDiagnostics
                                            CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                   PRESENCE optional },
RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
                                        RL-ID,
    uRA-Information
                                        URA-Information
                                                            OPTIONAL,
    sAI
                                        SAI,
                                        GA-Cell
    gA-Cell
                                                    OPTIONAL.
    qA-AccessPointPosition
                                        GA-AccessPointPosition OPTIONAL.
    ul-TimeSlot-ISCP-Info
                                        UL-TimeSlot-ISCP-Info,
    minUIL-STR
                                        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,
                                        ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
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 },
UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-AdditionRspTDD
                                                                                                                                      PRESENCE
mandatory }
UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD
UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID
                               CCTrCH-ID,
    ul-DPCH-Information
                                    UL-DPCH-InformationList-RL-AdditionRspTDD
                                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }
UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
     ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
                                    RepetitionLength,
    repetitionLength
    tDD-DPCHOffset
                                   TDD-DPCHOffset,
    uL-Timeslot-Information
                                    UL-Timeslot-Information,
                                    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 ::= SEOUENCE {
    cCTrCH-ID
                                CCTrCH-ID.
    dl-DPCH-Information
                                    DL-DPCH-InformationList-RL-AdditionRspTDD
                                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
PRESENCE optional } | -- this is a DCH
    { ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                     EXTENSION DL-Power
type CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                     EXTENSION DL-Power
                                                                                                            PRESENCE optional }, -- this is a DCH
type CCTrCH power
DL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD} }
DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
      ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD
                                                            CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory
DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
                                    DL-Timeslot-Information,
    dL-Timeslot-Information
                                    ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication
                                        DiversityIndication-RL-AdditionRspTDD,
    iE-Extensions
                                    ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
DCH-Information-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining
                    Combining-RL-AdditionRspTDD,
                   NonCombining-RL-AdditionRspTDD
    nonCombining
Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
    iE-Extensions
                                ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse
                                                                                                        PRESENCE optional },
                                            CRITICALITY ignore EXTENSION DCH-InformationResponse
    . . .
```

```
NonCombining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse
                              DCH-InformationResponse,
   iE-Extensions
                                  ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationListIEs-RL-AdditionRspTDD}}
DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIE-RL-AdditionRspTDD
                                                   CRITICALITY ignore TYPE DSCH-InformationListIE-RL-AdditionRspTDD
                                                                                                                      PRESENCE mandatory
DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-AdditionRspTDD
DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID
                          DSCH-ID,
    transportFormatManagement TransportFormatManagement,
    dSCH-FlowControlInformation
                                 DSCH-FlowControlInformation,
    diversityIndication DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
   iE-Extensions
                  . . .
DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
                          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-RL-AdditionRspTDD2 OPTIONAL,
    diversityIndication
```

```
-- 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 ::= {
    { ID id-RL-LCR-InformationResponse-RL-AdditionRspTDD
                                                            CRITICALITY ignore
                                                                                     EXTENSION
                                                                                                 RL-LCR-InformationResponse-RL-AdditionRspTDD
    PRESENCE optional
    --Mandatory for 1.28Mcps TDD only
    { ID id-Active-MBMS-Bearer-ServiceTDD-PFL
                                                             CRITICALITY ignore
                                                                                     EXTENSION Active-MBMS-Bearer-Service-ListTDD-PFL
    PRESENCE optional } |
    { ID id-HSDSCH-TDD-Information-Response
                                                             CRITICALITY ignore
                                                                                     EXTENSION HSDSCH-TDD-Information-Response
    PRESENCE optional }
    { ID id-DSCH-RNTI
                                                                                     EXTENSION DSCH-RNTI
                                                             CRITICALITY ignore
    PRESENCE optional } |
    { ID id-RL-InformationResponse-RL-AdditionRspTDD768
                                                             CRITICALITY ignore
                                                                                     EXTENSION RL-InformationResponse-RL-AdditionRspTDD768
        PRESENCE optional } |
    { ID id-E-DCH-Information-Response
                                                             CRITICALITY ignore
                                                                                     EXTENSION E-DCH-Information-Response
    PRESENCE optional }
    { ID id-E-DCH-768-Information-Response
                                                             CRITICALITY ignore
                                                                                     EXTENSION E-DCH-768-Information-Response
    PRESENCE optional }|
    { ID id-E-DCH-LCR-Information-Response
                                                            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 },
RL-LCR-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID
                                RL-ID,
    uRA-Information
                                URA-Information,
    sAI
                                SAI,
    qA-Cell
                                GA-Cell
                                            OPTIONAL,
    gA-AccessPointPosition
                                GA-AccessPointPosition OPTIONAL,
    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-Information
                                        UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                             OPTIONAL,
```

```
dl-CCTrCH-LCR-Information
                                        DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                            OPTIONAL,
    dCH-InformationResponse
                                        DCH-InformationResponseList-RL-AdditionRspTDD
                                                                                            OPTIONAL.
                                        DSCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL,
    dsch-LCR-InformationResponse
                                            USCH-LCR-InformationResponse-RL-AdditionRspTDD OPTIONAL,
    usch-LCR-InformationResponse
    neighbouring-UMTS-CellInformation
                                                Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
                                                Neighbouring-GSM-CellInformation
                                                                                             OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs} }
    OPTIONAL,
RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                    CRITICALITY ignore EXTENSION
                                                                                   GA-CellAdditionalShapes
                                                                                                                             PRESENCE optional }
     ID id-HCS-Prio
                                                    CRITICALITY ignore EXTENSION
                                                                                   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
                                                                                                                             PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION ControlGAP
    -- Applicable to 1.28Mcps TDD only
    { ID id-UARFCNforNt
                                                                                                                             PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION UARFON
    -- Applicable to 1.28Mcps TDD only
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                             PRESENCE optional } |
    { ID id-IdleIntervalInformation
                                                                                                                             PRESENCE optional },
                                                            CRITICALITY ignore EXTENSION IdleIntervalInformation
UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD }}
UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    ID id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD
    PRESENCE mandatory }
UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEOUENCE {
    cCTrCH-ID
                                CCTrCH-ID,
    ul-DPCH-LCR-Information
                                        UL-DPCH-LCR-InformationList-RL-AdditionRspTDD
                                                                                            OPTIONAL,
                                    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 ::= {
                                                                CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
    { ID id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
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 }
DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD
DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   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 ::= {
                                                            CRITICALITY ignore TYPE DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD PRESENCE
   { ID id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD
mandatory }
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
   repetitionPeriod
                                 RepetitionPeriod,
   repetitionLength
                                 RepetitionLength,
   tDD-DPCHOffset
                                 TDD-DPCHOffset,
   dL-TimeslotLCR-Information
                                 DL-TimeslotLCR-Information,
   tSTD-Indicator
                                 TSTD-Indicator.
   iE-Extensions
                                 ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL.
DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-AdditionRspTDD}}
```

```
DCH-InformationResponseListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    ID id-DCH-InformationResponse CRITICALITY ignore
                                                           TYPE DCH-InformationResponse PRESENCE mandatory }
DSCH-LCR-InformationResponse-RL-AdditionRspTDD ::= 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 OPTIONAL,
    bindingID
    transportLayerAddress TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
                            ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtlEs 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,
                               TransportFormatManagement,
    transportFormatManagement
    diversityIndication
                               DiversityIndication-RL-AdditionRspTDD2
                                                                            OPTIONAL,
                               ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationResponse-RL-AdditionRspTDD768 ::= SEQUENCE {
    rL-ID
                                       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,
                                                                                    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-RL-AdditionRspTDD
    uSCH-InformationResponse
                                                                                    OPTIONAL,
                                      Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-UMTS-CellInformation
    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 },
    . . .
UL-CCTrCHInformationList-RL-AdditionRspTDD768 ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768}}
UL-CCTrCHInformationListIEs-RL-AdditionRspTDD768 RNSAP-PROTOCOL-IES ::= {
    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-InformationList-RL-AdditionRspTDD768
    ul-DPCH-Information768
                                                                                        OPTIONAL,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
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,
                                     ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
   iE-Extensions
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, -- this is a DCH type CCTrCH power
   cCTrCH-Maximum-DL-Power
                                     DL-Power
                                                 OPTIONAL, -- this is a DCH type CCTrCH power
   cCTrCH-Minimum-DL-Power
                                     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 ::= SEOUENCE
   repetitionPeriod
                                  RepetitionPeriod,
   repetitionLength
                                  RepetitionLength,
                                 TDD-DPCHOffset,
   tDD-DPCHOffset
   dL-Timeslot-Information768
                                 DL-Timeslot-Information768,
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs} } OPTIONAL,
```

```
DL-DPCH-InformationItem-RL-AdditionRspTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- RADIO LINK ADDITION FAILURE FDD
  *****************
RadioLinkAdditionFailureFDD ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{RadioLinkAdditionFailureFDD-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}
                                                                                                                       OPTIONAL,
RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-AdditionFailureFDD
                                                             CRITICALITY
                                                                             ignore
                                                                                              TYPE CauseLevel-RL-AdditionFailureFDD
           PRESENCE
                     mandatory }|
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional },
    . . .
CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
   generalCause
                       GeneralCauseList-RL-AdditionFailureFDD,
                      RLSpecificCauseList-RL-AdditionFailureFDD,
   rLSpecificCause
GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
   cause
   iE-Extensions
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }
                                                                                                                                OPTIONAL,
GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                 UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD
                                                                 Successful RL-Information Response List-RL-Addition Failure FDD 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-
AdditionFailureFDD
                        PRESENCE mandatory
UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID
                                    RL-ID,
    cause
    iE-Extensions
                                    ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
UnsuccessfulrL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Successful RL-Information Response List-RL-Addition Failure FDD: = SEQUENCE (SIZE (0...maxNrOfRLs-2)) OF Protocol IE-Single-Container { Successful RL-
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 {
    rL-ID
                                        RL-ID.
    rL-Set-ID
                                        RL-Set-ID,
    uRA-Information
                                        URA-Information
                                                            OPTIONAL,
    sAI
                                        SAI,
    qA-Cell
                                        GA-Cell
                                                    OPTIONAL,
    qA-AccessPointPosition
                                        GA-AccessPointPosition
    received-total-wide-band-power
                                        Received-total-wide-band-power,
    not-Used-secondary-CCPCH-Info
                                                NULL
                                                            OPTIONAL,
    dl-CodeInformation
                                        DL-CodeInformationList-RL-AdditionFailureFDD,
    diversityIndication
                                        DiversityIndication-RL-AdditionFailureFDD.
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    sSDT-SupportIndicator
                                        SSDT-SupportIndicator,
    minUL-SIR
                                        UL-SIR,
    maxUL-SIR
                                        UL-SIR,
    closedlooptimingadjustmentmode
                                        Closedlooptimingadjustmentmode OPTIONAL,
    maximumAllowedULTxPower
                                        MaximumAllowedULTxPower,
    maximumDLTxPower
                                        DL-Power,
    minimumDLTxPower
                                        DL-Power,
    neighbouring-UMTS-CellInformation
                                        Neighbouring-UMTS-CellInformation OPTIONAL,
                                        Neighbouring-GSM-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation
    primaryCPICH-Power
                                        PrimarvCPICH-Power,
    pC-Preamble
                                        PC-Preamble,
    sRB-Delav
                                        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
                                                    CRITICALITY ignore EXTENSION HCS-Prio
     ID id-HCS-Prio
                                                                                                                      PRESENCE optional
     ID id-Active-MBMS-Bearer-ServiceFDD-PFL
                                                    CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-ListFDD-PFL
                                                                                                                      PRESENCE optional
     ID id-EDCH-RLSet-Id
                                                    CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                                      PRESENCE optional
     ID id-EDCH-FDD-DL-ControlChannelInformation
                                                    CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                      PRESENCE optional
     ID id-Initial-DL-DPCH-TimingAdjustment
                                                    CRITICALITY ignore EXTENSION DL-DPCH-TimingAdjustment
                                                                                                                      PRESENCE optional
     ID id-Neighbouring-E-UTRA-CellInformation
                                                    CRITICALITY ignore EXTENSION Neighbouring-E-UTRA-CellInformation
                                                                                                                      PRESENCE optional } |
     ID id-HSDSCH-PreconfigurationInfo
                                                    CRITICALITY ignore EXTENSION HSDSCH-PreconfigurationInfo
                                                                                                                      PRESENCE optional }
                                                    CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
     ID id-F-DPCH-SlotFormat
                                                                                                                      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
                                        CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                      PRESENCE optional },
   . . .
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 },
  *****************
-- RADIO LINK ADDITION FAILURE TDD
  *****************
RadioLinkAdditionFailureTDD ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                       {{RadioLinkAdditionFailureTDD-IEs}},
   protocolExtensions
                               ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}
                                                                                                             OPTIONAL,
RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
     { ID id-CriticalityDiagnostics
                                CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                      PRESENCE optional },
CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
   qeneralCause GeneralCauseList-RL-AdditionFailureTDD,
   rLSpecificCause
                  RLSpecificCauseList-RL-AdditionFailureTDD,
   . . .
GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
   cause
   iE-Extensions
                            ProtocolExtensionContainer { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs} }
                                                                                                     OPTIONAL,
   . . .
GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
   unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD
                                                        Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
                                                        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 ::= {
```

```
TYPE UnsuccessfulRL-InformationResponse-RL-
          id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD
                                                                       CRITICALITY ignore
AdditionFailureTDD PRESENCE mandatory}
UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD ::= SEQUENCE
                              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 {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{RadioLinkDeletionRequest-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}}
                                                                                                                 OPTIONAL,
RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= {
    PRESENCE mandatory
    . . .
RL-InformationList-RL-DeletionRqst
                                        ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-DeletionRgst-
IEs} }
RL-Information-RL-DeletionRqst-IEs RNSAP-PROTOCOL-IES ::=
    { ID id-RL-Information-RL-DeletionRqst
                                            CRITICALITY notify TYPE RL-Information-RL-DeletionRqst
                                                                                                 PRESENCE mandatory
RL-Information-RL-DeletionRqst ::= SEQUENCE {
   rL-ID
   iE-Extensions
                              ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs} } OPTIONAL,
RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::=
```

```
-- RADIO LINK DELETION RESPONSE
  *****************
RadioLinkDeletionResponse ::= SEQUENCE {
                                                        {{RadioLinkDeletionResponse-IEs}},
   protocolIEs
                               ProtocolIE-Container
   protocolExtensions
                               ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
                                                                                                            OPTIONAL,
RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-CriticalityDiagnostics
                                CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                       PRESENCE optional },
RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     -- RADIO LINK RECONFIGURATION PREPARE FDD
  *****************
RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
   protocolIEs
                                                        {{RadioLinkReconfigurationPrepareFDD-IEs}},
                               ProtocolIE-Container
   protocolExtensions
                               ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
                                                                                                                    OPTIONAL,
RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                   CRITICALITY reject TYPE AllowedQueuingTime
                                                                                     PRESENCE optional }
     ID id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                     CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                 PRESENCE optional
   { ID id-DL-DPCH-Information-RL-ReconfPrepFDD
                                                     CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD
                                                                                                                 PRESENCE optional
     ID id-FDD-DCHs-to-Modify
                                CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                          PRESENCE optional
     ID id-DCHs-to-Add-FDD
                            CRITICALITY reject TYPE DCH-FDD-Information
                                                                          PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD
                                                                                                 PRESENCE optional }
     ID id-RL-InformationList-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD PRESENCE optional }
     ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE
optional },
UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
   ul-ScramblingCode
                               UL-ScramblingCode
                                                     OPTIONAL,
                               UL-SIR
   ul-SIRTarget
                                                     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 OPTIONAL.
   ul-DPCCH-SlotFormat
                                   UL-DPCCH-SlotFormat
                                                          OPTIONAL,
   diversityMode
                                   DiversityMode
                                                          OPTIONAL,
   not-Used-sSDT-CellIDLength
                                   NULL
                                               OPTIONAL,
   not-Used-s-FieldLength
                                   NULL
                                                  OPTIONAL,
                                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    EXTENSION UL-DPDCHIndicatorEDCH PRESENCE optional },
DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
                                          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 } } OPTIONAL,
   iE-Extensions
    . . .
DL-DPCH-Power-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PowerOffsetInformation-RL-ReconfPrepFDD ::= SEQUENCE {
   pO1-ForTFCI-Bits
                                           PowerOffset,
   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 ::= SEOUENCE {
    dCH-ID
                                   ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-ReconfPrepFDD
                                           ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-ReconfPrepFDD-
IEs} }
RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-ReconfPrepFDD CRITICALITY reject TYPE RL-Information-RL-ReconfPrepFDD
                                                                                                             PRESENCE mandatory
RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID
                               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 }
                                                                        EXTENSION RL-Specific-EDCH-Information
                                                                                                                   PRESENCE optional } |
     ID id-RL-Specific-EDCH-Information
                                               CRITICALITY reject
     ID id-EDCH-RL-Indication
                                               CRITICALITY reject
                                                                        EXTENSION EDCH-RL-Indication
                                                                                                                   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
                                                           CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify
                                                                                                                               PRESENCE optional }
                                                                                                                               PRESENCE optional }
     ID id-HSDSCH-MACdFlows-to-Add
                                                           CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information
     ID id-HSDSCH-MACdFlows-to-Delete
                                                                                                                               PRESENCE optional }
                                                           CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete
     ID id-HSPDSCH-RL-ID
                                                           CRITICALITY reject EXTENSION RL-ID
                                                                                                                               PRESENCE optional }
     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 }
     ID id-EDCH-FDD-Information-To-Modify
                                                            CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify
                                                                                                                               PRESENCE optional }
     ID id-EDCH-MACdFlows-To-Add
                                                            CRITICALITY reject EXTENSION EDCH-MACdFlows-Information
                                                                                                                               PRESENCE optional }
     ID id-EDCH-MACdFlows-To-Delete
                                                            CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete
                                                                                                                               PRESENCE optional }
     ID id-Serving-EDCHRL-Id
                                                            CRITICALITY reject EXTENSION EDCH-Serving-RL
                                                                                                                               PRESENCE optional }
     ID id-F-DPCH-Information-RL-ReconfPrepFDD
                                                            CRITICALITY reject EXTENSION F-DPCH-Information-RL-ReconfPrepFDD PRESENCE optional
     ID id-Fast-Reconfiguration-Mode
                                                            CRITICALITY ignore EXTENSION Fast-Reconfiguration-Mode
                                                                                                                               PRESENCE optional } |
     ID id-CPC-Information
                                                            CRITICALITY reject EXTENSION CPC-Information
                                                                                                                               PRESENCE optional }
     ID id-Additional-HS-Cell-Information-RL-Reconf-Prep
                                                           CRITICALITY reject EXTENSION Additional-HS-Cell-Information-RL-Reconf-Prep
                                                                                                                                         PRESENCE
optional},
Additional-HS-Cell-Information-RL-Reconf-Prep ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                    RL-ID,
    c-ID
                                                    C-ID
                                                                                                    OPTIONAL,
    hS-DSCH-FDD-Secondary-Serving-Information
                                                    HS-DSCH-FDD-Secondary-Serving-Information
                                                                                                    OPTIONAL,
    hS-DSCH-Secondary-Serving-Information-To-Modify HS-DSCH-Secondary-Serving-Information-To-Modify OPTIONAL,
                                                    HS-DSCH-Secondary-Serving-Remove OPTIONAL,
    hS-HS-DSCH-Secondary-Serving-Remove
                                    ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs} } OPTIONAL,
    iE-Extensions
Additional-HS-Cell-Information-RL-Reconf-Prep-ItemIEs-ExtIEs
                                                               RNSAP-PROTOCOL-EXTENSION ::=
F-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE
    powerOffsetInformation
                                    PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD,
    fdd-dl-TPC-DownlinkStepSize
                                    FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease
                                   LimitedPowerIncrease,
    innerLoopDLPCStatus
                                   InnerLoopDLPCStatus,
                                    ProtocolExtensionContainer { { F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} }
    iE-Extensions
                                                                                                                               OPTIONAL,
F-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
     ID id-F-DPCH-SlotFormatSupportRequest
                                               CRITICALITY reject
                                                                            EXTENSION F-DPCH-SlotFormatSupportReguest
                                                                                                                         PRESENCE optional } |
     ID id-F-DPCH-SlotFormat
                                           CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                PRESENCE optional },
    . . .
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD ::= SEOUENCE {
    po2-ForTPC-Bits
                                    PowerOffset,
    -- This IE shall be ignored by DRNS
    iE-Extensions
                                    ProtocolExtensionContainer { { PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs} }
                                                                                                                               OPTIONAL,
PowerOffsetInformation-F-DPCH-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK RECONFIGURATION PREPARE TDD
  **********************
RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
                                                       {{RadioLinkReconfigurationPrepareTDD-IEs}},
   protocolIEs
                               ProtocolIE-Container
                               ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL,
   . . .
RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                  CRITICALITY reject TYPE AllowedQueuingTime
                                                                                    PRESENCE optional } |
     ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDDPRESENCE optional
    ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
                                                        CRITICALITY notify TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE
optional } |
   { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                                        CRITICALITY notify TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD PRESENCE
     ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDDPRESENCE 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 } |
                               CRITICALITY reject TYPE TDD-DCHs-to-Modify
     ID id-TDD-DCHs-to-Modify
                                                                         PRESENCE optional
     ID id-DCHs-to-Add-TDD
                           CRITICALITY reject TYPE DCH-TDD-Information
                                                                         PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfPrepTDD
                                         CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
                                                                                               PRESENCE optional } |
     ID id-DSCH-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepTDD
                                                                                               PRESENCE optional }
     ID id-DSCHs-to-Add-TDD
                               CRITICALITY reject TYPE DSCH-TDD-Information
                                                                                PRESENCE optional } |
     ID id-DSCH-DeleteList-RL-ReconfPrepTDD
                                         CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepTDD
                                                                                               PRESENCE optional
                                                                                                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 },
   . . .
                                             ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
AddInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
   UL-CCTrCH-AddInformation-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                           CCTrCH-ID,
   tFCS
                           TFCS,
   tFCI-Coding
                           TFCI-Coding,
   punctureLimit
                               PunctureLimit,
   iE-Extensions
                               ProtocolExtensionContainer { {UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
```

```
UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-SIRTarget
                            CRITICALITY reject
                                                   EXTENSION
                                                                  UL-SIR
                                                                              PRESENCE optional } |
   -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD or 7.68Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional
      },
   -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD or 7.68Mcps TDD
                                                 ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
ModifyInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD CRITICALITY notify TYPE UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD PRESENCE
mandatory }
UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                    CCTrCH-ID.
   tFCS
                           TFCS
                                        OPTIONAL,
                          TFCI-Coding
                                                   OPTIONAL.
   tFCI-Coding
   punctureLimit
                             PunctureLimit
                                                           OPTIONAL,
                                 ProtocolExtensionContainer { {UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
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
                                                 ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
DeleteInformation-RL-ReconfPrepTDD-IEs} }
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
   mandatory }
UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD ::= SEQUENCE
   cCTrCH-ID
                             CCTrCH-ID,
                                 ProtocolExtensionContainer { {UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
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 ::= {
   mandatory }
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
                           CCTrCH-ID,
   cCTrCH-ID
   tFCS
                           TFCS.
   tFCI-Coding
                           TFCI-Coding.
   punctureLimit
                              PunctureLimit.
   cCTrCH-TPCList
                              CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
   iE-Extensions
                              ProtocolExtensionContainer { {DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-DownlinkStepSize PRESENCE optional
      },
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                               ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                              ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
ModifyInformation-RL-ReconfPrepTDD-IEs} }
DL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
   mandatory }
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                           CCTrCH-ID,
                                     OPTIONAL,
   tFCS
                           TFCS
   tFCI-Coding
                           TFCI-Coding
                                                OPTIONAL,
   punctureLimit
                              PunctureLimit
   cCTrCH-TPCList
                              CCTrCH-TPCModifyList-RL-ReconfPrepTDD
                                                                    OPTIONAL,
                              ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
```

```
DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   optional},
   . . .
CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   cCTrCH-ID
                              CCTrCH-ID,
                              ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
                                              ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }
DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IES RNSAP-PROTOCOL-IES ::= {
   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
   iE-Extensions
                           ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-ReconfPrepTDD
DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
   dscH-ID
                                 DSCH-ID,
   dl-ccTrCHID
                                 CCTrCH-ID
                                                             OPTIONAL,
```

```
trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet
                                        TransportFormatSet
                                                                         OPTIONAL,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                         OPTIONAL.
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                         OPTIONAL,
                                                                         OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
                                     ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass
                                                                                                             PRESENCE optional } |
    { ID id-BindingID
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 BindingID
                                                                                                            PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                            CRITICALITY ignore
                                                                                                            PRESENCE optional } |
                                                                     EXTENSION
                                                                                 TransportLayerAddress
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 TnlOos
                                                                                                            PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    . . .
DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-ReconfPrepTDD
DSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dscH-ID
    iE-Extensions
                                    ProtocolExtensionContainer { {DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    . . .
DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-ReconfPrepTDD
USCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID
                                        USCH-ID,
    ul-ccTrCHID
                                        CCTrCH-ID
                                                                         OPTIONAL,
    trChSourceStatisticsDescriptor
                                        TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet
                                        TransportFormatSet
                                                                         OPTIONAL,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                         OPTIONAL,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                         OPTIONAL,
                                                                         OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    rb-Info
                                        RB-Info
    iE-Extensions
                                        ProtocolExtensionContainer { {USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-TrafficClass
                                    CRITICALITY ignore EXTENSION TrafficClass
                                                                                              PRESENCE optional } |
     ID id-BindingID
                                    CRITICALITY ignore EXTENSION
                                                                     BindingID
                                                                                 PRESENCE
                                                                                                 optional
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 TransportLayerAddress
                                                                                                             PRESENCE
                                                                                                                        optional }
```

```
-- Shall be ignored if bearer establishment with ALCAP.
   { ID id-TnlOos
                                      CRITICALITY
                                                      ignore
                                                                  EXTENSION
                                                                             TnlOos
                                                                                         PRESENCE
                                                                                                       optional },
    . . .
USCH-DeleteList-RL-ReconfPrepTDD ::= SEOUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-ReconfPrepTDD
USCH-DeleteItem-RL-ReconfPrepTDD ::= SEOUENCE {
   11SCH-TD
                                       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
                                                                                                  PrimaryCCPCH-RSCP PRESENCE optional }|
                                                              CRITICALITY ignore
                                                                                      EXTENSION
     ID id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD
                                                              CRITICALITY ignore
                                                                                                 DL-TimeSlot-ISCP-Info PRESENCE optional }
                                                                                     EXTENSION
     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}|
     ID id-HSDSCH-MACdFlows-to-Add
                                              CRITICALITY reject
                                                                      EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                      PRESENCE optional |
     ID id-HSDSCH-MACdFlows-to-Delete
                                              CRITICALITY reject
                                                                      EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                PRESENCE optional } |
     ID id-HSPDSCH-RL-ID
                                              CRITICALITY reject
                                                                      EXTENSION RL-ID
                                                                                                 PRESENCE optional } |
     ID id-PDSCH-RL-ID
                                                              EXTENSION RL-ID
                                                                                  PRESENCE optional } |
                                  CRITICALITY ignore
     ID id-UL-Synchronisation-Parameters-LCR
                                                      CRITICALITY ignore
                                                                             EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                               PRESENCE
    optional } | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
     ID id-RL-Information-RL-ReconfPrepTDD
                                              CRITICALITY ignore
                                                                      EXTENSION RL-Information-RL-ReconfPrepTDD PRESENCE
                                                                                                                              optional }|
                                                              EXTENSION PrimaryCCPCH-RSCP-Delta
     ID id-PrimaryCCPCH-RSCP-Delta
                                       CRITICALITY ignore
                                                                                                    PRESENCE
                                                                                                                optional }
     ID id-E-DCH-Information-Reconfig
                                              CRITICALITY reject
                                                                      EXTENSION E-DCH-Information-Reconfig
                                                                                                                   PRESENCE optional }
                                                                                                                   PRESENCE optional }
     ID id-E-DCH-Serving-RL-ID
                                                                      EXTENSION RL-ID
                                              CRITICALITY reject
     ID id-E-DCH-768-Information-Reconfig
                                                                      EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                   PRESENCE optional }
                                              CRITICALITY reject
                                                                                                                PRESENCE optional }
     ID id-E-DCH-LCR-Information-Reconfig
                                              CRITICALITY reject
                                                                      EXTENSION E-DCH-LCR-Information-Reconfig
     ID id-NeedforIdleInterval
                                                      CRITICALITY ignore EXTENSION NeedforIdleInterval
                                                                                                                   PRESENCE optional } |
     ID id-CPC-InformationLCR
                                                      CRITICALITY reject EXTENSION CPC-InformationLCR
                                                                                                                            PRESENCE optional },
RL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-InformationIE-RL-ReconfPrepTDD
RL-InformationIE-RL-ReconfPrepTDD ::= SEOUENCE {
   rL-ID
                                      RL-ID,
   rL-Specific-DCH-Info
                                      RL-Specific-DCH-Info
                                                                      OPTIONAL,
   iE-Extensions
                                      OPTIONAL,
RL-InformationIE-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
-- RADIO LINK RECONFIGURATION READY FDD
  *****************
RadioLinkReconfigurationReadyFDD ::= SEQUENCE {
                                                  {{RadioLinkReconfigurationReadyFDD-IEs}},
   protocolIEs
                            ProtocolIE-Container
   protocolExtensions
                            ProtocolExtensionContainer {{RadioLinkReconfigurationReadyFDD-Extensions}}
                                                                                                       OPTIONAL,
   . . .
RadioLinkReconfigurationReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE
optional } |
   { ID id-CriticalityDiagnostics
                                   CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                              PRESENCE optional },
   . . .
                                         ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-
RL-InformationResponseList-RL-ReconfReadyFDD
RL-ReconfReadyFDD-IEs} }
RL-InformationResponse-RL-ReconfReadyFDD-IES RNSAP-PROTOCOL-IES ::= {
   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
                               NULL
                                                                                                      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}
   PRESENCE
optional }
   { ID id-Secondary-CPICH-Information-Change
                                            CRITICALITY ignore EXTENSION Secondary-CPICH-Information-Change
                                                                                                        PRESENCE
optional }
    ID id-EDCH-FDD-InformationResponse
                                            CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse
                                                                                                        PRESENCE optional
   { ID id-EDCH-RLSet-Id
                                            CRITICALITY ignore EXTENSION RL-Set-ID
                                                                                                        PRESENCE
optional }|
```

```
{ ID id-EDCH-FDD-DL-ControlChannelInformation
                                                  CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation
                                                                                                                      PRESENCE
optional }
   { ID id-F-DPCH-SlotFormat
                                                  CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                                                                      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
                                        CRITICALITY ignore
                                                                                                           PRESENCE optional
     ID id-MAChs-ResetIndicator
                                                                 EXTENSION MAChs-ResetIndicator
     ID id-Fast-Reconfiguration-Permission CRITICALITY ignore
                                                                 EXTENSION Fast-Reconfiguration-Permission
                                                                                                           PRESENCE optional }
     ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                            CRITICALITY ignore
                                                                                                EXTENSION Continuous-Packet-Connectivity-
HS-SCCH-Less-Information-Response
                               PRESENCE optional }
   EXTENSION Additional-HS-Cell-RL-Reconf-Response
                                                                                                                   PRESENCE optional },
Additional-HS-Cell-RL-Reconf-Response ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-RL-Reconf-Response-ItemIEs
Additional-HS-Cell-RL-Reconf-Response-ItemIEs ::=SEQUENCE{
   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
                                                         {{RadioLinkReconfigurationReadyTDD-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{RadioLinkReconfigurationReadyTDD-Extensions}}
                                                                                                                     OPTIONAL,
```

```
RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-ReconfReadyTDD
                          CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfReadyTDD
                                                                                            PRESENCE optional
    --This RL-InformationResponse-RL-ReconfReadyTDD is for the first RL repetition in the list.
    --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfReadyTDD.
    { ID id-CriticalityDiagnostics
                                          CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                              PRESENCE optional },
    . . .
RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE {
    rL-ID
                                  RL-ID.
                                  UL-SIR
   max-UL-SIR
                                                  OPTIONAL,
   min-UL-SIR
                                  UL-SIR
                                                  OPTIONAL,
   maximumDLTxPower
                                  DL-Power
                                                  OPTIONAL,
   minimumDLTxPower
                                                  OPTIONAL,
                                  DL-Power
    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,
                                  DCH-InformationResponseList-RL-ReconfReadyTDD OPTIONAL,
    dCHInformationResponse
                                  DSCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL,
    dSCHsToBeAddedOrModified
                                  USCHToBeAddedOrModified-RL-ReconfReadvTDD
    uSCHsToBeAddedOrModified
                                                                            OPTIONAL,
                                  ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs} }
    iE-Extensions
RL-InformationResponse-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-TimingAdvanceCtrl-LCR
                                                                                                                        PRESENCE optional } |
                                                         CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
    --For 1.28Mcps TDD only
    { ID id-secondary-LCR-CCPCH-Info-TDD
                                                                                                                        PRESENCE optional } |
                                                          CRITICALITY ignore EXTENSION Secondary-LCR-CCPCH-Info-TDD
    --For 1.28Mcps TDD only
    { ID id-secondary-CCPCH-Info-RL-ReconfReadyTDD768
                                                                                                                        PRESENCE optional } |
                                                          CRITICALITY ignore EXTENSION Secondary-CCPCH-Info-TDD768
     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-DeleteInformation
                                  UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
                                                                                            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
                                                                                             EXTENSION UL-DPCH-LCR-InformationAddList-RL-
                                                                     CRITICALITY ignore
ReconfReadvTDD
                    PRESENCE optional }
    --For 1.28Mcps TDD only
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD768
                                                                    CRITICALITY ignore
                                                                                             EXTENSION UL-DPCH-InformationAddList-RL-
ReconfReadvTDD768
                        PRESENCE optional },
    --For 7.68Mcps TDD only
    . . .
UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
                                    RepetitionLength,
    repetitionLength
                                    TDD-DPCHOffset,
    tDD-DPCHOffset
                                    UL-TimeslotLCR-Information,
    uL-TimeslotLCR-Info
                                    ProtocolExtensionContainer { {UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-LCR-InformationAddItem-RL-ReconfReadvTDD-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 ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD
                                                                                                                                          PRESENCE
optional }
UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod,
    repetitionLength
                                    RepetitionLength,
    tDD-DPCHOffset
                                    TDD-DPCHOffset,
    rxTimingDeviationForTA
                                    RxTimingDeviationForTA
                                                                    OPTIONAL,
    uL-Timeslot-Information
                                    UL-Timeslot-Information,
                                    ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
UL-DPCH-InformationAddItem-RL-ReconfReadvTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-RxTimingDeviationForTAext
                                            CRITICALITY ignore
                                                                    EXTENSION RxTimingDeviationForTAext
                                                                                                          PRESENCE optional },
    . . .
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
   iE-Extensions
                                ProtocolExtensionContainer { {UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                  EXTENSION UL-TimeslotLCR-InformationModifyList-RL-
                 PRESENCE optional }
ReconfReadyTDD
   --For 1.28Mcps TDD only
   ReconfReadyTDD768
                     PRESENCE optional },
   -- 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-InformationModifyList-RL-ReconfReadyTDD
   tDD-uL-Code-LCR-Information
                                                                                          OPTIONAL,
                                ProtocolExtensionContainer { {UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD
TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
   dPCH-ID
                                DPCH-ID,
   tDD-ChannelisationCodeLCR
                                   TDD-ChannelisationCodeLCR
                                                                OPTIONAL,
```

```
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-InformationModifyItem-RL-ReconfReadyTDD
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE
   timeSlot
                                 TimeSlot,
   midambleShiftAndBurstType
                                             MidambleShiftAndBurstType
                                                                               OPTIONAL,
                                 TFCI-Presence
   tFCI-Presence
                                                        OPTIONAL,
   uL-Code-Information
                             TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD
                                                                                      OPTIONAL,
                                 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,
   iE-Extensions
                                 ProtocolExtensionContainer { { TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEOUENCE {
   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.
   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-ReconfReadyTDD ::= SEQUENCE {
   dPCH-ID
                                ProtocolExtensionContainer { {UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                              ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}}
DL-CCTrCH-InformationList-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-ReconfReadvTDD ::= SEOUENCE {
   cCTrCH-ID
                                CCTrCH-ID.
   dl-DPCH-AddInformation
                                DL-DPCH-InformationAddList-RL-ReconfReadyTDD
                                                                                  OPTIONAL.
   --For 3.84Mcps TDD only
   dl-DPCH-ModifyInformation
                               DL-DPCH-InformationModifyList-RL-ReconfReadyTDD
                                                                                  OPTIONAL,
   dl-DPCH-DeleteInformation
                                DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD
                                                                                  OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
```

```
DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                            EXTENSION DL-DPCH-LCR-InformationAddList-RL-
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
    { ID id-DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD
                                                                    CRITICALITY ignore
                                                                                            EXTENSION DL-DPCH-InformationDeleteList768-RL-
                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,
   dL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                         DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD
                                                                                                            OPTIONAL,
   --For 3.84Mcps TDD only
   iE-Extensions
                                ProtocolExtensionContainer { {DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                  EXTENSION DL-TimeslotLCR-InformationModifyList-RL-
ReconfReadvTDD
                 PRESENCE optional } |
   --For 1.28Mcps TDD only
   ReconfReadvTDD768
                     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
   tFCI-Presence
                                TFCI-Presence
                                                     OPTIONAL,
   tDD-dL-Code-LCR-Information
                                TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD
                                                                                       OPTIONAL,
   iE-Extensions
                                ProtocolExtensionContainer { {DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   . . .
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 EXTENSION
                                                                                                             DL-Power
                                                                                                                         PRESENCE optional }
     ID id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                                  EXTENSION
                                                                                                             DL-Power
                                                                                                                         PRESENCE optional },
    . . .
DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
   timeSlot
                                  TimeSlot,
   midambleShiftAndBurstTvpe
                                  MidambleShiftAndBurstTvpe
                                                                    OPTIONAL,
   tFCI-Presence
                                  TFCI-Presence
                                                        OPTIONAL,
    dL-Code-Information
                                  TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD
                                                                                           OPTIONAL,
                                  ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD
TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE
    dPCH-ID
                                  DPCH-ID,
    tDD-ChannelisationCode
                                                            OPTIONAL,
                                  TDD-ChannelisationCode
   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::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768
DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD768 ::= SEQUENCE {
    timeSlot
                                  TimeSlot,
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MidambleShiftAndBurstType768
                                                                        OPTIONAL,
   midambleShiftAndBurstType768
    t.FCI-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
   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-ReconfReadvTDD ::= SEOUENCE {
   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-ReconfReadvTDD ::= SEOUENCE (SIZE (0..maxNrOfDPCHs768)) OF DL-DPCH-InformationDeleteItem768-RL-ReconfReadvTDD
DL-DPCH-InformationDeleteItem768-RL-ReconfReadvTDD ::= SEOUENCE {
   dPCH-ID768
   iE-Extensions
                                  ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    . . .
DL-DPCH-InformationDeleteList768-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

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DCH-InformationResponseList-RL-ReconfReadyTDD
                                                    ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }
DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
   { ID id-DCH-InformationResponse
                                  CRITICALITY ignore TYPE DCH-InformationResponse
                                                                                    PRESENCE mandatory }
DSCHToBeAddedOrModified-RL-ReconfReadyTDD
                                             ::= ProtocolIE-Single-Container { {DSCHToBeAddedOrModifiedIEs-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
   transportFormatManagement TransportFormatManagement,
   dSCH-FlowControlInformation DSCH-FlowControlInformation,
                BindingID OPTIONAL,
   transportLayerAddress TransportLayerAddress OPTIONAL,
                       ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-ReconfReadvTDD-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-ReconfReadvTDD-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 }
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ID id-DSCH-RNTI
                                           CRITICALITY ignore
                                                                 EXTENSION DSCH-RNTI
                                                                                                           PRESENCE optional }
     ID id-HSDSCH-TDD-Information-Response
                                           CRITICALITY ignore
                                                                 EXTENSION HSDSCH-TDD-Information-Response
                                                                                                           PRESENCE optional }
     ID id-MAChs-ResetIndicator
                                           CRITICALITY ignore
                                                                 EXTENSION MAChs-ResetIndicator
                                                                                                           PRESENCE optional }
     ID id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD CRITICALITY ignore
                                                                                EXTENSION
                                                                                         Multiple-RL-InformationResponse-RL-
ReconfReadyTDD
                  PRESENCE
                             optional}
-- This is for RL repetitions 2 and on in RL list.
     ID id-E-DCH-Information-Response
                                           CRITICALITY ignore
                                                                 EXTENSION E-DCH-Information-Response
                                                                                                           PRESENCE optional } |
                                           CRITICALITY ignore
     ID id-E-DCH-768-Information-Response
                                                                 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 }
                                           CRITICALITY ignore
                                                                                                           PRESENCE optional }
     ID id-PowerControlGAP
                                                                 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-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-
                            PRESENCE optional },
Information-ResponseLCR
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 ::= {
                             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 ::= SEQUENCE {
```

```
{{RadioLinkReconfigurationFailure-IEs}},
                                  ProtocolIE-Container
   protocolIEs
   protocolExtensions
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationFailure-Extensions}}
                                                                                                                           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 ::= SEQUENCE
                                              Cause,
                                              ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
   iE-Extensions
                                                                                                                             OPTIONAL
GeneralCauseItem-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
   rL-ReconfigurationFailureList-RL-ReconfFailure
                                                      RL-ReconfigurationFailureList-RL-ReconfFailure
                                                      iE-Extensions
   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
   iE-Extensions
                              ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs} } OPTIONAL,
    . . .
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 {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{RadioLinkReconfigurationCancel-IEs}},
                                 ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}
   protocolExtensions
                                                                                                                      OPTIONAL,
RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
RadioLinkReconfigurationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ************
  RADIO LINK RECONFIGURATION REQUEST FDD
        ****************
RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{RadioLinkReconfigurationRequestFDD-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
                                                                                                                          OPTIONAL,
RadioLinkReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedQueuingTime
                                                      CRITICALITY reject TYPE AllowedQueuingTime
                                                                                                                         PRESENCE optional
     ID id-UL-DPCH-Information-RL-ReconfRqstFDD
                                                      CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                         PRESENCE optional
     ID id-DL-DPCH-Information-RL-ReconfRqstFDD
                                                      CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD
                                                                                                                         PRESENCE optional
     ID id-FDD-DCHs-to-Modify
                                                      CRITICALITY reject TYPE FDD-DCHs-to-Modify
                                                                                                                         PRESENCE optional
     ID id-DCHs-to-Add-FDD
                                                      CRITICALITY reject TYPE DCH-FDD-Information
                                                                                                                         PRESENCE optional
     ID id-DCH-DeleteList-RL-ReconfRqstFDD
                                                      CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD
                                                                                                                         PRESENCE optional
```

```
{ ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional
},
UL-DPCH-Information-RL-ReconfRgstFDD ::= SEQUENCE {
    t FCS
                                   TFCS
                                          OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    EXTENSION UL-DPDCHIndicatorEDCH
                                                                                              PRESENCE optional },
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
                                   TFCS OPTIONAL,
    tFCI-SignallingMode
                                   TFCI-SignallingMode OPTIONAL,
   limitedPowerIncrease
                                   LimitedPowerIncrease
                                                          OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRqstFDD
                                          ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                                   ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
DCH-DeleteItem-RL-ReconfRqstFDD-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
                                                          CRITICALITY ignore EXTENSION DL-ReferencePowerInformation
                                                                                                                            PRESENCE optional }
     ID id-HSDSCH-FDD-Information
                                                  CRITICALITY reject EXTENSION HSDSCH-FDD-Information
                                                                                                                       PRESENCE optional |
                                                                              EXTENSION HSDSCH-Information-to-Modify-Unsynchronised PRESENCE
     ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject
optional}|
     ID id-HSDSCH-MACdFlows-to-Add
                                                   CRITICALITY reject
                                                                          EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                       PRESENCE optional } |
     ID id-HSDSCH-MACdFlows-to-Delete
                                                   CRITICALITY reject
                                                                          EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                       PRESENCE optional }
                                                                                                                       PRESENCE optional |
     ID id-HSPDSCH-RL-ID
                                                   CRITICALITY reject
                                                                          EXTENSION RL-ID
     ID id-EDPCH-Information-RLReconfRequest-FDD
                                                                                                                            PRESENCE optional } |
                                                  CRITICALITY reject
                                                                          EXTENSION EDPCH-Information-RLReconfRequest-FDD
     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 }
                                                                          EXTENSION EDCH-MACdFlows-Information
                                                                                                                       PRESENCE optional }
     ID id-EDCH-MACdFlows-To-Add
                                                   CRITICALITY reject
```

```
ID id-EDCH-MACdFlows-To-Delete
                                                                          EXTENSION EDCH-MACdFlows-To-Delete
                                                                                                                      PRESENCE optional } |
                                                  CRITICALITY reject
     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-Reg
                                                          CRITICALITY reject
                                                                                  EXTENSION Additional-HS-Cell-Information-RL-Reconf-Reg
    PRESENCE optional },
Additional-HS-Cell-Information-RL-Reconf-Req
                                              ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Reconf-Req-ItemIEs
Additional-HS-Cell-Information-RL-Reconf-Reg-ItemIEs
                                                      ::=SEQUENCE{
    hSPDSCH-RL-ID
                                                  RL-ID.
   c-ID
                                                  C-ID
                                                                                             OPTIONAL.
   hS-DSCH-FDD-Secondary-Serving-Information
                                                  HS-DSCH-FDD-Secondary-Serving-Information OPTIONAL,
   hs-DsCH-FDD-secondary-serving-Information-To-Modify-Unsynchronised
                                                                         HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised
   OPTIONAL,
   hS-DSCH-Secondary-Serving-Remove
                                                  HS-DSCH-Secondary-Serving-Remove
                                                                                     OPTIONAL,
                                   ProtocolExtensionContainer { { Additional-HS-Cell-Information-RL-Reconf-Reg-ExtIEs} } OPTIONAL,
   iE-Extensions
Additional-HS-Cell-Information-RL-Reconf-Req-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
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 PRESENCE
optional
RL-ReconfigurationRequestFDD-RL-Information-IEs ::= SEQUENCE {
                           RL-Specific-DCH-Info OPTIONAL,
    rL-Specific-DCH-Info
   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 }.
   **********************
-- RADIO LINK RECONFIGURATION REQUEST TDD
  ******************
```

```
RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{RadioLinkReconfigurationRequestTDD-IEs}},
   protocolExtensions
                                ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
                                                                                                                    OPTIONAL.
RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-AllowedOueuingTime
                                   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-ReconfRgstTDD
                                                                                                                           PRESENCE
optional } |
   { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                         CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
optional } |
     ID id-TDD-DCHs-to-Modify
                                CRITICALITY reject TYPE TDD-DCHs-to-Modify
                                                                           PRESENCE optional
     ID id-DCHs-to-Add-TDD
                            CRITICALITY reject TYPE DCH-TDD-Information
                                                                           PRESENCE optional
    ID id-DCH-DeleteList-RL-ReconfRqstTDD
                                          CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD
                                                                                                 PRESENCE optional },
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 ::= {
   mandatory }
UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD ::= SEQUENCE {
                            CCTrCH-ID,
   cCTrCH-ID
   t FCS
                            TFCS
                                       OPTIONAL,
                                ProtocolExtensionContainer { {UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
   { ID id-UL-SIRTarget
                          CRITICALITY reject
                                               EXTENSION
                                                             UL-SIR
                                                                        PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
   . . .
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
                                                 ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }
UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IES RNSAP-PROTOCOL-IES ::= {
   mandatory }
UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                            CCTrCH-ID,
   iE-Extensions
                                ProtocolExtensionContainer { {UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
```

```
UL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-CCTrCH-InformationModifyList-RL-ReconfRgstTDD
                                             ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }
DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
   mandatory }
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                          CCTrCH-ID,
   t.FCS
                          TFCS
                                    OPTIONAL,
                              ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
                                              ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DL-CCTrCH-InformationDeleteList-RL-ReconfRgstTDD
InformationDeleteList-RL-ReconfRgstTDD-IEs} }
DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
   mandatory }
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   cCTrCH-ID
                          CCTrCH-ID,
   iE-Extensions
                              ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DCH-DeleteList-RL-ReconfRgstTDD
                             ::= SEOUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD
DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
   dCH-ID
   iE-Extensions
                              ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
   . . .
DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  EXTENSION Multiple-RL-ReconfigurationRequestTDD-RL-Information
              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-UnsynchronisedPRESENCE
optional}|
     ID id-HSDSCH-MACdFlows-to-Add
                                             CRITICALITY reject
                                                                    EXTENSION HSDSCH-MACdFlows-Information
                                                                                                                   PRESENCE optional |
     ID id-HSDSCH-MACdFlows-to-Delete
                                             CRITICALITY reject
                                                                    EXTENSION HSDSCH-MACdFlows-to-Delete
                                                                                                                PRESENCE optional }
     ID id-HSPDSCH-RL-ID
                                                                                                                PRESENCE optional }
                                             CRITICALITY reject
                                                                    EXTENSION RL-ID
     ID id-E-DCH-Information-Reconfig
                                             CRITICALITY reject
                                                                    EXTENSION E-DCH-Information-Reconfig
                                                                                                                PRESENCE optional } |
     ID id-E-DCH-Serving-RL-ID
                                             CRITICALITY reject
                                                                                                                PRESENCE optional }
                                                                    EXTENSION RL-ID
     ID id-E-DCH-768-Information-Reconfig
                                             CRITICALITY reject
                                                                    EXTENSION E-DCH-768-Information-Reconfig
                                                                                                                PRESENCE optional }
     ID id-E-DCH-LCR-Information-Reconfig
                                             CRITICALITY reject
                                                                    EXTENSION E-DCH-LCR-Information-Reconfig
                                                                                                             PRESENCE optional }
     ID id-CPC-InformationLCR
                                                     CRITICALITY reject EXTENSION CPC-InformationLCR
                                                                                                                         PRESENCE optional },
Multiple-RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-ReconfigurationRequestTDD-RL-Information
RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE {
   rL-ID
                          RL-ID,
    rL-Specific-DCH-Info
                          RL-Specific-DCH-Info OPTIONAL,
                          ProtocolExtensionContainer { { RL-ReconfigurationRequestTDD-RL-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-ReconfigurationRequestTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
         id-UL-Synchronisation-Parameters-LCR
                                                        CRITICALITY ignore
                                                                               EXTENSION UL-Synchronisation-Parameters-LCR
                                                                                                                              PRESENCE
    optional | -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD or 7.68Mcps TDD
    { ID id-NeedforIdleInterval
                                                     CRITICALITY ignore EXTENSION NeedforIdleInterval
                                                                                                                PRESENCE optional },
    . . .
    ******************
-- RADIO LINK RECONFIGURATION RESPONSE FDD
         ***************
RadioLinkReconfigurationResponseFDD ::= SEQUENCE {
                                                            {{RadioLinkReconfigurationResponseFDD-IEs}},
   protocolIEs
                                  ProtocolIE-Container
                                  ProtocolExtensionContainer {{RadioLinkReconfigurationResponseFDD-Extensions}}
   protocolExtensions
                                                                                                                             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
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
                                                                                                                      PRESENCE optional }
     ID id-F-DPCH-SlotFormat
                                                 CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                     ::= 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 ::= {
    ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation
                                                                                    PRESENCE optional
RadioLinkReconfigurationResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-HSDSCH-RNTI
                                             CRITICALITY ignore
                                                                    EXTENSION HSDSCH-RNTI
                                                                                                                 PRESENCE optional
     ID id-HSDSCH-FDD-Information-Response
                                             CRITICALITY ignore
                                                                    EXTENSION HSDSCH-FDD-Information-Response
                                                                                                                 PRESENCE optional
     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
optional },
  *****************
```

```
-- RADIO LINK RECONFIGURATION RESPONSE TDD
__ **********************
RadioLinkReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs
                                   ProtocolIE-Container
                                                               {{RadioLinkReconfigurationResponseTDD-IEs}},
    protocolExtensions
                                   ProtocolExtensionContainer {{RadioLinkReconfigurationResponseTDD-Extensions}}
                                                                                                                                  OPTIONAL,
RadioLinkReconfigurationResponseTDD-IES RNSAP-PROTOCOL-IES ::=
    { ID id-RL-InformationResponse-RL-ReconfRspTDD
                                                       CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfRspTDD
                                                                                                                              PRESENCE optional
    -- This RL-InformationResponse-RL-ReconfRspTDD is for the first RL repetition in the list.
    --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfRspTDD.
    { ID id-CriticalityDiagnostics
                                           CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                PRESENCE optional },
RL-InformationResponse-RL-ReconfRspTDD ::= 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,
    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
                                                       CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR
                                                                                                                  PRESENCE optional }.
    --For 1.28Mcps TDD only
DL-CCTrCH-InformationList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfRspTDD
DL-CCTrCH-InformationItem-RL-ReconfRspTDD ::= SEQUENCE {
    cCTrCH-ID
    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
                                                                       OPTIONAL,
    --For 3.84Mcps TDD and 7.68Mcps TDD only, this is a DCH type CCTrCH power
    iE-Extensions
                                               ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs} }
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-ReconfRgstTDD
                                                               DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD
                                                                                                                            OPTIONAL.
  iE-ExtensionsProtocolExtensionContainer { { DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs} }
                                                                                                                      OPTIONAL.
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-Timeslot-LCR-InformationModifyItem-RL-
ReconfRspTDD
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD
                                                         ::= SEOUENCE
    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 ::= {
                                                       ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspTDD} }
DCH-InformationResponseList-RL-ReconfRspTDD
DCH-InformationResponseListIEs-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    \{ ID {	t id-DCH-InformationResponse} CRITICALITY {	t 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-
                              PRESENCE optional },
Information-ResponseLCR
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}},
                                  ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                       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 {
                          RL-RL-FailureInd,
   rT.
   rL-Set
                          RL-Set-RL-FailureInd, --FDD only
    . . . ,
    cCTrCH
                          CCTrCH-RL-FailureInd --TDD only
RL-RL-FailureInd
                          ::= SEQUENCE {
   rL-InformationList-RL-FailureInd
                                          RL-InformationList-RL-FailureInd,
   iE-Extensions
                                          ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs} } OPTIONAL,
RLItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-FailureInd
                                          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-FailureInd-IEs}
RL-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-FailureInd
                                              CRITICALITY ignore TYPE RL-Information-RL-FailureInd
                                                                                                       PRESENCE mandatory
```

```
RL-Information-RL-FailureInd ::= SEQUENCE {
   rL-ID
    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 ::= {
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
RL-Set-InformationList-RL-FailureInd
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
                                                       {{RadioLinkPreemptionReguiredIndication-IEs}},
   protocolIEs
                               ProtocolIE-Container
   protocolExtensions
                               ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}
                                                                                                                     OPTIONAL,
RadioLinkPreemptionRequiredIndication-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationList-RL-PreemptRequiredInd
                                              CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd PRESENCE optional },
   . . .
RL-InformationList-RL-PreemptRequiredInd
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
PreemptRequiredInd} }
RL-InformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-PreemptRequiredInd
                                                    CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd
                                                                                                                 PRESENCE
mandatory }
RL-InformationItem-RL-PreemptRequiredInd::= SEOUENCE {
   rL-ID
                           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 ::= SEQUENCE (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,
   iE-Extensions
                           ProtocolExtensionContainer { { HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
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 ::= {
   PreemptRequiredInd PRESENCE mandatory
EDCH-MacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE
   eDCH-MACdFlow-ID
                          EDCH-MACdFlow-ID,
   iE-Extensions
                           ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
EDCH-MacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK RESTORE INDICATION
  ****************
RadioLinkRestoreIndication ::= SEQUENCE {
   protocolIEs
                              ProtocolIE-Container
                                                      {{RadioLinkRestoreIndication-IEs}},
                              ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}
   protocolExtensions
                                                                                                        OPTIONAL,
```

```
RadioLinkRestoreIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Reporting-Object-RL-RestoreInd CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd PRESENCE mandatory },
Reporting-Object-RL-RestoreInd ::= CHOICE {
                           RL-RL-RestoreInd, --TDD only
    rL-Set
                           RL-Set-RL-RestoreInd, --FDD only
    . . . ,
    cCTrCH
                           CCTrCH-RL-RestoreInd --TDD only
RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd
                                           RL-InformationList-RL-RestoreInd,
                                           ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RLItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-InformationList-RL-RestoreInd
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-RestoreInd-IEs}
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 {
                                   ProtocolExtensionContainer { {RL-Information-RL-RestoreInd-ExtIEs} } OPTIONAL.
   iE-Extensions
RL-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
RL-Set-RL-RestoreInd ::= SEQUENCE {
                                           RL-Set-InformationList-RL-RestoreInd,
   rL-Set-InformationList-RL-RestoreInd
   iE-Extensions
                                           ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
RL-SetItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-RL-RestoreInd
                                             ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-
RestoreInd-IEs} }
```

```
RL-Set-Information-RL-RestoreInd-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-Information-RL-RestoreInd
                                            CRITICALITY ignore TYPE RL-Set-Information-RL-RestoreInd PRESENCE mandatory
RL-Set-Information-RL-RestoreInd ::= SEQUENCE {
   rL-Set-ID
                                  RL-Set-ID,
                                  ProtocolExtensionContainer { {RL-Set-Information-RL-RestoreInd-ExtIEs} } OPTIONAL.
   iE-Extensions
RL-Set-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkRestoreIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
CCTrCH-RL-RestoreInd ::= SEQUENCE {
                                              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,
                                              ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-RestoreInd-ExtIEs } }
   iE-Extensions
                                                                                                                             OPTIONAL,
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- DOWNLINK POWER CONTROL REQUEST
__ ********************
```

```
DL-PowerControlRequest ::= SEQUENCE {
   protocolIEs
                                   ProtocolIE-Container
                                                              {{DL-PowerControlRequest-IEs}},
   protocolExtensions
                                   ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
                                                                                                                    OPTIONAL.
DL-PowerControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PowerAdjustmentType
                                            CRITICALITY ignore
                                                                        TYPE PowerAdiustmentType
                                                                                                                           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
                                            CRITICALITY ignore
                                                                                                                           PRESENCE optional }
                                                                        TYPE InnerLoopDLPCStatus
                                                                                                                          PRESENCE conditional }
    { ID id-DLReferencePowerList-DL-PC-Rast CRITICALITY ignore
                                                                        TYPE DL-ReferencePowerInformationList-DL-PC-Rgst
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
   { ID id-MaxAdjustmentStep
                                            CRITICALITY ignore
                                                                        TYPE MaxAdjustmentStep
                                                                                                                           PRESENCE conditional }
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod
                                            CRITICALITY ignore
                                                                        TYPE AdjustmentPeriod
                                                                                                                           PRESENCE conditional
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    { ID id-AdjustmentRatio
                                            CRITICALITY ignore
                                                                        TYPE ScaledAdjustmentRatio
                                                                                                                           PRESENCE conditional
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
DL-ReferencePowerInformationList-DL-PC-Rgst
                                                  ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {DL-
ReferencePowerInformation-DL-PC-Rgst-IEs} }
DL-ReferencePowerInformation-DL-PC-Rgst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-ReferencePowerInformation-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformation-DL-PC-Rqst PRESENCE mandatory
DL-ReferencePowerInformation-DL-PC-Rgst ::= SEOUENCE {
                               RL-ID,
   rI.-ID
    dl-Reference-Power
                               DL-Power,
                               ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rgst-ExtIEs} } OPTIONAL,
   iE-Extensions
DL-ReferencePowerInformation-DL-PC-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- DOWNLINK POWER TIMESLOT CONTROL REQUEST TDD
  ****************
```

```
DL-PowerTimeslotControlRequest ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                    {{DL-PowerTimeslotControlRequest-IEs}},
   protocolExtensions
                             ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}
                                                                                                         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 ::= SEQUENCE {
   protocolIEs
                             ProtocolIE-Container
                                                     {PhysicalChannelReconfigurationReguestFDD-IEs}},
                             ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestFDD-Extensions}}
   protocolExtensions
                                                                                                                 OPTIONAL,
PhysicalChannelReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
   . . .
RL-Information-PhyChReconfRqstFDD ::= SEQUENCE {
   rL-ID
                          RL-ID,
   dl-CodeInformation
                             DL-CodeInformationList-PhyChReconfRqstFDD,
                             ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstFDD-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Information-PhyChReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-F-DPCH-SlotFormat
                                    CRITICALITY ignore EXTENSION F-DPCH-SlotFormat
                                                                               PRESENCE optional },
   . . .
                                       ::= ProtocolIE-Single-Container { {DL-CodeInformationListIEs-PhyChReconfRqstFDD} }
{\tt DL-CodeInformationList-PhyChReconfRqstFDD}
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 {
   protocolIEs
                                 ProtocolIE-Container
                                                            {{PhysicalChannelReconfigurationRequestTDD-IEs}},
   protocolExtensions
                                 ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestTDD-Extensions}}
                                                                                                                                 OPTIONAL,
PhysicalChannelReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
   PRESENCE mandatory \},
   . . .
RL-Information-PhyChReconfRgstTDD ::= SEQUENCE {
                              RL-ID,
   ul-CCTrCH-Information
                              UL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                           OPTIONAL,
   dl-CCTrCH-Information
                              DL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                                           OPTIONAL,
   iE-Extensions
                              ProtocolExtensionContainer { {RL-Information-PhyChReconfRgstTDD-ExtIEs} } OPTIONAL,
RL-Information-PhyChReconfRqstTDD-ExtlEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                   CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-
                      PRESENCE optional } |
PhyChReconfRqstTDD
   -- For 3.84Mcps TDD only
    { ID id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD
                                                                   CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationListLCR-
PhyChReconfRqstTDD PRESENCE optional } |
   --For 1.28Mcps TDD only
    { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                                   CRITICALITY reject EXTENSION HSPDSCH-Timeslot-InformationList-
PhyChReconfRqstTDD768
                          PRESENCE optional } |
   --For 7.68Mcps TDD only
   { ID id-UARFCNforNt
                                                                   CRITICALITY ignore EXTENSION UARFCN
                                                                                                               PRESENCE optional },
   -- Applicable to 1.28Mcps TDD only
UL-CCTrCH-InformationList-PhyChReconfRqstTDD
                                                ::= ProtocolIE-Single-Container { { UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }
UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD
                                                            CRITICALITY reject TYPE UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
                                                                                                                                   PRESENCE
mandatory }
UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD
```

```
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID
                                    CCTrCH-ID.
    ul-DPCH-Information
                                    UL-DPCH-InformationList-PhyChReconfRgstTDD,
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-DPCH-InformationList-PhyChReconfRgstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRgstTDD}}
UL-DPCH-InformationListIEs-PhyChReconfRgstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-PhyChReconfRgstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-PhyChReconfRgstTDD
                                                                                                                                 PRESENCE mandatory }
UL-DPCH-InformationItem-PhyChReconfRgstTDD ::= SEQUENCE {
    repetitionPeriod
                                    RepetitionPeriod
                                                            OPTIONAL,
    repetitionLength
                                    RepetitionLength
                                                            OPTIONAL,
    tDD-DPCHOffset
                                    TDD-DPCHOffset
                                                            OPTIONAL,
    uL-Timeslot-InformationList-PhyChReconfRqstTDD
                                                            UL-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                                                              OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    . . .
UL-DPCH-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD
                                                                CRITICALITY reject
                                                                                         EXTENSION UL-TimeslotLCR-InformationList-
PhyChReconfRqstTDD
                        PRESENCE optional } |
    --For 1.28Mcps TDD only
    { ID id-UL-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                              CRITICALITY reject
                                                                                         EXTENSION UL-Timeslot-InformationList-
                            PRESENCE optional },
PhyChReconfRqstTDD768
    -- For 7.68Mcps TDD only
    . . .
UL-TimeslotLCR-InformationList-PhyChReconfRgstTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD
UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    timeSlotLCR
                                    TimeSlotLCR,
    midambleShiftLCR
                                    MidambleShiftLCR
                                                            OPTIONAL
    tFCT-Presence
                                    TFCI-Presence
                                                        OPTIONAL,
    uL-Code-LCR-Information
                                    TDD-UL-Code-LCR-Information
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    . . .
UL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD-ExtIES RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-PLCCH-Information-PhyChReconfRqstTDD
                                                        CRITICALITY reject
                                                                                 EXTENSION PLCCHinformation
                                                                                                              PRESENCE optional },
    . . .
```

```
UL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD
UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                   TimeSlot.
    midambleShiftAndBurstType
                                               MidambleShiftAndBurstType
                                                                                OPTIONAL.
                                                       OPTIONAL,
    tFCI-Presence
                                    TFCI-Presence
                                                           OPTIONAL,
    uL-Code-Information
                               TDD-UL-Code-Information
    iE-Extensions
                                    ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-Timeslot-InformationList-PhyChReconfRgstTDD768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRgstTDD768
UL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE
    timeSlot
                                   TimeSlot,
    midambleShiftAndBurstType768
                                   MidambleShiftAndBurstType768
                                                                        OPTIONAL,
    tFCI-Presence
                                   TFCI-Presence
                                                       OPTIONAL,
    uL-Code-Information768
                                   TDD-UL-Code-Information768
                                                                    OPTIONAL,
    iE-Extensions
                                   ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs} } OPTIONAL,
    . . .
UL-Timeslot-InformationItem-PhyChReconfRgstTDD768-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-PhyChReconfRgstTDD ::= SEOUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRgstTDD
DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE
    cCTrCH-ID
                                    CCTrCH-ID,
    dl-DPCH-Information
                                   DL-DPCH-InformationList-PhyChReconfRqstTDD,
                                    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}
DL-DPCH-InformationListIEs-PhyChReconfRqstTDD 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-PhyChReconfRqstTDD DL-Timeslot-InformationList-PhyChReconfRqstTDD
                                                                                                                                           OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} }
                                                                                                                                           OPTIONAL,
DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD
                                                                     CRITICALITY reject
                                                                                             EXTENSION DL-TimeslotLCR-InformationList-
PhyChReconfRqstTDD
                        PRESENCE optional }
    --For 1.28Mcps TDD only
    { ID id-DL-Timeslot-InformationList-PhyChReconfRqstTDD768
                                                                     CRITICALITY reject
                                                                                             EXTENSION DL-Timeslot-InformationList-
PhyChReconfRgstTDD768
                            PRESENCE optional },
    --For 7.68Mcps TDD only
    . . .
DL-TimeslotLCR-InformationList-PhyChReconfRgstTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRgstTDD
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,
                                    ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD
DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                                MidambleShiftAndBurstType
                                                                                 OPTIONAL,
    t.FCI-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-PhyChReconfRqstTDD768::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD768
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768 ::= SEQUENCE {
```

```
timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                  MidambleShiftAndBurstType768
                                                                        OPTIONAL,
    t.FCI-Presence
                                    TFCI-Presence
                                                        OPTIONAL.
    dL-Code-Information768
                                    TDD-DL-Code-Information768
                                                                    OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRgstTDD768-ExtIEs} } OPTIONAL,
DL-Timeslot-InformationItem-PhyChReconfRqstTDD768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationList-PhyChReconfRgstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
   iE-Extensions
                                                    ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs } }
           OPTIONAL,
    . . .
HSPDSCH-Timeslot-InformationItem-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRgstTDD::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF HSPDSCH-Timeslot-InformationItemLCR-
PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD::= SEQUENCE {
    timeslotLCR
                                                TimeSlotLCR,
   midambleShiftLCR
                                                MidambleShiftLCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs } }
        OPTIONAL,
    . . .
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRgstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-Timeslot-InformationList-PhyChreconfRqstTDD768 ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-
PhyChReconfRqstTDD768
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD768::= SEQUENCE {
    timeslot
                                                    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 ::= SEQUENCE {
   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 ::= SEOUENCE {
   protocolIEs
                ProtocolIE-Container
                                                     {{RadioLinkCongestionIndication-IEs}},
   protocolExtensions
                         ProtocolExtensionContainer {{RadioLinkCongestionIndication-Extensions}}
                                                                                                          OPTIONAL.
RadioLinkCongestionIndication-IES RNSAP-PROTOCOL-IES ::= {
    ID id-CongestionCause
                                        CRITICALITY ignore TYPE CongestionCause
                                                                                            PRESENCE optional } |
   ID id-RL-InformationList-RL-CongestInd CRITICALITY ignore TYPE RL-InformationList-RL-CongestInd
                                                                                            PRESENCE mandatory },
   . . .
RL-InformationList-RL-CongestInd
                                    ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-
CongestInd }
RL-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-InformationItem-RL-CongestInd
                                          CRITICALITY ignore TYPE RL-InformationItem-RL-CongestInd PRESENCE mandatory
RL-InformationItem-RL-CongestInd ::= SEQUENCE {
                                 RL-ID,
   dCH-Rate-Information
                          DCH-Rate-Information-RL-CongestInd,
                          ProtocolExtensionContainer { {RL-Information-RL-CongestInd-ExtIEs} } OPTIONAL,
   iE-Extensions
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 {
   allowed-Rate-Information
                          Allowed-Rate-Information OPTIONAL,
   iE-Extensions
                          ProtocolExtensionContainer { { DCH-Rate-InformationItem-RL-CongestInd-ExtIEs} } OPTIONAL,
   . . .
DCH-Rate-InformationItem-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Information-RL-CongestInd-ExtIES RNSAP-PROTOCOL-EXTENSION ::=
   PRESENCE optional } |
   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-ConqestInd RNSAP-PROTOCOL-IES ::= {
     ID id-EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
                                                                  CRITICALITY ignore TYPE EDCH-MacdFlowSpecificInformationItem-RL-CongestInd
    PRESENCE mandatory }
EDCH-MacdFlowSpecificInformationItem-RL-CongestInd ::= SEOUENCE {
    eDCH-MACdFlow-ID
                               EDCH-MACdFlow-ID.
    iE-Extensions
                               ProtocolExtensionContainer { { EDCH-MacdFlowSpecificInformation-RL-CongestInd-ExtIEs} } OPTIONAL,
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 ::= {
    { ID id-UC-ID
                                                          CRITICALITY ignore
                                                                             TYPE UC-ID
                                                                                                                            PRESENCE mandatory
     ID id-SAI
                                                                                                                            PRESENCE mandatory
                                                          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
    { ID id-D-RNTI
                                                          CRITICALITY ignore
                                                                              TYPE D-RNTI
                                                                                                                            PRESENCE optional
    { ID id-PropagationDelay
                                                          CRITICALITY ignore
                                                                             TYPE PropagationDelay
                                                                                                                            PRESENCE mandatory }
    { ID id-STTD-SupportIndicator
                                                          CRITICALITY ignore
                                                                              TYPE STTD-SupportIndicator
                                                                                                                            PRESENCE mandatory }
     ID id-ClosedLoopMode1-SupportIndicator
                                                          CRITICALITY ignore
                                                                              TYPE ClosedLoopMode1-SupportIndicator
                                                                                                                            PRESENCE mandatory }
```

```
{ ID id-L3-Information
                                                                                                                             PRESENCE mandatory }
                                                          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
                                                                                                                             PRESENCE optional }.
                                                          CRITICALITY ignore
                                                                              TYPE URA-Information
UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-GA-CellAdditionalShapes
                                                          CRITICALITY ignore
                                                                               EXTENSION GA-CellAdditionalShapes
                                                                                                                             PRESENCE optional }
                                                           CRITICALITY ignore
     ID id-DPC-Mode-Change-SupportIndicator
                                                                               EXTENSION DPC-Mode-Change-SupportIndicator
                                                                                                                             PRESENCE optional }
     ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore
                                                                                                                             EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired
                                                          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-CellPortionID
                                                          CRITICALITY ignore
                                                                               EXTENSION CellPortionID
                                                                                                                             PRESENCE optional
      ID id-Active-MBMS-Bearer-ServiceFDD
                                                           CRITICALITY ignore
                                                                               EXTENSION Active-MBMS-Bearer-Service-ListFDD
                                                                                                                            PRESENCE optional }
                                                          CRITICALITY ignore
     ID id-Inter-Frequency-Cell-List
                                                                               EXTENSION Inter-Frequency-Cell-List
                                                                                                                             PRESENCE optional
     ID id-ExtendedPropagationDelay
                                                          CRITICALITY ignore
                                                                               EXTENSION ExtendedPropagationDelay
                                                                                                                             PRESENCE optional
                                                          CRITICALITY ignore
                                                                               EXTENSION HSDSCH-RNTI
                                                                                                                             PRESENCE optional
     ID id-HSDSCH-RNTI
     ID id-Multiple-PLMN-List
                                                          CRITICALITY ignore
                                                                               EXTENSION Multiple-PLMN-List
                                                                                                                             PRESENCE optional
                                                          CRITICALITY ignore
                                                                                                                             PRESENCE optional }.
     ID id-E-RNTI
                                                                               EXTENSION E-RNTI
-- UPLINK SIGNALLING TRANSFER INDICATION TDD
__ *********************
UplinkSignallingTransferIndicationTDD ::= SEQUENCE {
                                                               {{UplinkSignallingTransferIndicationTDD-IEs}},
    protocolIEs
                                   ProtocolIE-Container
                                   ProtocolExtensionContainer {{UplinkSignallingTransferIndicationTDD-Extensions}}
    protocolExtensions
                                                                                                                                     OPTIONAL,
UplinkSignallingTransferIndicationTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID
                                                                                                                              PRESENCE mandatory }
                                               CRITICALITY ignore
                                                                      TYPE UC-ID
    { ID id-SAI
                                                                                                                              PRESENCE mandatory }
                                               CRITICALITY ignore
                                                                      TYPE SAI
    { ID id-GA-Cell
                                               CRITICALITY ignore
                                                                                                                              PRESENCE optional }
                                                                      TYPE GA-Cell
                                                                                                                              PRESENCE mandatory }
    { ID id-C-RNTI
                                               CRITICALITY ignore
                                                                      TYPE C-RNTI
    { ID id-S-RNTI
                                               CRITICALITY ignore
                                                                      TYPE S-RNTI
                                                                                                                              PRESENCE mandatory }
    { ID id-D-RNTI
                                                                                                                              PRESENCE optional }
                                               CRITICALITY ignore
                                                                      TYPE D-RNTI
    { ID id-RxTimingDeviationForTA
                                               CRITICALITY ignore
                                                                      TYPE RxTimingDeviationForTA
                                                                                                                              PRESENCE mandatory }
```

```
{ ID id-L3-Information
                                               CRITICALITY ignore
                                                                     TYPE L3-Information
                                                                                                                            PRESENCE mandatory
     ID id-CN-PS-DomainIdentifier
                                               CRITICALITY ignore
                                                                     TYPE CN-PS-DomainIdentifier
                                                                                                                            PRESENCE optional
     ID id-CN-CS-DomainIdentifier
                                               CRITICALITY ignore
                                                                     TYPE CN-CS-DomainIdentifier
                                                                                                                            PRESENCE optional
    { ID id-URA-Information
                                               CRITICALITY ignore
                                                                     TYPE URA-Information
                                                                                                                            PRESENCE optional },
UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::=
     ID id-GA-CellAdditionalShapes
                                               CRITICALITY ignore
                                                                     EXTENSION GA-CellAdditionalShapes
                                                                                                                            PRESENCE optional } |
     ID id-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
                                                                                                                            PRESENCE optional } |
                                               CRITICALITY ignore
                                                                     EXTENSION CellCapabilityContainer-TDD-LCR
    -- Applicable to 1.28Mcps TDD only
     ID id-SNA-Information
                                               CRITICALITY ignore
                                                                     EXTENSION SNA-Information
                                                                                                                            PRESENCE optional }
     ID id-Active-MBMS-Bearer-ServiceTDD
                                                                                                                            PRESENCE optional }
                                               CRITICALITY ignore
                                                                     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
                                               CRITICALITY ignore
                                                                     EXTENSION RxTimingDeviationForTA768
                                                                                                                            PRESENCE optional
     ID id-RxTimingDeviationForTAext
                                               CRITICALITY ignore
                                                                     EXTENSION RxTimingDeviationForTAext
                                                                                                                            PRESENCE optional
     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 },
    . . .
      ****************
-- DOWNLINK SIGNALLING TRANSFER REQUEST
   *****************
DownlinkSignallingTransferRequest ::= SEQUENCE {
   protocolIEs
                                                              {{DownlinkSignallingTransferRequest-IEs}},
                                   ProtocolIE-Container
                                   ProtocolExtensionContainer {{DownlinkSignallingTransferRequest-Extensions}}
   protocolExtensions
                                                                                                                               OPTIONAL,
DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-C-ID
                                       CRITICALITY ignore TYPE C-ID
                                                                                              PRESENCE mandatory }
    -- 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 ::= {
    { ID id-URA-ID
                                       CRITICALITY ignore
                                                              EXTENSION URA-ID
                                                                                                        PRESENCE optional }
```

```
ID id-MBMS-Bearer-Service-List
                                   CRITICALITY ignore
                                                        EXTENSION MBMS-Bearer-Service-List
                                                                                              PRESENCE optional }
     ID id-Old-URA-ID
                                   CRITICALITY ignore
                                                        EXTENSION URA-ID
                                                                                              PRESENCE optional }
                                                                                              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
                                                        EXTENSION Extended-RNC-ID
                                                                                              PRESENCE optional }
   ID id-Enhanced-PCH-Capability
                                   CRITICALITY ignore
                                                                                              PRESENCE optional },
                                                        EXTENSION Enhanced-PCH-Capability
   -- FDD and 1.28Mcps TDD only
  ********************
-- RELOCATION COMMIT
         RelocationCommit ::= SEQUENCE {
                                                        {{RelocationCommit-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{RelocationCommit-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL,
RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI CRITICALITY ignore TYPE D-RNTI
                                                                          PRESENCE optional } |
   { ID id-RANAP-RelocationInformation
                                      CRITICALITY ignore TYPE RANAP-RelocationInformation
                                                                                         PRESENCE optional },
RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
__ *******************************
-- PAGING REOUEST
PagingRequest ::= SEQUENCE {
                                                        {{PagingRequest-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                ProtocolExtensionContainer {{PagingRequest-Extensions}}
   protocolExtensions
                                                                                                 OPTIONAL,
PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-PagingArea-PagingRgst
                                       CRITICALITY ignore TYPE PagingArea-PagingRgst
                                                                                         PRESENCE mandatory
     ID id-SRNC-ID
                                       CRITICALITY ignore TYPE RNC-ID
                                                                                         PRESENCE mandatory
                                                                                                               -- May be a BSC-Id.
     ID id-S-RNTI
                                       CRITICALITY ignore TYPE S-RNTI
                                                                                         PRESENCE mandatory
     ID id-IMSI
                                       CRITICALITY ignore TYPE IMSI
                                                                                         PRESENCE mandatory
     ID id-DRXCycleLengthCoefficient
                                       CRITICALITY ignore TYPE DRXCycleLengthCoefficient
                                                                                         PRESENCE mandatory
     ID id-CNOriginatedPage-PagingRqst
                                       CRITICALITY ignore TYPE CNOriginatedPage-PagingRqst
                                                                                         PRESENCE optional
```

```
PagingArea-PagingRqst ::= CHOICE {
                          URA-PagingRqst, -- May be a GRA-ID.
   cell
                          Cell-PagingRqst, -- UTRAN only
    . . .
URA-PagingRgst ::= SEQUENCE {
   uRA-ID
                              URA-ID,
                              ProtocolExtensionContainer { { URAItem-PagingRgst-ExtIEs} } OPTIONAL,
   iE-Extensions
URAItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Cell-PagingRqst ::= SEQUENCE {
                              ProtocolExtensionContainer { { CellItem-PagingRqst-ExtIEs} } OPTIONAL,
   iE-Extensions
CellItem-PagingRgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CNOriginatedPage-PagingRqst::= SEQUENCE {
   pagingCause
                              PagingCause,
   {\tt cNDomainType}
                              CNDomainType,
   pagingRecordType
                              PagingRecordType,
                              ProtocolExtensionContainer { { CNOriginatedPage-PagingRgst-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
CNOriginatedPage-PagingRgst-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
PagingRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Extended-SRNC-ID
                                     CRITICALITY reject
                                                            EXTENSION
                                                                        Extended-RNC-ID
                                                                                               PRESENCE optional |
    { ID id-Enhanced-PCH-Capability
                                     CRITICALITY ignore
                                                            EXTENSION
                                                                       Enhanced-PCH-Capability PRESENCE optional },
    -- FDD and 1.28Mcps TDD only
    *******************
-- DEDICATED MEASUREMENT INITIATION REQUEST
  *****************
DedicatedMeasurementInitiationRequest ::= SEQUENCE {
                                  ProtocolIE-Container
                                                            {{DedicatedMeasurementInitiationRequest-IEs}},
   protocolIEs
```

```
ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
    protocolExtensions
                                                                                                                                       OPTIONAL,
DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
      ID id-MeasurementID
                                        CRITICALITY reject TYPE MeasurementID
                                                                                            PRESENCE mandatory } |
     ID id-DedicatedMeasurementObjectType-DM-Rqst CRITICALITY reject TYPE DedicatedMeasurementObjectType-DM-Rqst PRESENCE mandatory }
      ID id-DedicatedMeasurementType
                                            CRITICALITY reject TYPE DedicatedMeasurementType
                                                                                                     PRESENCE mandatory }
      ID id-MeasurementFilterCoefficient
                                            CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                     PRESENCE optional }
      ID id-ReportCharacteristics
                                            CRITICALITY reject TYPE ReportCharacteristics
                                                                                                     PRESENCE mandatory }
      ID id-CFNReportingIndicator
                                            CRITICALITY reject TYPE FNReportingIndicator
                                                                                                     PRESENCE mandatory }
                                                                                                     PRESENCE optional },
     ID id-CFN
                                            CRITICALITY reject TYPE CFN
DedicatedMeasurementObjectType-DM-Rgst ::= CHOICE {
    rL
                            RL-DM-Rast,
                            RL-Set-DM-Rast,
    rLS
    allRL
                            All-RL-DM-Rast,
    allRLS
                            All-RL-Set-DM-Rgst,
    . . .
RL-DM-Rqst ::= SEQUENCE {
    rL-InformationList-DM-Rgst
                                    RL-InformationList-DM-Rqst,
    iE-Extensions
                                    ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs} } OPTIONAL,
RLItem-DM-Rgst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                            ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rgst-IEs} }
RL-InformationList-DM-Rgst
RL-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rgst
                                            CRITICALITY reject TYPE RL-InformationItem-DM-Rgst
                                                                                                     PRESENCE mandatory
RL-InformationItem-DM-Rgst ::= SEQUENCE {
    rL-ID
                                RL-ID.
    dPCH-ID
                                DPCH-ID
                                            OPTIONAL,
                                    ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RL-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSSICH-Info-DM-Rqst
                                                CRITICALITY reject
                                                                                 EXTENSION HSSICH-Info-DM-Rast
                                                                                                                                PRESENCE optional } |
    -- TDD only
    { ID id-DPCH-ID768-DM-Rgst
                                                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-Rgst ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID
HSSICH-Info-DM-Rgst-Extension ::= SEQUENCE (SIZE (1..maxNrOfHSSICHs)) OF HS-SICH-ID-Extension
RL-Set-DM-Rqst ::= SEQUENCE {
   rL-Set-InformationList-DM-Rqst RL-Set-InformationList-DM-Rqst,
   iE-Extensions
                                  ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs} } OPTIONAL,
RL-SetItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-InformationList-DM-Rgst
                                              ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-
Rast-IEs} }
RL-Set-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rqst
                                              CRITICALITY reject TYPE RL-Set-InformationItem-DM-Rqst
                                                                                                          PRESENCE mandatory
RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
   rL-Set-ID
   iE-Extensions
                                  ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
{\tt RL-Set-InformationItem-DM-Rqst-ExtlEs} \ \ {\tt RNSAP-PROTOCOL-EXTENSION} \ ::= \ \big\{
    . . .
All-RL-DM-Rqst ::= NULL
All-RL-Set-DM-Rqst ::= NULL
DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-PartialReportingIndicator
                                                                                 PartialReportingIndicator
                                                  CRITICALITY ignore EXTENSION
                                                                                                                     PRESENCE optional }
     ID id-MeasurementRecoveryBehavior
                                                  CRITICALITY ignore EXTENSION
                                                                                 MeasurementRecoveryBehavior
                                                                                                                     PRESENCE optional } |
     ID id-AlternativeFormatReportingIndicator
                                                  CRITICALITY ignore EXTENSION
                                                                                 AlternativeFormatReportingIndicator PRESENCE optional },
    *******************
  DEDICATED MEASUREMENT INITIATION RESPONSE
  ***********************
DedicatedMeasurementInitiationResponse ::= SEQUENCE {
   protocolIEs
                                  ProtocolIE-Container
                                                             {{DedicatedMeasurementInitiationResponse-IEs}},
   protocolExtensions
                                  ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}
                                                                                                                                   OPTIONAL,
    . . .
```

```
DedicatedMeasurementInitiationResponse-IES RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                                   CRITICALITY ignore TYPE MeasurementID
                                                                                                                       PRESENCE mandatory }
     ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp
                                                                                                                       PRESENCE optional } |
     ID id-CriticalityDiagnostics
                                                    CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                                       PRESENCE optional },
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
                            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,
                                    ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
RLItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Rsp ::= SEQUENCE {
                                    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,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
    . . .
RL-InformationItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-HSSICH-Info-DM
                                CRITICALITY reject
                                                                EXTENSION HS-SICH-ID
                                                                                            PRESENCE optional }
```

```
-- TDD only
          id-multiple-DedicatedMeasurementValueList-TDD-DM-Rsp CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-TDD-DM-Rsp
    PRESENCE optional }
    -- Applicable to 3.84Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-multiple-DedicatedMeasurementValueList-LCR-TDD-DM-Rsp
                                                                      CRITICALITY ignore EXTENSION Multiple-DedicatedMeasurementValueList-LCR-
TDD-DM-Rsp PRESENCE optional } |
    -- Applicable to 1.28Mcps TDD only. This list of dedicated measurement values is used for the 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-multiple-HSSICHMeasurementValueList-TDD-DM-Rsp
                                                                      CRITICALITY ignore EXTENSION Multiple-HSSICHMeasurementValueList-TDD-DM-
Rsp PRESENCE optional } |
    -- TDD only. This list of HS-SICH measurement values is used for the 2nd 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 2nd and beyond measurements of a RL when multiple
dedicated measurement values need to be reported.
    { ID id-DPCH-ID768-DM-Rsp
                                                                       CRITICALITY ignore EXTENSION DPCH-ID768
    PRESENCE optional \
    { ID id-HS-SICH-ID-Extension
                                                                       CRITICALITY ignore EXTENSION HS-SICH-ID-Extension
    PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
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,
                                   DedicatedMeasurementValue,
    dedicatedMeasurementValue
    CFN
                                   CFN
                                               OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rspns-ExtIEs} } OPTIONAL,
RL-Set-InformationItem-DM-Rspns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
          id-MeasurementRecoverySupportIndicator CRITICALITY ignore
                                                                              EXTENSION MeasurementRecovervSupportIndicator 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 ::= SEQUENCE (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,
   iE-Extensions
                                        ProtocolExtensionContainer { { Multiple-HSSICHMeasurementValueItem-TDD-DM-Rsp-ExtIEs} }
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 ::= SEOUENCE {
    dPCH-ID768
                                        DPCH-ID768.
    dedicatedMeasurementValue
                                        DedicatedMeasurementValue,
                                        ProtocolExtensionContainer { { Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs} } OPTIONAL,
   iE-Extensions
Multiple-DedicatedMeasurementValueItem-TDD768-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DEDICATED MEASUREMENT INITIATION FAILURE
  *****************
DedicatedMeasurementInitiationFailure ::= SEQUENCE {
                                 ProtocolIE-Container
                                                            {{DedicatedMeasurementInitiationFailure-IEs}},
   protocolIEs
   protocolExtensions
                                 ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
                                                                                                                               OPTIONAL,
   . . .
DedicatedMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                     CRITICALITY ignore TYPE MeasurementID
                                                                                       PRESENCE mandatory } |
     ID id-Cause
                                 CRITICALITY ignore TYPE Cause
                                                                               PRESENCE mandatory } |
     ID id-CriticalityDiagnostics
                                         CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                            PRESENCE optional },
DedicatedMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DedicatedMeasurementObjectType-DM-Fail CRITICALITY ignore EXTENSION DedicatedMeasurementObjectType-DM-Fail PRESENCE optional },
    . . .
DedicatedMeasurementObjectType-DM-Fail ::= CHOICE {
                          RL-DM-Fail,
   rLS
                          RL-Set-DM-Fail,
   allRL
                          RL-DM-Fail,
   allRLS
                          RL-Set-DM-Fail,
RL-DM-Fail ::= SEOUENCE {
   rL-unsuccessful-InformationRespList-DM-Fail
                                                 RL-Unsuccessful-InformationRespList-DM-Fail,
   rL-successful-InformationRespList-DM-Fail
                                                 RL-Successful-InformationRespList-DM-Fail
                                                                                               OPTIONAL,
   iE-Extensions
                                 ProtocolExtensionContainer { { RLItem-DM-Fail-ExtIEs} } OPTIONAL,
RLItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Fail ::= SEQUENCE {
   rL-Set-unsuccessful-InformationRespList-DM-Fail RL-Set-Unsuccessful-InformationRespList-DM-Fail,
   rL-Set-successful-InformationRespList-DM-Fail RL-Set-Successful-InformationRespList-DM-Fail
                                                                                                  OPTIONAL,
                                 ProtocolExtensionContainer { { RL-SetItem-DM-Fail-ExtIEs} } OPTIONAL,
   iE-Extensions
    . . .
RL-SetItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
RL-Unsuccessful-InformationRespList-DM-Fail
                                                   ::= SEOUENCE (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 ::= SEQUENCE {
    rL-ID
                                RL-ID,
    individualcause
                                Cause OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL,
RL-Unsuccessful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Successful-InformationRespList-DM-Fail
                                                    ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Successful-
InformationResp-DM-Fail-IEs} }
RL-Successful-InformationResp-DM-Fail-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Successful-InformationItem-DM-Fail
                                                        CRITICALITY ignore TYPE RL-Successful-InformationItem-DM-Fail PRESENCE mandatory
RL-Successful-InformationItem-DM-Fail ::= SEQUENCE {
    rL-ID
                                RL-ID,
    dPCH-ID
                                DPCH-ID
                                                    OPTIONAL,
    dedicatedMeasurementValue
                               DedicatedMeasurementValue,
                                                    OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {RL-Successful-InformationItem-DM-Fail-ExtIEs} } OPTIONAL,
RL-Successful-InformationItem-DM-Fail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                                                                                PRESENCE optional } |
    {ID id-HSSICH-Info-DM
                                            CRITICALITY reject
                                                                            EXTENSION HS-SICH-ID
    -- TDD only
    { ID id-HS-SICH-ID-Extension
                                            CRITICALITY ignore
                                                                            EXTENSION HS-SICH-ID-Extension
                                                                                                                PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
RL-Set-Unsuccessful-InformationRespList-DM-Fail
                                                           ::= SEOUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-
Unsuccessful-InformationResp-DM-Fail-IEs} }
RL-Set-Unsuccessful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
                                                            CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail
    { ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail
                                                                                                                                     PRESENCE
mandatory }
RL-Set-Unsuccessful-InformationItem-DM-Fail ::= SEQUENCE {
    rL-Set-ID
                                    RL-Set-ID,
```

```
individualcause
                                          OPTIONAL,
                               Cause
   iE-Extensions
                               ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs} } OPTIONAL,
RL-Set-Unsuccessful-InformationItem-DM-Failns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                                  ::= SEQUENCE (SIZE (1..maxNrOfRLSets-1)) OF ProtocolIE-Single-Container { {RL-Set-
RL-Set-Successful-InformationRespList-DM-Fail
Successful-InformationResp-DM-Fail-IEs} }
RL-Set-Successful-InformationResp-DM-Fail-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-Successful-InformationItem-DM-Fail
                                                    CRITICALITY ignore TYPE RL-Set-Successful-InformationItem-DM-Fail
                                                                                                                  PRESENCE
mandatory }
RL-Set-Successful-InformationItem-DM-Fail ::= SEQUENCE {
   rL-Set-ID
                               RL-Set-ID,
   dedicatedMeasurementValue
                               DedicatedMeasurementValue,
   CFN
                                                 OPTIONAL,
                               ProtocolExtensionContainer { {RL-Set-Successful-InformationItem-DM-Failns-ExtIEs} } OPTIONAL,
   iE-Extensions
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 ::= {
                                   CRITICALITY ignore TYPE MeasurementID
                                                                                 PRESENCE mandatory } |
     ID id-MeasurementID
   . . .
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-Rort
                                    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
                                    ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs} } OPTIONAL,
RL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                           ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rprt-IEs} }
RL-InformationList-DM-Rprt
RL-Information-DM-Rort-IES RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt
                                            CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt
                                                                                                     PRESENCE mandatorv }
RL-InformationItem-DM-Rprt ::= SEQUENCE {
    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
                                                                    EXTENSION HS-SICH-ID
                                                                                                PRESENCE optional |
    -- TDD only
    { ID id-DPCH-ID768-DM-Rprt
                                        CRITICALITY ignore
                                                                                                                    PRESENCE optional } |
                                                                        EXTENSION DPCH-ID768
    { 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-Rort
                                             ::= SEOUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-
Rprt-IEs} }
RL-Set-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rprt
                                                CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt
                                                                                                              PRESENCE mandatory
RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-Set-ID
                                    RL-Set-ID.
    dedicatedMeasurementValueInformation
                                            DedicatedMeasurementValueInformation,
```

```
ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
   iE-Extensions
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
                                                       {{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 {
                                                       {{DedicatedMeasurementFailureIndication-IEs}},
   protocolIEs
                              ProtocolIE-Container
                               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 ::= {
```

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ID id-DedicatedMeasurementObjectType-DM-Fail-Ind CRITICALITY ignore EXTENSION DedicatedMeasurementObjectType-DM-Fail-Ind PRESENCE optional
DedicatedMeasurementObjectType-DM-Fail-Ind ::= CHOICE {
    rL
                           RL-DM-Fail-Ind,
    rLS
                            RL-Set-DM-Fail-Ind,
    allRT.
                           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,
    iE-Extensions
                                                        ProtocolExtensionContainer { { RLItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
    . . .
RLItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-DM-Fail-Ind ::= SEOUENCE {
    rL-Set-unsuccessful-InformationRespList-DM-Fail-Ind
                                                            RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind,
   iE-Extensions
                                                            ProtocolExtensionContainer { { RL-SetItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
    . . .
RL-SetItem-DM-Fail-Ind-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
RL-Unsuccessful-InformationRespList-DM-Fail-Ind
                                                      ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Unsuccessful-
InformationResp-DM-Fail-Ind-IEs} }
RL-Unsuccessful-InformationResp-DM-Fail-Ind-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Unsuccessful-InformationItem-DM-Fail-Ind
                                                           CRITICALITY ignore TYPE RL-Unsuccessful-InformationItem-DM-Fail-Ind
                                                                                                                                      PRESENCE
mandatory
RL-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
    rL-ID
                                RL-ID,
    individualcause
                                Cause
                                            OPTIONAL,
                                ProtocolExtensionContainer { {RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Unsuccessful-InformationItem-DM-Fail-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Set-Unsuccessful-InformationRespList-DM-Fail-Ind
                                                                ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-
Unsuccessful-InformationResp-DM-Fail-Ind-IEs} }
```

```
RL-Set-Unsuccessful-InformationResp-DM-Fail-Ind-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind CRITICALITY ignore TYPE RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind PRESENCE
mandatory
RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind ::= SEQUENCE {
                                RL-Set-ID,
   individualcause
                                 Cause
                                           OPTIONAL,
                                 ProtocolExtensionContainer { {RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Set-Unsuccessful-InformationItem-DM-Fail-Indns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     ****************
  COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST
  *****************
CommonTransportChannelResourcesReleaseRequest ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                          {{CommonTransportChannelResourcesReleaseRequest-IEs}},
   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}},
   protocolExtensions
                                ProtocolExtensionContainer {{CommonTransportChannelResourcesRequest-Extensions}}
                                                                                                                  OPTIONAL,
CommonTransportChannelResourcesRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-D-RNTI
                                           CRITICALITY reject TYPE D-RNTI
                                                                                                          PRESENCE mandatory }
    ID id-C-ID
                                                                                                          PRESENCE optional }
                                           CRITICALITY reject TYPE C-ID
```

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ID id-TransportBearerRequestIndicator
                                            CRITICALITY reject TYPE TransportBearerRequestIndicator
                                                                                                            PRESENCE mandatory } |
     ID id-TransportBearerID
                                            CRITICALITY reject TYPE TransportBearerID
                                                                                                            PRESENCE mandatory },
   . . .
CommonTransportChannelResourcesRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Permanent-NAS-UE-Identity
                                            CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity
                                                                                                            PRESENCE optional } |
                                                                                                            PRESENCE optional }
    { ID id-BindingID
                                            CRITICALITY ignore EXTENSION BindingID
   -- 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 TnlOos
                                                                                                            PRESENCE optional } |
    PRESENCE optional }
    -- FDD and 1.28Mcps TDD only
   { ID id-Common-EDCH-Support-Indicator
                                            CRITICALITY ignore EXTENSION Common-EDCH-Support-Indicator
                                                                                                            PRESENCE optional },
    -- FDD only
  COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
      *************
CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
                                                           {{CommonTransportChannelResourcesResponseFDD-IEs}},
   protocolIEs
                                 ProtocolIE-Container
   protocolExtensions
                                 ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseFDD-Extensions}}
                                                                                                                       OPTIONAL,
CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-S-RNTI
                                 CRITICALITY ignore TYPE S-RNTI
                                                                              PRESENCE mandatory
     ID id-C-RNTI
                                 CRITICALITY ignore TYPE C-RNTI
                                                                              PRESENCE optional
     ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD
   PRESENCE mandatory } |
     ID id-TransportLayerAddress
                                        CRITICALITY ignore TYPE TransportLayerAddress
                                                                                           PRESENCE optional } |
     ID id-BindingID
                                 CRITICALITY ignore TYPE BindingID
                                                                                  PRESENCE optional } |
    ID id-CriticalityDiagnostics
                                        CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                           PRESENCE optional },
   . . .
FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD ::= 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 }}
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FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory
CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-C-ID
                                                            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 },
          COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
  *****************
CommonTransportChannelResourcesResponseTDD ::= SEOUENCE {
   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 } |
                                         CRITICALITY ignore TYPE TransportLayerAddress
     ID id-TransportLayerAddress
                                                                                             PRESENCE optional } |
                                 CRITICALITY ignore TYPE BindingID
                                                                                   PRESENCE optional } |
     ID id-BindingID
    { 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
```

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CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-C-ID
                                                          CRITICALITY ignore
                                                                                EXTENSION
                                                                                           C-ID
   PRESENCE mandatory } |
   { 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 },
   . . .
  *****************
  COMMON TRANSPORT CHANNEL RESOURCES FAILURE
  *****************
CommonTransportChannelResourcesFailure ::= SEQUENCE {
                                                          [{CommonTransportChannelResourcesFailure-IEs}},
   protocolIEs
                                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
                                                                                        PRESENCE mandatory }
                                       CRITICALITY ignore TYPE Cause
    ID id-CriticalityDiagnostics
                                                                                        PRESENCE optional },
                                       CRITICALITY ignore TYPE CriticalityDiagnostics
   . . .
CommonTransportChannelResourcesFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    COMPRESSED MODE COMMAND
  CompressedModeCommand ::= SEQUENCE {
                                                         {{CompressedModeCommand-IEs}},
   protocolIEs
                                ProtocolIE-Container
                                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 {
                              ProtocolIE-Container
                                                     {{ErrorIndication-IEs}},
   protocolIEs
                              ProtocolExtensionContainer {{ErrorIndication-Extensions}}
   protocolExtensions
                                                                                               OPTIONAL,
ErrorIndication-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-Cause CRITICALITY ignore TYPE Cause
                                                                      PRESENCE optional }
   PRESENCE optional },
ErrorIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
                        CRITICALITY ignore EXTENSION S-RNTI
    ID id-S-RNTI
                                                                              PRESENCE optional } |
   { ID id-D-RNTI
                              CRITICALITY ignore EXTENSION D-RNTI
                                                                             PRESENCE optional },
  *****************
  COMMON MEASUREMENT INITIATION REQUEST
        ***************
CommonMeasurementInitiationRequest ::= SEQUENCE {
                                           {{CommonMeasurementInitiationRequest-IEs}},
   protocolIEs
                       ProtocolIE-Container
                       ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}
   protocolExtensions
                                                                                            OPTIONAL,
CommonMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                     CRITICALITY reject TYPE
                                                             MeasurementID
                                                                                                  PRESENCE mandatory }
     ID id-CommonMeasurementObjectType-CM-Rqst CRITICALITY reject TYPE
                                                                CommonMeasurementObjectType-CM-Rqst
                                                                                                  PRESENCE mandatory }
     ID id-CommonMeasurementType
                                     CRITICALITY reject TYPE
                                                             CommonMeasurementType
                                                                                                  PRESENCE mandatory }
                                                                                                 PRESENCE optional } |
   { ID id-MeasurementFilterCoefficient
                                     CRITICALITY reject TYPE
                                                             MeasurementFilterCoefficient
   -- UTRAN only
    ID id-ReportCharacteristics
                                     CRITICALITY reject TYPE
                                                             ReportCharacteristics
                                                                                                 PRESENCE mandatory } |
    ID id-SFNReportingIndicator
                                                                                                  PRESENCE mandatory }
                                     CRITICALITY reject TYPE
                                                             FNReportingIndicator
   { 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
                                                                                    GANSS-Time-ID
                                                                                                                PRESENCE optional },
                                                                          EXTENSION
CommonMeasurementObjectType-CM-Rgst ::= CHOICE {
                               Cell-CM-Rgst,
   cell
   . . .
Cell-CM-Rqst ::= SEQUENCE {
   uC-ID
                               UC-ID.
   -- May be a GERAN cell identifier
   timeSlot
                               TimeSlot.
                                              OPTIONAL,
                                                        --3.84Mcps TDD and 7.68Mcps TDD only
   timeSlotLCR
                               TimeSlotLCR
                                              OPTIONAL,
                                                        --1.28Mcps TDD only
                                              NeighbouringCellMeasurementInfo
   neighbouringCellMeasurementInformation
                                                                             OPTIONAL.
   -- UTRAN only
                               ProtocolExtensionContainer { { CellItem-CM-Rgst-ExtIEs} }
   iE-Extensions
                                                                                      OPTIONAL,
NeighbouringCellMeasurementInfo ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
       CHOICE {
              neighbouringFDDCellMeasurementInformation
                                                        NeighbouringFDDCellMeasurementInformation,
              neighbouringTDDCellMeasurementInformation
                                                        NeighbouringTDDCellMeasurementInformation,
              extension-neighbouringCellMeasurementInformation
                                                            Extension-neighbouringCellMeasurementInformation,
              extension-neighbouringCellMeasurementInformation768 Extension-neighbouringCellMeasurementInformation768
Extension-neighbouringCellMeasurementInformation
                                            ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}
Extension-neighbouringCellMeasurementInformationIE RNSAP-PROTOCOL-IES ::= {
    mandatory },
   . . .
Extension-neighbouringCellMeasurementInformation768 ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformation768IE }}
Extension-neighbouringCellMeasurementInformation768IE RNSAP-PROTOCOL-IES ::= {
   mandatory },
Cellitem-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-UARFCNforNt
                                   CRITICALITY ignore EXTENSION UARFON
                                                                                 PRESENCE optional } |
   -- Applicable to 1.28Mcps TDD only
```

```
{ ID id-UPPCHPositionLCR
                                                                                       PRESENCE optional },
                                      CRITICALITY reject EXTENSION UPPCHPositionLCR
   -- Applicable to 1.28Mcps TDD only
  *****************
  COMMON MEASUREMENT INITIATION RESPONSE
  *******************
CommonMeasurementInitiationResponse ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{CommonMeasurementInitiationResponse-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}}
                                                                                                       OPTIONAL,
CommonMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
           id-MeasurementID
                                                 CRITICALITY ignore TYPE
                                                                            MeasurementID
                                                                                                                   PRESENCE mandatory } |
          id-CommonMeasurementObjectType-CM-Rsp CRITICALITY ignore TYPE
                                                                                                                   PRESENCE optional }
     ID
                                                                            CommonMeasurementObjectType-CM-Rsp
    { ID
          id-SFN
                                                 CRITICALITY ignore TYPE
                                                                                                                   PRESENCE optional }
    -- UTRAN only
          id-CriticalityDiagnostics
                                                                            CriticalityDiagnostics
    { ID
                                                 CRITICALITY ignore TYPE
                                                                                                                   PRESENCE optional } |
    { ID id-CommonMeasurementAccuracy
                                                 CRITICALITY reject TYPE
                                                                            CommonMeasurementAccuracy
                                                                                                                   PRESENCE optional \}.
    -- UTRAN only
    . . .
CommonMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
          id-MeasurementRecoverySupportIndicator
                                                    CRITICALITY ignore
                                                                            EXTENSION MeasurementRecoverySupportIndicator PRESENCE optional
    -- UTRAN only
    . . .
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
   cell
                              Cell-CM-Rsp,
Cell-CM-Rsp ::= SEQUENCE {
   commonMeasurementValue
                                             CommonMeasurementValue,
   iE-Extensions
                                             ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs} }
                                                                                                       OPTIONAL,
CellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- COMMON MEASUREMENT INITIATION FAILURE
```

```
__ *********************
CommonMeasurementInitiationFailure ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                  {{CommonMeasurementInitiationFailure-IEs}},
   protocolExtensions
                          ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}}
                                                                                                          OPTIONAL,
CommonMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
          id-MeasurementID
                                          CRITICALITY
                                                          ignore
                                                                         TYPE
                                                                                 MeasurementID
                                                                                                          PRESENCE mandatory
     TD
           id-Cause
                                                                         TYPE
                                                                                                          PRESENCE mandatory }
                                          CRITICALITY
                                                          ignore
                                                                                 Cause
    { ID
           id-CriticalityDiagnostics
                                          CRITICALITY
                                                          ignore
                                                                         TYPE
                                                                                 CriticalityDiagnostics
                                                                                                          PRESENCE optional },
CommonMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  COMMON MEASUREMENT REPORT
CommonMeasurementReport ::= SEQUENCE
                          ProtocolIE-Container
                                                  {{CommonMeasurementReport-IEs}},
   protocolIEs
   protocolExtensions
                          ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}
                                                                                              OPTIONAL,
CommonMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
           id-MeasurementID
                                                  CRITICALITY ignore TYPE
                                                                             MeasurementID
                                                                                                            PRESENCE mandatory } |
          id-CommonMeasurementObjectType-CM-Rprt CRITICALITY ignore TYPE
                                                                             CommonMeasurementObjectType-CM-Rprt PRESENCE mandatory
     ID id-SFN
                                                  CRITICALITY ignore TYPE
                                                                                                            PRESENCE optional },
    -- UTRAN only
CommonMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID
        id-MeasurementRecoveryReportingIndicator
                                                         CRITICALITY ignore
                                                                                 EXTENSION MeasurementRecoveryReportingIndicator
optional },
   -- UTRAN only
CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
   cell
                                  Cell-CM-Rprt,
    . . .
Cell-CM-Rprt ::= SEQUENCE {
   commonMeasurementValueInformation CommonMeasurementValueInformation,
   iE-Extensions
                                  ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}
                                                                                              OPTIONAL,
```

```
. . .
CellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- COMMON MEASUREMENT TERMINATION REQUEST
__ **********************
CommonMeasurementTerminationRequest ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{CommonMeasurementTerminationRequest-IEs}},
                        ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
   protocolExtensions
CommonMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
          id-MeasurementID
                           CRITICALITY
                                                                                           PRESENCE mandatory },
                                                                          MeasurementID
   . . .
CommonMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
       ****************
-- COMMON MEASUREMENT FAILURE INDICATION
__ *******************************
CommonMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                             {{CommonMeasurementFailureIndication-IEs}},
                            ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}}
   protocolExtensions
                                                                                                         OPTIONAL,
CommonMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
          id-MeasurementID
                                   CRITICALITY ignore
                                                                                      PRESENCE mandatory
                                                            TYPE
                                                                   MeasurementID
                                   CRITICALITY ignore
                                                                                      PRESENCE mandatory
    ID
          id-Cause
                                                            TYPE
                                                                   Cause
   . . .
CommonMeasurementFailureIndication-Extensions 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
                                                                                                                                PRESENCE mandatory
    { ID
           id-InformationExchangeObjectType-InfEx-Rqst
                                                            CRITICALITY reject
                                                                                    TYPE
                                                                                            InformationExchangeObjectType-InfEx-Rgst
                                                                                                                                         PRESENCE
    mandatory } |
     ID
           id-InformationType
                                                            CRITICALITY reject
                                                                                    TYPE
                                                                                            InformationType
                                                                                                                                PRESENCE mandatory
     ID
           id-InformationReportCharacteristics
                                                                                    TYPE
                                                                                            InformationReportCharacteristics
                                                            CRITICALITY reject
                                                                                                                                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-Rqst ::= SEQUENCE {
                                    C-ID, --May be a GERAN cell identifier
    iE-Extensions
                                    ProtocolExtensionContainer { CellItem-InfEx-Rqst-ExtIEs} }
                                                                                                     OPTIONAL,
CellItem-InfEx-Rgst-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-Rqst
                                                            CRITICALITY reject
                                                                                        TYPE GSM-Cell-InfEx-Rqst
    PRESENCE mandatory } |
    { ID id-MBMS-Bearer-Service-List
                                                            CRITICALITY
                                                                            reiect
                                                                                        TYPE
                                                                                                MBMS-Bearer-Service-List
    PRESENCE mandatory |
    { ID id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst
                                                            CRITICALITY
                                                                            reject
                                                                                        TYPE
                                                                                                MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst
    PRESENCE mandatory |
    { ID id-MBMS-Cell-InfEx-Rqst
                                                            CRITICALITY
                                                                                        TYPE
                                                                                                MBMS-Cell-InfEx-Rqst
                                                                            reject
                                                                                                                                         PRESENCE
    mandatory}
```

```
GSM-Cell-InfEx-Rqst ::= SEQUENCE {
                                iE-Extensions
                                                                                            OPTIONAL,
GSMCellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rqst ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rgst
                                             ::= SEQUENCE
   c-ID
   mBMS-Bearer-Service-List-InfEx-Rgst
                                                         MBMS-Bearer-Service-List-InfEx-Rgst,
                                ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs} }
   iE-Extensions
                                                                                                                    OPTIONAL,
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-List-InfEx-Rgst ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Cell-InfEx-Rgst
                    ::= SEQUENCE (SIZE (1..maxNrOfCells)) 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-InformationExchangeObjectType-InfEx-Rsp CRITICALITY ignore TYPE
                                                                           InformationExchangeObjectType-InfEx-Rsp
                                                                                                                  PRESENCE optional } |
          id-CriticalityDiagnostics
                                                CRITICALITY ignore TYPE
                                                                           CriticalityDiagnostics
                                                                                                          PRESENCE optional },
    ID
InformationExchangeInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
    cell
                               Cell-InfEx-Rsp.
    extension-InformationExchangeObjectType-InfEx-Rsp
                                                           Extension-InformationExchangeObjectType-InfEx-Rsp
Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue
                                    RequestedDataValue,
                                   ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} }
   iE-Extensions
                                                                                                    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
                                                                                        TYPE
                                                                                                MBMS-Bearer-Service-List-InfEx-Rsp
                                                                            ignore
    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 }
MBMS-Bearer-Service-List-InfEx-Rsp ::= SEOUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
MBMS-Bearer-ServiceItemIEs-InfEx-Rsp
                                       ::=SEOUENCE{
    tmai
          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 ::= SEOUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rsp
MBMS-Cell-Item-InfEx-Rsp
                     ::= SEQUENCE {
   c-ID
   requestedDataValue
                               RequestedDataValue,
                               iE-Extensions
                                                                                            OPTIONAL,
MBMS-Cell-Item-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
     -- INFORMATION EXCHANGE INITIATION FAILURE
  *****************
InformationExchangeInitiationFailure ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                             {{InformationExchangeInitiationFailure-IEs}},
   protocolExtensions
                       ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}}
                                                                                                 OPTIONAL,
InformationExchangeInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID
         id-InformationExchangeID
                                            CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                               InformationExchangeID
                                                                                                           PRESENCE mandatory
     TD
          id-Cause
                                                                        TYPE
                                                                                                           PRESENCE mandatory
                                             CRITICALITY
                                                          ignore
                                                                               Cause
   { ID
         id-CriticalityDiagnostics
                                             CRITICALITY
                                                          ignore
                                                                        TYPE
                                                                               CriticalityDiagnostics
                                                                                                           PRESENCE optional },
   . . .
InformationExchangeInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- INFORMATION REPORT
  *****************
InformationReport ::= SEQUENCE {
   protocolIEs
                       ProtocolIE-Container
                                            {{InformationReport-IEs}},
                       ProtocolExtensionContainer {{InformationReport-Extensions}}
   protocolExtensions
                                                                                   OPTIONAL,
InformationReport-IEs RNSAP-PROTOCOL-IES ::= {
```

```
id-InformationExchangeID
                                                            CRITICALITY ignore
                                                                                        TYPE
                                                                                                InformationExchangeID
                                                                                                                                            PRESENCE
    mandatory }|
    { ID
           id-InformationExchangeObjectType-InfEx-Rprt
                                                            CRITICALITY ignore
                                                                                        TYPE
                                                                                                InformationExchangeObjectType-InfEx-Rprt
                                                                                                                                            PRESENCE
    mandatory },
InformationReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
                                    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
                                                                                        TYPE
                                                                                                MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt
                                                            CRITICALITY
                                                                            ignore
    PRESENCE
               mandatory}|
    { ID id-MBMS-Cell-InfEx-Rprt
                                                            CRITICALITY
                                                                            ignore
                                                                                        TYPE
                                                                                                MBMS-Cell-InfEx-Rort
    PRESENCE
              mandatory}
Cell-InfEx-Rprt ::= SEQUENCE {
    requestedDataValueInformation
                                    RequestedDataValueInformation,
    iE-Extensions
                                    ProtocolExtensionContainer {{ CellItem-InfEx-Rprt-ExtIEs }}
                                                                                                     OPTIONAL,
    . . .
CellItem-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt
                                                    ::= SEQUENCE
                                    C-ID,
    mBMS-Bearer-Service-List-InfEx-Rprt
                                                                MBMS-Bearer-Service-List-InfEx-Rprt,
                                    ProtocolExtensionContainer { { MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs} }
   iE-Extensions
                                                                                                                                   OPTIONAL,
MBMS-Bearer-Service-in-MBMS-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

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```
MBMS-Bearer-Service-List-InfEx-Rprt ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF MBMS-Bearer-Service-List-Item-InfEx-Rprt
MBMS-Bearer-Service-List-Item-InfEx-Rprt
                                       ::= SEQUENCE {
   requestedDataValueInformation RequestedDataValueInformation,
                                ProtocolExtensionContainer { { MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs} }
   iE-Extensions
MBMS-Bearer-Service-List-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Cell-InfEx-Rprt
                   ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMS-Cell-Item-InfEx-Rprt
MBMS-Cell-Item-InfEx-Rprt ::= SEQUENCE {
                                C-ID,
   requestedDataValueInformation RequestedDataValueInformation,
                                ProtocolExtensionContainer { { MBMS-Cell-Item-InfEx-Rprt-ExtIEs} }
   iE-Extensions
MBMS-Cell-Item-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ******************
-- INFORMATION EXCHANGE TERMINATION REQUEST
__ **********************
InformationExchangeTerminationRequest ::= SEQUENCE {
                                              {{InformationExchangeTerminationRequest-IEs}},
                        ProtocolIE-Container
   protocolIEs
                        ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                    OPTIONAL.
InformationExchangeTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= 
   { ID
          id-InformationExchangeID
                                          CRITICALITY
                                                         ignore
                                                                           TYPE
                                                                                  InformationExchangeID
                                                                                                            PRESENCE mandatory },
   . . .
InformationExchangeTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    *********************
-- INFORMATION EXCHANGE FAILURE INDICATION
  ******************
```

```
InformationExchangeFailureIndication ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                {{InformationExchangeFailureIndication-IEs}},
                              ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}
   protocolExtensions
                                                                                                                  OPTIONAL.
InformationExchangeFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
           id-InformationExchangeID
                                             CRITICALITY ignore
                                                                       TYPE
                                                                               InformationExchangeID
                                                                                                          PRESENCE mandatory
     ID
          id-Cause
                                             CRITICALITY ignore
                                                                       TYPE
                                                                               Cause
                                                                                                          PRESENCE mandatory
   . . .
InformationExchangeFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    -- RESET REQUEST
    *******************
ResetRequest ::= SEQUENCE {
   protocolIEs
                          ProtocolIE-Container
                                                 {{ResetRequest-IEs}},
                          ProtocolExtensionContainer {{ResetRequest-Extensions}}
   protocolExtensions
                                                                                   OPTIONAL,
ResetRequest-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-RNC-ID
                              CRITICALITY reject TYPE RNC-ID
                                                                PRESENCE mandatory}
     ID id-ResetIndicator
                             CRITICALITY reject
                                                    TYPE ResetIndicator
                                                                               PRESENCE
                                                                                          mandatory},
ResetRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-RNC-ID
                                     CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                      PRESENCE optional },
ResetIndicator ::= CHOICE {
   context
                  ContextList-Reset,
   all-contexts
                      NULL,
   contextGroup
                  ContextGroupList-Reset
ContextList-Reset ::= SEOUENCE
   contextInfoList-Reset
                              ContextInfoList-Reset,
   iE-Extensions
                                         ProtocolExtensionContainer { ContextItem-Reset-ExtIEs} }
                                                                                                    OPTIONAL,
   . . .
ContextItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
ContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContext)) OF ProtocolIE-Single-Container {{ ContextInfoItemIE-Reset }}
ContextInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
    {ID id-ContextInfoItem-Reset
                                       CRITICALITY reject
                                                              TYPE ContextInfoItem-Reset
                                                                                              PRESENCE mandatory }
ContextInfoItem-Reset ::= SEQUENCE {
    contextType-Reset
                               ContextType-Reset,
   iE-Extensions
                               ProtocolExtensionContainer { { ContextInfoItem-Reset-ExtIEs} }
    . . .
ContextInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContextType-Reset ::= CHOICE {
    SRNTI
                   S-RNTI,
    dRNTI
                   D-RNTI,
    . . .
ContextGroupList-Reset ::= SEQUENCE {
    contextGroupInfoList-Reset
                                   ContextGroupInfoList-Reset,
    iE-Extensions
                                   ProtocolExtensionContainer { {ContextGroupItem-Reset-ExtIEs} }
                                                                                                     OPTIONAL,
ContextGroupItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ContextGroupInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContextGroup)) OF ProtocolIE-Single-Container {{ ContextGroupInfoItemIE-Reset }}
ContextGroupInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
    {ID id-ContextGroupInfoItem-Reset
                                           CRITICALITY reject
                                                                  TYPE ContextGroupInfoItem-Reset
                                                                                                     PRESENCE mandatory }
ContextGroupInfoItem-Reset ::= SEQUENCE {
    s-RNTI-Group
                               S-RNTI-Group,
    iE-Extensions
                               ProtocolExtensionContainer { { ContextGroupInfoItem-Reset-ExtIEs} }
                                                                                                     OPTIONAL,
ContextGroupInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    ************************
-- RESET RESPONSE
```

```
__ *********************
ResetResponse ::= SEQUENCE {
   protocolIEs
                        ProtocolIE-Container
                                             {{ResetResponse-IEs}},
   protocolExtensions
                        ProtocolExtensionContainer {{ResetResponse-Extensions}}
                                                                                    OPTIONAL,
ResetResponse-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-RNC-ID
                           CRITICALITY ignore TYPE RNC-ID
                                                            PRESENCE mandatory }
    ID id-CriticalityDiagnostics
                                   CRITICALITY
                                                                CriticalityDiagnostics
                                                 ignore
                                                                                           PRESENCE optional },
   . . .
ResetResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
   { ID id-Extended-RNC-ID
                                   CRITICALITY reject EXTENSION Extended-RNC-ID
                                                                                 PRESENCE optional },
-- RADIO LINK ACTIVATION COMMAND FDD
  ************************
RadioLinkActivationCommandFDD ::= SEQUENCE {
                                             {{RadioLinkActivationCommandFDD-IEs}},
   protocolIEs
                        ProtocolIE-Container
                        ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}
   protocolExtensions
                                                                                              OPTIONAL,
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 ::= {
   optional
DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
                            RL-ID,
   delayed-activation-update
                           DelayedActivationUpdate,
   iE-Extensions
                            ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs} } OPTIONAL,
   . . .
```

```
DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- RADIO LINK ACTIVATION COMMAND TDD
__ *********************
RadioLinkActivationCommandTDD ::= SEQUENCE {
   protocolIEs
               ProtocolIE-Container
                                            {{RadioLinkActivationCommandTDD-IEs}},
                     ProtocolExtensionContainer {{RadioLinkActivationCommandTDD-Extensions}}
   protocolExtensions
                                                                                           OPTIONAL,
RadioLinkActivationCommandTDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-DelayedActivationList-RL-ActivationCmdTDD
                                                   CRITICALITY ignore TYPE
                                                                           DelayedActivationInformationList-RL-ActivationCmdTDD
   PRESENCE mandatory },
RadioLinkActivationCommandTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
    DelayedActivationInformation-RL-ActivationCmdTDD-IEs} }
DelayedActivationInformation-RL-ActivationCmdTDD-IES RNSAP-PROTOCOL-IES ::= {
   optional }
DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
                           RL-ID,
   delayed-activation-update DelayedActivationUpdate,
   iE-Extensions
                           ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs} } OPTIONAL,
   . . .
DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- GERAN UPLINK SIGNALLING TRANSFER INDICATION
__ **********************
GERANUplinkSignallingTransferIndication ::= SEQUENCE {
```

```
{{GERANUplinkSignallingTransferIndication-IEs}},
                                    ProtocolIE-Container
    protocolIEs
    protocolExtensions
                                    ProtocolExtensionContainer {{GERANUplinkSignallingTransferIndication-Extensions}} 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
                                       CRITICALITY ignore TYPE S-RNTI
     ID id-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 ::= {
-- RADIO LINK PARAMETER UPDATE INDICATION FDD
RadioLinkParameterUpdateIndicationFDD ::= SEQUENCE
                                                    {{RadioLinkParameterUpdateIndicationFDD-IEs}},
    protocolIEs
                            ProtocolIE-Container
                            ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationFDD-Extensions}}
    protocolExtensions
                                                                                                                      OPTIONAL,
    . . .
RadioLinkParameterUpdateIndicationFDD-IES RNSAP-PROTOCOL-IES ::= {
           id-HSDSCH-FDD-Update-Information
                                                                    CRITICALITY ignore TYPE
                                                                                                HSDSCH-FDD-Update-Information
                                                                                                                                     PRESENCE
    optional}|
          id-RL-ParameterUpdateIndicationFDD-RL-InformationList CRITICALITY ignore TYPE
    { ID
                                                                                                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
```

```
ProtocolExtensionContainer { { RL-ParameterUpdateIndicationFDD-RL-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-ParameterUpdateIndicationFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
RadioLinkParameterUpdateIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
     ID id-Additional-HS-Cell-Information-RL-Param-Upd CRITICALITY ignore
                                                                     EXTENSION Additional-HS-Cell-Information-RL-Param-Upd
                                                                                                                     PRESENCE
optional },
   . . .
Additional-HS-Cell-Information-RL-Param-Upd ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs
Additional-HS-Cell-Information-RL-Param-Upd-ItemIEs ::=SEQUENCE{
   hSPDSCH-RL-ID
                                                RL-ID,
   hs-DsCH-FDD-secondary-serving-Update-Information Hs-DsCH-FDD-secondary-serving-Update-Information,
                               ProtocolExtensionContainer { Additional-HS-Cell-Information-RL-Setup-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
Additional-HS-Cell-Information-RL-Setup-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ******************
-- RADIO LINK PARAMETER UPDATE INDICATION TDD
  ******************
RadioLinkParameterUpdateIndicationTDD ::= SEQUENCE {
                        ProtocolIE-Container
                                             {{RadioLinkParameterUpdateIndicationTDD-IEs}},
   protocolIEs
                        ProtocolExtensionContainer {{RadioLinkParameterUpdateIndicationTDD-Extensions}}
   protocolExtensions
                                                                                                      OPTIONAL,
   . . .
RadioLinkParameterUpdateIndicationTDD-IEs RNSAP-PROTOCOL-IES ::= {
   { ID
         id-HSDSCH-TDD-Update-Information
                                             CRITICALITY
                                                                     TYPE
                                                                            HSDSCH-TDD-Update-Information
                                                                                                            PRESENCE optional },
                                                           ignore
   . . .
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
                                                                                                PRESENCE optional
                                          CRITICALITY reject TYPE AllowedQueuingTime
     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
                                                                                                PRESENCE optional
     ID id-UEMeasurementTimeslotInfoLCR
                                          CRITICALITY reject TYPE UEMeasurementTimeslotInfoLCR
     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}},
   protocolExtensions
                               ProtocolExtensionContainer {{UEMeasurementInitiationResponse-Extensions}}
                                                                                                                OPTIONAL,
UEMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MeasurementID
                                          CRITICALITY ignore TYPE MeasurementID
                                                                                                PRESENCE mandatory
     ID id-MeasurementFilterCoefficient
                                          CRITICALITY reject TYPE MeasurementFilterCoefficient
                                                                                                PRESENCE optional
     PRESENCE optional
    ID id-CriticalityDiagnostics
                                 CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                                PRESENCE optional },
UEMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::=
-- UE MEASUREMENT INITIATION FAILURE
```

```
__ ******************
UEMeasurementInitiationFailure ::= SEOUENCE {
   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}},
                           ProtocolExtensionContainer {{UEMeasurementTerminationRequest-Extensions}}
   protocolExtensions
                                                                                                        OPTIONAL,
UEMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-MeasurementID
                                    CRITICALITY ignore TYPE MeasurementID
                                                                                   PRESENCE mandatory },
UEMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::=
     ****************
-- UE MEASUREMENT FAILURE INDICATION
__ **********************
UEMeasurementFailureIndication ::= SEQUENCE {
   protocolIEs
                                ProtocolIE-Container
                                                         {{UEMeasurementFailureIndication-IEs}},
                                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
                                           CRITICALITY ignore TYPE ListOfInterfacesToTrace
     ID id-ListOfInterfacesToTrace
                                                                                                   PRESENCE optional
    ID id-TraceDepth
                                           CRITICALITY ignore TYPE TraceDepth
                                                                                                   PRESENCE mandatory
   . . .
ListOfInterfacesToTrace ::= SEQUENCE (SIZE (1..maxNrOfInterfaces)) OF ProtocolIE-Single-Container {{ InterfacesToBeTracedItemIE }}
```

```
InterfacesToBeTracedItemIE RNSAP-PROTOCOL-IES ::= {
   { ID id-InterfacesToTraceItem
                                           CRITICALITY ignore TYPE InterfacesToTraceItem
                                                                                                  PRESENCE mandatory }
InterfacesToTraceItem ::= SEOUENCE
                        ENUMERATED {iub, iur, ...},
   interface
                       ProtocolExtensionContainer { {InterfacesToTraceItem-ExtIEs} } OPTIONAL,
   iE-Extensions
InterfacesToTraceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IurInvokeTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- IUR DEACTIVATE TRACE
__ *******************
IurDeactivateTrace ::= SEQUENCE {
                                           ProtocolIE-Container
                                                                    {{IurDeactivateTrace-IEs}},
   protocolIEs
                                           ProtocolExtensionContainer {{IurDeactivateTrace-Extensions}} OPTIONAL,
   protocolExtensions
IurDeactivateTrace-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-D-RNTI
                                           CRITICALITY ignore TYPE D-RNTI
                                                                                                  PRESENCE optional
   { ID id-TraceReference
                                           CRITICALITY ignore TYPE TraceReference
                                                                                                  PRESENCE mandatory },
IurDeactivateTrace-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- MBMS ATTACH COMMAND
__ *********************
MBMSAttachCommand ::= SEQUENCE {
   protocolIEs
                      ProtocolIE-Container
                                              {{MBMSAttachCommand-IEs}},
   protocolExtensions ProtocolExtensionContainer {{MBMSAttachCommand-Extensions}}
                                                                                      OPTIONAL,
MBMSAttachCommand-IEs RNSAP-PROTOCOL-IES ::= {
```

```
ID id-MBMS-Bearer-Service-List
                                     CRITICALITY
                                                    ignore
                                                              TYPE MBMS-Bearer-Service-List PRESENCE mandatory}
   { ID id-UE-State
                                      CRITICALITY
                                                    ignore
                                                                    UE-State
                                                                                      PRESENCE optional },
MBMSAttachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *******************
-- MBMS DETACH COMMAND
  MBMSDetachCommand ::= SEQUENCE {
               ProtocolIE-Container
                                            {{MBMSDetachCommand-IEs}},
   protocolIEs
                       ProtocolExtensionContainer {{MBMSDetachCommand-Extensions}}
   protocolExtensions
                                                                                  OPTIONAL,
MBMSDetachCommand-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MBMS-Bearer-Service-List CRITICALITY
                                                          TYPE MBMS-Bearer-Service-List PRESENCE mandatory}
                                                ignore
                                                                                    PRESENCE optional },
    ID id-UE-State
                                  CRITICALITY
                                                ignore
                                                          TYPE UE-State
MBMSDetachCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
__ *********************
-- DIRECT INFORMATION TRANSFER
__ ******************
DirectInformationTransfer ::= SEQUENCE {
   protocolIEs
               ProtocolIE-Container
                                                {{DirectInformationTransfer-IEs}},
   protocolExtensions ProtocolExtensionContainer {{DirectInformationTransfer-Extensions}}
                                                                                                      OPTIONAL,
DirectInformationTransfer-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-RNC-ID
                                         CRITICALITY ignore TYPE RNC-ID
                                                                                            PRESENCE mandatory
                                         CRITICALITY ignore TYPE ProvidedInformation
    ID id-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 {
             ProtocolIE-Container
   protocolIEs
                                               {{EnhancedRelocationRequest-IEs}},
  protocolExtensions
                          ProtocolExtensionContainer {{EnhancedRelocationRequest-Extensions}}
                                                                                           OPTIONAL,
EnhancedRelocationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    ID id-Cause 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" --
    ID id-Extended-SRNC-ID CRITICALITY reject TYPE Extended-RNC-ID
                                                         PRESENCE optional } |
               CRITICALITY reject TYPE S-RNTI PRESENCE mandatory } |
                                            CRITICALITY reject TYPE RANAP-EnhancedRelocationInformationRequest PRESENCE
   { ID id-RANAP-EnhancedRelocationInformationRequest
mandatory },
   . . .
EnhancedRelocationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- 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 {
   protocolIEs
                               ProtocolIE-Container
                                                       {{EnhancedRelocationFailure-IEs}},
   protocolExtensions
                               ProtocolExtensionContainer {{EnhancedRelocationFailure-Extensions}}
                                                                                                           OPTIONAL.
EnhancedRelocationFailure-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-Cause CRITICALITY ignore TYPE Cause
                                                               PRESENCE mandatory } |
   ID id-CriticalityDiagnostics
                                      CRITICALITY ignore TYPE CriticalityDiagnostics
                                                                                      PRESENCE optional },
   . . .
EnhancedRelocationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  *****************
-- ENHANCED RELOCATION CANCEL
         EnhancedRelocationCancel ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{EnhancedRelocationCancel-IEs}},
                               ProtocolExtensionContainer {{EnhancedRelocationCancel-Extensions}}
   protocolExtensions
                                                                                                          OPTIONAL,
EnhancedRelocationCancel-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-Cause
                 CRITICALITY ignore TYPE Cause
                                                               PRESENCE mandatory },
   . . .
EnhancedRelocationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::=
  *****************
-- ENHANCED RELOCATION SIGNALLING TRANSFER
EnhancedRelocationSignallingTransfer ::= SEQUENCE {
   protocolIEs
                               ProtocolIE-Container
                                                        {{EnhancedRelocationSignallingTransfer-IEs}},
                              ProtocolExtensionContainer {{EnhancedRelocationSignallingTransfer-Extensions}}
   protocolExtensions
                                                                                                                     OPTIONAL,
EnhancedRelocationSignallingTransfer-IEs RNSAP-PROTOCOL-IES ::= {
   { ID id-L3-Information
                           CRITICALITY ignore TYPE L3-Information
                                                                             PRESENCE mandatory },
   . . .
```

```
EnhancedRelocationSignallingTransfer-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
-- ENHANCED RELOCATION RELEASE
__ *********************
EnhancedRelocationRelease ::= SEQUENCE {
   protocolIEs
                                 ProtocolIE-Container
                                                           {{EnhancedRelocationRelease-IEs}},
   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 {
                                                {{MBSFNMCCHInformation-IEs}},
   protocolIEs
                ProtocolIE-Container
   protocolExtensions ProtocolExtensionContainer {{MBSFNMCCHInformation-Extensions}}
                                                                                         OPTIONAL,
MBSFNMCCHInformation-IEs RNSAP-PROTOCOL-IES ::= {
     ID id-MBSFN-Cluster-Identity CRITICALITY
                                                           TYPE MBSFN-Cluster-Identity PRESENCE mandatory |
                                                ignore
                                                       TYPE MCCH-Message-List PRESENCE mandatory }
     ID id-MCCH-Message-List CRITICALITY 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 CRITICALITY
                                                                              ignore
                                                                                         TYPE MBSFN-Scheduling-Transmission-Time-Interval-
Info-List PRESENCE optional },
MBSFNMCCHInformation-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

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,
maxNrOfHAROProc,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUSize,
maxNrOfMBMSL3,
maxNrOfMCCHMessages,
maxNrOfEDCHMACdFlows,
maxNrOfEDCHMACdFlows-1,
maxNrOfEDCHMACdFlowsLCR,
maxNrOfEDCHMACdFlowsLCR-1,
maxNrOfMBMSServices,
maxNrOfPDUIndexes,
maxNrOfPDUIndexes-1,
maxNrOfPrioQueues,
maxNrOfPrioQueues-1,
maxNrOfSatAlmanac-maxNoSat,
maxNrOfGERANSI,
maxNrofSiqSeqERGHICH-1,
maxNrOfUEs,
maxNrOfAddFreq,
maxNrOfCellsPerFreq,
maxNoOfLogicalChannels,
maxNrOfRefBetas,
maxNrOfEAGCHCodes,
maxNrOfHS-DSCHTBSs,
```

```
maxNrOfHS-DSCHTBSs-HS-SCCHless,
maxHS-PDSCHCodeNrComp-1,
maxNrOfEHICHCodes.
maxGANSSSat,
maxNoGANSS,
maxSqnType,
maxNrOfBroadcastPLMNs,
maxHSDPAFrequency,
maxHSDPAFrequency-1,
maxFrequencyinCell,
maxFrequencyinCell-1,
maxGANSSSatAlmanac,
maxGANSSClockMod.
maxNrOfEDCHRLs.
maxNrOfEUTRANeighboursPerRNC,
maxEARFCN,
maxNrOfPreconfiguredNeighbours,
maxNrOfHSDSCH-1,
maxNrOfHSDSCH,
maxGANSS-1,
maxlengthMBMSconcatservlists,
maxNoOfTBSs-Mapping-HS-DSCH-SPS,
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1,
maxNoOfHS-DSCH-TBSsLCR,
maxNoOfRepetition-Period-LCR,
maxNoOfRepetitionPeriod-SPS-LCR-1,
maxNoOf-HS-SICH-SPS,
maxNoOf-HS-SICH-SPS-1,
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH,
id-Allowed-Rate-Information,
id-AntennaColocationIndicator,
id-BindingID,
id-Cell-Capacity-Class-Value,
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information,
id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response,
id-Counting-Information,
id-CoverageIndicator,
id-DPC-Mode-Change-SupportIndicator,
id-E-DCH-Minimum-Set-E-TFCIValidityIndicator,
id-E-RGCH-E-HICH-ChannelisationCodeValidityIndicator,
id-Extended-Round-Trip-Time-Value,
id-ExtendedPropagationDelay,
id-Extended-SRNC-ID,
id-Extended-RNC-ID,
id-GERAN-Cell-Capability,
id-GERAN-Classmark,
id-Guaranteed-Rate-Information,
id-HARO-Preamble-Mode-Activation-Indicator,
id-HCS-Prio,
```

```
id-Inter-Frequency-Cell-Information,
id-Load-Value.
id-Load-Value-IncrDecrThres.
id-Neighbouring-GSM-CellInformation,
id-Neighbouring-UMTS-CellInformationItem,
id-neighbouring-LCR-TDD-CellInformation,
id-NRT-Load-Information-Value,
id-NRT-Load-Information-Value-IncrDecrThres.
id-OnModification.
id-Received-Total-Wideband-Power-Value,
id-Received-Total-Wideband-Power-Value-IncrDecrThres,
id-RT-Load-Value,
id-RT-Load-Value-IncrDecrThres,
id-SFNSFNMeasurementThresholdInformation.
id-SNA-Information.
id-TrafficClass.
id-Transmitted-Carrier-Power-Value,
id-Transmitted-Carrier-Power-Value-IncrDecrThres,
id-TUTRANGPSMeasurementThresholdInformation,
id-UL-Timeslot-ISCP-Value,
id-UL-Timeslot-ISCP-Value-IncrDecrThres.
maxNrOfLevels.
maxNrOfMeasNCell.
maxNrOfMeasNCell-1.
id-MessageStructure,
id-RestrictionStateIndicator,
id-Rx-Timing-Deviation-Value-LCR,
id-TransportLaverAddress,
id-Transmission-Mode-Information,
id-TypeOfError,
id-Angle-Of-Arrival-Value-LCR,
id-IPDL-TDD-ParametersLCR,
id-DSCH-InitialWindowSize,
id-Maximum-DL-Power-TimeslotLCR-InformationItem,
id-MBMS-Bearer-Service-Full-Address,
id-MBMS-Neighbouring-Cell-Information,
id-MBMS-RLC-Sequence-Number-Information,
id-MBSFN-Cluster-Identity,
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List,
id-MCCH-Configuration-Info,
id-MCCH-Message-List,
id-Minimum-DL-Power-TimeslotLCR-InformationItem,
id-HS-SICH-Reception-Quality,
id-HS-SICH-Reception-Quality-Measurement-Value,
id-HS-PDSCH-Code-Change-Grant,
id-HS-PDSCH-Code-Change-Indicator,
id-ExtendedGSMCellIndividualOffset,
id-Unidirectional-DCH-Indicator,
id-RTLoadValue,
id-RLC-Sequence-Number,
id-NRTLoadInformationValue,
id-Satellite-Almanac-Information-ExtItem,
id-TnlOos,
id-UpPTSInterferenceValue,
```

```
id-NACC-Related-Data,
id-HARO-Preamble-Mode.
id-User-Plane-Congestion-Fields-Inclusion,
id-FrequencyBandIndicator,
id-PLCCH-Information-UL-TimeslotLCR-Info,
id-CellCapabilityContainer-TDD768,
id-hSSCCH-TDD-Specific-InfoList-Response768,
id-hSPDSCH-TDD-Specific-InfoList-Response768.
id-Rx-Timing-Deviation-Value-768,
id-UEMeasurementValueTransmittedPowerList768.
id-UEMeasurementValueTimeslotISCPList768,
id-E-DCH-PowerOffset-for-SchedulingInfo,
id-Rx-Timing-Deviation-Value-ext,
id-TrCH-SrcStatisticsDescr.
id-eDCH-MACdFlow-Retransmission-Timer-LCR,
id-MIMO-ActivationIndicator.
id-MIMO-InformationResponse,
id-MIMO-Mode-Indicator,
id-MIMO-N-M-Ratio,
id-SixteenQAM-UL-Operation-Indicator,
id-E-AGCH-Table-Choice,
id-E-TFCI-Boost-Information,
id-E-DPDCH-PowerInterpolation,
id-HSDSCH-MACdPDUSizeFormat,
id-MaximumMACdPDU-SizeExtended,
id-GANSS-Common-Data.
id-GANSS-Information,
id-GANSS-Generic-Data,
id-TUTRANGANSSMeasurementThresholdInformation,
id-TUTRANGANSSMeasurementValueInformation,
id-HARO-MemoryPartitioningInfoExtForMIMO,
id-Ext-Reference-E-TFCI-PO,
id-Ext-Max-Bits-MACe-PDU-non-scheduled,
id-Multiple-PLMN-List,
id-TransportBearerNotSetupIndicator,
id-TransportBearerNotRequestedIndicator,
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-multipleFreq-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-SixtyfourQAM-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-Req.
    id-UE-without-HS-SCCH-constraint-indicator,
    id-EnhancedHSServingCC-Abort,
    id-GANSS-Time-ID,
    id-GANSS-AddIonoModelReg,
    id-GANSS-EarthOrientParaReg.
    id-GANSS-AddNavigationModelsReq,
    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,
    id-MIMO-SFMode-Supported-For-HSPDSCHDualStream,
    id-MIMO-ReferenceSignal-InformationListLCR,
    id-DL-RLC-PDU-Size-Format
FROM RNSAP-Constants
    Criticality,
    ProcedureID,
    ProtocolIE-ID,
   TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes
    ProtocolIE-Single-Container{},
    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-IES.
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers:
```

```
-- A
AccessPointName
                   ::= OCTET STRING (SIZE (1..255))
AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1
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 ::= SEQUENCE {
    cMConfigurationChangeCFN
                                   CFN.
    transmission-Gap-Pattern-Sequence-Status Transmission-Gap-Pattern-Sequence-Status-List
                       ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    . . .
Active-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
AdditionalPreferredFrequency ::= SEQUENCE (SIZE (1..maxNrOfAddFreq)) OF AdditionalPreferredFrequencyItem
AdditionalPreferredFrequencyItem ::= SEQUENCE {
    dL-UARFCN
                                    UARFCN,
    correspondingCells
                                   CorrespondingCells,
                                   ProtocolExtensionContainer { { AdditionalPreferredFrequencyItem-ExtIEs} } OPTIONAL,
   iE-Extensions
AdditionalPreferredFrequencyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
AdjustmentPeriod
                           ::= INTEGER(1..256)
-- Unit Frame
AffectedUEInformationForMBMS
                              ::= SEQUENCE (SIZE (1..maxNrOfUEs)) OF S-RNTI
AllocationRetentionPriority ::= SEQUENCE {
                               PriorityLevel,
    priorityLevel
    pre-emptionCapability
                               Pre-emptionCapability,
    pre-emptionVulnerability
                               Pre-emptionVulnerability,
    iE-Extensions
                           ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
```

```
AllocationRetentionPriority-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 ::= {
                  ::= 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-Accuracy-Class AOA-LCR-Accuracy-Class,
                     ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
Angle-Of-Arrival-Value-LCR-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,
    . . .
-- B
```

```
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)
BindingID
                        ::= OCTET STRING (SIZE (1..4,...))
-- If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2.
BLER
                        ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER
SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
BSIC ::= SEQUENCE {
    nCC
                NCC,
    bCC
                BCC
BundlingModeIndicator ::= ENUMERATED {
    bundling,
    no-bundling
BurstModeParameters ::= SEQUENCE {
    burstStart
                   INTEGER (0..15),
```

```
burstLength
                   INTEGER (10..25),
   burstFreq
                   INTEGER (1..16),
   iE-Extensions
                               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,
e-dch-not-supported,
continuous-packet-connectivity-dtx-drx-operation-not-supported,
continuous-packet-connectivity-hs-scch-less-operation-not-supported,
mimo-not-supported,
e-dch-tti2ms-not-supported,
continuous-packet-connectivity-DTX-DRX-operation-not-available,
continuous-packet-connectivity-UE-DTX-Cycle-not-available,
mimo-not-available,
sixteenQAM-UL-not-Supported,
hSDSCH-MACdPDU-SizeFormatNotSupported,
f-dpch-slot-format-operation-not-supported,
e-DCH-MACdPDU-SizeFormat-not-available,
e-DPCCH-Power-Boosting-not-supported,
trelocprep-expiry,
directed-retry,
no-Iu-CS-UP-relocation,
reduce-load-in-serving-cell,
relocation-cancelled,
relocation-desirable-for-radio-reasons,
resource-optimisation-relocation.
time-critical-relocation,
traffic-load-in-the-target-cell-higher-than-in-the-source-cell,
sixtyfourOAM-DL-and-MIMO-Combined-not-available,
multi-Cell-operation-not-available,
multi-Cell-operation-not-supported,
semi-Persistent-scheduling-not-supported,
continuous-Packet-Connectivity-DRX-not-supported,
```

```
continuous-Packet-Connectivity-DRX-not-available
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified.
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
-- Twentyfirst bit: SixtyfourQAM DL Support Indicator
-- Twentysecond bit: Flexible E-DCH MAC-d PDU Size Support Indicator
-- Twentythird bit: E-DPCCH Power Boosting Support Indicator
-- Twentyfourth bit: SixtyfourQAM DL and MIMO Combined Support Indicator
-- Twentyfifth bit: Multi Cell Support Indicator Support Indicator
-- Twentysixth bit: MBMS Support Indicator
-- 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.
```

ChipOffset

::= INTEGER (0..38399)

```
CellCapabilityContainer-TDD768 ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- The fourth bit: Flexible MAC-d PDU Size Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
C-TD
                       ::= INTEGER (0..65535)
CCTrCH-ID
                      ::= INTEGER (0..15)
Cell-Capacity-Class-Value ::= SEQUENCE {
        uplinkCellCapacityClassValue
                                            INTEGER (1..100,...),
        downlinkCellCapacityClassValue
                                            INTEGER (1..100,...)
CellIndividualOffset ::= INTEGER (-20..20)
CellParameterID
                           ::= INTEGER (0..127,...)
CellPortionID ::= INTEGER (0..63,...)
CFN
                    ::= INTEGER (0..255)
CGI ::= SEQUENCE {
   1AI
                SEQUENCE {
        pLMN-Identity PLMN-Identity,
                        LAC,
        iE-Extensions
                                ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
                    CI,
    сI
                            ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL
    iE-Extensions
LAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ChannelCodingType ::= ENUMERATED {
   no-codingTDD,
    convolutional-coding,
    turbo-coding,
    . . .
```

```
CI
                    ::= OCTET STRING (SIZE (2))
ClosedLoopModel-SupportIndicator
                                     ::= ENUMERATED
    closedLoop-Model-Supported,
    closedLoop-Mode1-not-Supported
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    . . .
CodingRate ::= ENUMERATED {
    half,
    third,
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass
                                             TUTRANGPSAccuracyClass,
    tUTRANGANSSMeasurementAccuracyClass
                                             TUTRANGANSSAccuracyClass
CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-UE-Positioning,
    sFN-SFN-observerd-time-difference,
    load,
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    rT-load,
    nRT-load-Information,
    upPTSInterference,
    uTRAN-GANSS-timing-of-cell-frames-for-UE-Positioning
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.
CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation
                                             TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation
                                             SFNSFNMeasurementValueInformation,
    loadValue
                                             LoadValue,
    transmittedCarrierPowerValue
                                             INTEGER (0..100),
    receivedTotalWideBandPowerValue
                                             INTEGER (0..621),
    uplinkTimeslotISCPValue
                                             UL-TimeslotISCP,
    . . . ,
    extension-CommonMeasurementValue
                                             Extension-CommonMeasurementValue
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 {
                                CommonMeasurementAvailable,
    measurementAvailable
    measurementnotAvailable
                                NULL
CommonMeasurementAvailable::= SEQUENCE {
    commonMeasurementValue
                                CommonMeasurementValue,
                                    ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }
    iE-Extensions
                                                                                                                 OPTIONAL,
CommonMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CongestionCause ::= ENUMERATED
    uTRAN-dynamic-resources,
    uTRAN-semistatic-resources,
CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED
    not-Required
Common-EDCH-MAC-d-Flow-Specific-InformationFDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem ::= SEQUENCE {
    common-EDCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    MaxNr-Retransmissions-EDCH,
    eDCH-HARQ-PO-FDD
                                                    E-DCH-HARQ-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                           OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                    Common-E-DCH-LogicalChannelInformation,
                                                    ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-ExtIEs} }
    iE-Extensions
           OPTIONAL,
Common-EDCH-MAC-d-Flow-Specific-InformationFDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
Common-EDCH-MAC-d-Flow-Specific-InformationLCR ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlowsLCR)) OF Common-EDCH-MAC-d-Flow-Specific-
InformationItemLCR
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR ::= SEQUENCE {
    common-EDCH-MACdFlow-ID-LCR
                                                    EDCH-MACdFlow-ID-LCR.
    maximum-Number-of-Retransmissions-For-E-DCH
                                                    MaxNr-Retransmissions-EDCH,
    eDCH-HARQ-PO-TDD
                                                    E-DCH-HARQ-PO-TDD,
    eDCH-MACdFlow-Multiplexing-List
                                                    E-DCH-MACdFlow-Multiplexing-List
                                                                                                            OPTIONAL,
    common-E-DCHLogicalChannelInformation
                                                    Common-E-DCH-LogicalChannelInformation,
                                                     ProtocolExtensionContainer { { Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs} }
    iE-Extensions
           OPTIONAL,
    . . .
Common-EDCH-MAC-d-Flow-Specific-InformationItemLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Common-E-DCH-LogicalChannelInformation ::= SEOUENCE (SIZE (1..maxNoOfLogicalChannels)) OF Common-E-DCH-LogicalChannelInformationItem
Common-E-DCH-LogicalChannelInformationItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
    maximumMACdPDU-SizeExtended
                                    MAC-PDU-SizeExtended,
                                    ProtocolExtensionContainer { { Common-E-DCH-LogicalChannelInformationItem-ExtIEs } }
   iE-Extensions
                                                                                                                                 OPTIONAL,
Common-E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Common-EDCH-Support-Indicator ::= NULL
Continuous-Packet-Connectivity-DTX-DRX-Information ::= SEOUENCE {
    uE-DTX-DRX-Offset
                                                UE-DTX-DRX-Offset,
    enabling-Delay
                                                Enabling-Delay,
    dTX-Information
                                                DTX-Information,
    dRX-Information
                                                DRX-Information
                                                                                         OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-ExtIEs } }
    OPTIONAL,
    . . .
Continuous-Packet-Connectivity-DTX-DRX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify ::= SEQUENCE {
                                                UE-DTX-DRX-Offset
    uE-DTX-DRX-Offset
                                                                                         OPTIONAL,
    enabling-Delay
                                                Enabling-Delay
                                                                                         OPTIONAL,
    dTX-Information-to-Modify
                                                DTX-Information-to-Modify
                                                                                         OPTIONAL,
    dRX-Information-to-Modify
                                                DRX-Information-to-Modify
                                                                                         OPTIONAL,
```

```
ProtocolExtensionContainer { { Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs
    iE-Extensions
           OPTIONAL.
    . . .
Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-HS-SCCH-Less-Information ::= SEQUENCE (SIZE (1..maxNrOfHS-DSCHTBSs-HS-SCCHless)) OF Continuous-Packet-Connectivity-
HS-SCCH-Less-InformationItem
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem ::= SEQUENCE {
    transport-Block-Size-Index
                                            Transport-Block-Size-Index,
    hSPDSCH-Second-Code-Support
                                            HSPDSCH-Second-Code-Support,
    iE-Extensions
                                            ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs } }
           OPTIONAL,
Continuous-Packet-Connectivity-HS-SCCH-Less-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response ::= SEQUENCE {
    hSPDSCH-First-Code-Index
                                            HSPDSCH-First-Code-Index,
    hSPDSCH-Second-Code-Index
                                            HSPDSCH-Second-Code-Index
                                                                                    OPTIONAL,
    iE-Extensions
                                            ProtocolExtensionContainer { { Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs
           OPTIONAL,
Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CorrespondingCells ::= SEQUENCE (SIZE (1..maxNrOfCellsPerFreq)) OF C-ID
CoverageIndicator ::= ENUMERATED {
    overlap,
    covers,
    containedIn,
CPC-Information ::= SEQUENCE
    continuous-Packet-Connectivity-DTX-DRX-Information
                                                                            Continuous-Packet-Connectivity-DTX-DRX-Information
    OPTIONAL,
    continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
                                                                            Continuous-Packet-Connectivity-DTX-DRX-Information-to-Modify
    OPTIONAL,
```

```
continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                             Continuous-Packet-Connectivity-HS-SCCH-Less-Information
    OPTIONAL.
    iE-Extensions
                                                                             ProtocolExtensionContainer { { CPC-Information-ExtIEs} }
    OPTIONAL,
CPC-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Deactivate-Indicator
                                                                                      CRITICALITY reject
                                                                                                                  EXTENSION Continuous-Packet-
Connectivity-HS-SCCH-less-Deactivate-Indicator
                                                         PRESENCE optional },
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,
    counting-Result
                                        Counting-Result,
    iE-Extensions
                                        ProtocolExtensionContainer { { Counting-Information-List-ExtIEs} } OPTIONAL,
    . . .
Counting-Information-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Counting-Result ::= INTEGER (0..63)
CRC-Size
                        ::= ENUMERATED {
    v0,
    v8,
    v12.
    v16.
    v24.
    . . .
CriticalityDiagnostics ::= SEQUENCE {
    procedureID
                                    ProcedureID
                                                             OPTIONAL,
    triggeringMessage
                                    TriggeringMessage
                                                             OPTIONAL,
    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,
                                ProtocolIE-ID,
       iE-ID
        repetitionNumber
                                RepetitionNumber0
                                                        OPTIONAL.
       iE-Extensions
                                ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ID id-MessageStructure
                                CRITICALITY ignore
                                                        EXTENSION MessageStructure
                                                                                        PRESENCE optional }
   ID id-TypeOfError
                                                        EXTENSION TypeOfError
                                                                                        PRESENCE mandatory },
                                CRITICALITY ignore
    . . .
MessageStructure ::= SEOUENCE (SIZE (1..maxNrOfLevels)) OF
    SEQUENCE {
       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
                        ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
    iE-Extensions
CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    1AC
                        LAC,
    rAC
                        RAC,
    iE-Extensions
                        ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                ::= ENUMERATED
CNDomainType
   cs-domain,
    ps-domain,
    dont-care,
    . . .
```

```
-- See in [16]
CommonPhysicalChannelID ::= INTEGER (0..255)
COI-DTX-Timer ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity}
    -- Unit subframe
ControlGAP ::= INTEGER (1..255)
CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,..., v16, v32, v64}
COI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1
COI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1
C-RNTI
                       ::= INTEGER (0..65535)
CodeRate ::= INTEGER (0..63)
CodeRate-short ::= INTEGER (0..10)
CPC-InformationLCR ::= SEQUENCE {
    continuousPacketConnectivity-DRX-InformationLCR
                                                                  ContinuousPacketConnectivity-DRX-InformationLCR
                                                                                                                                OPTIONAL,
    continuousPacketConnectivity-DRX-Information-to-Modify-LCR
                                                                   ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR
                                                                                                                                OPTIONAL,
    hS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                  HS-DSCH-Semi-PersistentScheduling-Information-LCR
                                                                                                                                OPTIONAL,
    hS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                                  HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR
                                                                                                                                OPTIONAL,
    hS-DSCH-SPS-Deactivate-Indicator-LCR
                                                                              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,
    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,
                                   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,
    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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
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,
    e-AGCH-UE-DRX-Offset-LCR
                                                        UE-DRX-Offset-LCR,
    iE-Extensions
                                                        ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-ExtIEs} } OPTIONAL,
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
E-AGCH-UE-Inactivity-Monitor-Threshold ::= ENUMERATED {v0, v1, v2, v4, v8, v16, v32, v64, v128, v256, v512, infinity,...}
    -- Unit subframe
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR ::= SEQUENCE
    enabling-Delay
                                                Enabling-Delay
                                                                                        OPTIONAL,
    dRX-Information-to-Modify-LCR
                                                DRX-Information-to-Modify-LCR
                                                                                        OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs }
               OPTIONAL,
ContinuousPacketConnectivity-DRX-Information-to-Modify-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DRX-Information-to-Modify-LCR ::= CHOICE {
                    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
                                                                                     OPTIONAL,
                                                E-AGCH-DRX-Information-LCR
    iE-Extensions
                                                ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-LCR-ExtIEs} } OPTIONAL,
DRX-Information-to-Modify-Items-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
ContinuousPacketConnectivity-DRX-Information-ResponseLCR ::= SEQUENCE {
                                            Enabling-Delay
    enabling-Delay
                                                                                     OPTIONAL,
    hS-SCCH-DRX-Information-ResponseLCR
                                            HS-SCCH-DRX-Information-ResponseLCR
                                                                                     OPTIONAL,
                                            E-AGCH-DRX-Information-ResponseLCR
    e-AGCH-DRX-Information-ResponseLCR
                                                                                     OPTIONAL,
                                            ProtocolExtensionContainer { { ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs } }
    iE-Extensions
       OPTIONAL,
    . . .
ContinuousPacketConnectivity-DRX-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-DRX-Information-ResponseLCR ::= SEQUENCE {
    hS-SCCH-UE-DRX-Cycle-LCR
                                                                 UE-DRX-Cycle-LCR
                                                                                         OPTIONAL,
    hS-SCCH-Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                 Inactivity-Threshold-for-UE-DRX-Cycle-LCR
                                                                                                               OPTIONAL,
   hS-SCCH-UE-DRX-Offset-LCR
                                                                UE-DRX-Offset-LCR
                                                                                         OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { HS-SCCH-DRX-Information-ResponseLCR-ExtIEs} } OPTIONAL,
HS-SCCH-DRX-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
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,
                                                     ProtocolExtensionContainer { { E-AGCH-DRX-Parameters-Response-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
```

```
E-AGCH-DRX-Parameters-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- D
DATA-ID ::= INTEGER (0..3)
DCH-FDD-Information
                       ::= SEOUENCE (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 ::= {
                                                                                         optional },
    { ID id-TnlOos
                           CRITICALITY
                                          ignore
                                                      EXTENSION
                                                                 TnlQos
                                                                             PRESENCE
    . . .
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,
    gE-Selector
                                      OE-Selector,
   dRACControl
                                      DRACControl,
                                      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
                                TransportLaverAddress OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { {DCH-InformationResponseItem-ExtIEs} } OPTIONAL,
DCH-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Allowed-Rate-Information
                                                CRITICALITY ignore EXTENSION Allowed-Rate-Information
                                                                                                                     PRESENCE optional }
     ID id-TransportBearerNotSetupIndicator
                                                CRITICALITY ignore EXTENSION TransportBearerNotSetupIndicator
                                                                                                                     PRESENCE optional }, -- FDD only
                        ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem
DCH-TDD-Information
DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator
                                        PayloadCRC-PresenceIndicator,
    ul-FP-Mode
                                        UL-FP-Mode,
    toAWS
                                        ToAWS,
    toAWE
                                        TOAWE,
    dCH-SpecificInformationList
                                        DCH-Specific-TDD-InformationList,
    iE-Extensions
                                        ProtocolExtensionContainer { {DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    . . .
DCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlOos
                                        CRITICALITY
                                                         ignore
                                                                     EXTENSION
                                                                                 TnlQos
                                                                                             PRESENCE
                                                                                                         optional },
    . . .
DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item
DCH-Specific-TDD-Item ::=
                            SEQUENCE {
    dCH-ID
                                        DCH-ID,
    ul-cCTrCH-ID
                                        CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
    dl-cCTrCH-ID
                                        CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
    trCH-SrcStatisticsDescr
                                        TrCH-SrcStatisticsDescr,
    ul-transportFormatSet
                                        TransportFormatSet,
    dl-transportFormatSet
                                        TransportFormatSet,
    ul-BLER
                                        BLER,
    dl-BLER
                                        BLER,
    allocationRetentionPriority
                                        AllocationRetentionPriority,
    frameHandlingPriority
                                        FrameHandlingPriority,
    qE-Selector
                                        OE-Selector
                                                             OPTIONAL,
    -- This IE shall be present if DCH is part of set of Co-ordinated DCHs
                                        ProtocolExtensionContainer { {DCH-Specific-TDD-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
```

```
DCH-Specific-TDD-Item-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
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
                                                CRITICALITY reject TYPE HS-SICH-Reception-Quality-Value
     ID id-HS-SICH-Reception-Quality
                                                                                                           PRESENCE mandatory
                                                                                                           PRESENCE mandatory
     ID id-Rx-Timing-Deviation-Value-768
                                                CRITICALITY reject TYPE Rx-Timing-Deviation-Value-768
     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 },
DedicatedMeasurementValueInformation ::= CHOICE {
                                DedicatedMeasurementAvailable.
    measurementAvailable
    measurementnotAvailable
                                DedicatedMeasurementnotAvailable
DedicatedMeasurementAvailable::= SEQUENCE {
    dedicatedmeasurementValue
                                    DedicatedMeasurementValue,
    CFN
                                                            OPTIONAL,
```

```
ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }
    ie-Extensions
                                                                                                               OPTIONAL,
DedicatedMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DedicatedMeasurementnotAvailable ::= NULL
DelayedActivation ::= CHOICE {
    separate-indication
                          NULL
DelayedActivationUpdate ::= CHOICE {
    activate
                  Activate-Info,
    deactivate
                   Deactivate-Info
Activate-Info ::= SEQUENCE {
    activation-type
                           Execution-Type,
    initial-dl-tx-power
                          DL-Power,
    firstRLS-Indicator
                           FirstRLS-Indicator
                                                                                    OPTIONAL, --FDD Only
    propagation-delay
                          PropagationDelay
                                                                                    OPTIONAL, --FDD Only
    iE-Extensions
                           ProtocolExtensionContainer { { Activate-Info-ExtIEs} }
                                                                                    OPTIONAL,
    . . .
Activate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-ExtendedPropagationDelay
                                      CRITICALITY ignore EXTENSION ExtendedPropagationDelay PRESENCE optional },
Deactivate-Info ::= SEQUENCE {
    deactivation-type
                           Execution-Type,
    iE-Extensions
                           OPTIONAL,
    . . .
Deactivate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Execution-Type ::= CHOICE {
    synchronised
    unsynchronised NULL
DeltaSIR
                       ::= INTEGER (0..30)
-- Step 0.1 dB, Range 0..3 dB.
```

```
DGANSSCorrections ::= SEQUENCE {
   dGANSS-ReferenceTime
                                INTEGER (0..119),
   dGANSS-Information
                                SEQUENCE (SIZE (1..maxSgnType)) OF SEQUENCE {
       gANSS-SignalId
                                   GANSS-Signal-ID
                                                                                                        OPTIONAL,
       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),
          qANSS-iod
                                       BIT STRING (SIZE (10)),
          udre
                                       INTEGER (-2047..2047),
          ganss-prc
          ganss-rrc
                                       INTEGER (-127..127),
                                       ie-Extensions
                                                                                                        OPTIONAL,
                                    ProtocolExtensionContainer { { DGANSS-InformationItem-ExtIEs } }
       ie-Extensions
                                                                                                        OPTIONAL,
   ie-Extensions
                                OPTIONAL,
DGANSSCorrections-ExtlEs 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 GANSS-ID
                                                                            PRESENCE
                                                                                      optional},
   . . .
DGANSS-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DGANSS-SignalInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
DGANSSThreshold ::= SEQUENCE {
           pRCDeviation
                                                                 PRCDeviation,
DGPSCorrections ::= SEQUENCE {
           qPSTOW
                                                                                                                        GPSTOW.
           qPS-Status-Health
                                                                                                                        GPS-Status-Health,
           satellite-DGPSCorrections-Information
                                                                                                                        SEQUENCE (SIZE (1..maxNoSat)) OF
                     SEQUENCE {
                                sAT-ID
                                                                                                                                    SAT-ID,
                                iode-dqps
                                                                                                                                    BIT STRING (SIZE (8)),
                                uDRE
                                                                                                                                    UDRE,
                                pRC
                                                                                                                                    PRC,
                                range-Correction-Rate
                                                                                                                                    Range-Correction-Rate,
                                iE-Extensions
                                                                                                                                    ProtocolExtensionContainer { { Satellite-DGPSCorrections-Information-ExtIEs} }
                                                                                                                                                                                                                                                                                                                                                                     OPTIONAL,
                     },
                                                                                                   iE-Extensions
                                                                                                                                                                                                                                                                             OPTIONAL,
            . . .
Satellite-DGPSCorrections-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
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, v100
DiversityControlField
                                                                                        ::= ENUMERATED {
           may,
           must,
           must-not
```

```
::= ENUMERATED {
DiversityMode
   none,
    sTTD.
    closedLoopMode1,
    not-used-closedLoopMode2,
DL-DPCH-SlotFormat
                          ::= INTEGER (0..16,...)
DL-DPCH-TimingAdjustment ::= ENUMERATED {
    timing-advance,
    timing-delay
DL-Power
                       ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step 0.1dB
DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType
                                       PowerAdjustmentType,
    dLReferencePower
                                       DL-Power
                                                     OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dLReferencePowerList DL-ReferencePowerInformationList
    -- 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
                                                               OPTIONAL,
    adjustmentPeriod
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentRatio
                                       ScaledAdjustmentRatio OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    iE-Extensions
                                       ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
    . . .
DL-PowerBalancing-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-ReferencePowerInformationList
                                       ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
   rL-ID
                               RL-ID,
    dl-Reference-Power
                               DL-Power,
   iE-Extensions
                               ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL.
DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
```

```
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
DL-ReferencePowerInformation
                              ::= SEQUENCE {
    common-DL-ReferencePowerInformation
                                                DL-Power
                                                                OPTIONAL,
    individual-DL-ReferencePowerInformation
                                                DL-ReferencePowerInformationList
                                                                                        OPTIONAL,
                                                ProtocolExtensionContainer { { DL-ReferencePowerInformation-ExtIEs } } OPTIONAL,
    iE-Extensions
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 ::= SEOUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType
                                    MidambleShiftAndBurstType,
    tFCI-Presence
                                    TFCI-Presence,
                                    TDD-DL-Code-Information,
    dL-Code-Information
                                    ProtocolExtensionContainer { {DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
DL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF DL-TimeslotLCR-InformationItem
DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                            TimeSlotLCR,
    midambleShiftLCR
                                            MidambleShiftLCR,
    tFCI-Presence
                                            TFCI-Presence,
    dL-Code-LCR-Information
                                        TDD-DL-Code-LCR-Information,
```

```
ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                            OPTIONAL,
DL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   PRESENCE optional } |
                                                                          EXTENSION DL-Power
   -- 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,
                                ProtocolExtensionContainer { {DL-Timeslot-InformationItem768-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
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.
                                ProtocolExtensionContainer { { DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} }
   iE-Extensions
                                                                                                    OPTIONAL,
DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DL-TimeslotISCP
                     ::= INTEGER (0..91)
```

```
-- According to mapping in [24]
Downlink-Compressed-Mode-Method
                                    ::= ENUMERATED {
    not-Used-puncturing,
    sFdiv2,
    higher-layer-scheduling,
DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
DPC-Mode-Change-SupportIndicator ::= ENUMERATED {
   dPC-ModeChangeSupported
DPCH-ID
                        ::= INTEGER (0..239)
DPCH-ID768 ::= INTEGER (0..479)
DPCHConstantValue ::= INTEGER (-10..10)
-- Unit dB, Step 1dB
DRACControl
               ::= ENUMERATED {
    not-Used-requested,
    not-requested
DRXCycleLengthCoefficient
                                        ::= INTEGER (3..9)
-- See in [16]
DRX-Information ::= SEQUENCE {
    uE-DRX-Cycle
                                            UE-DRX-Cycle,
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                     Inactivity-Threshold-for-UE-DRX-Cycle,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                     Inactivity-Threshold-for-UE-Grant-Monitoring,
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring,
                                            ProtocolExtensionContainer { {DRX-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
DRX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DRX-Information-to-Modify ::= CHOICE {
    modify
                         DRX-Information-to-Modify-Items,
    deactivate
                    NULL,
    . . .
```

```
DRX-Information-to-Modify-Items ::= SEQUENCE
    uE-DRX-Cvcle
                                            UE-DRX-Cvcle
                                                                        OPTIONAL.
    inactivity-Threshold-for-UE-DRX-Cycle
                                                                    Inactivity-Threshold-for-UE-DRX-Cycle
                                                                                                                    OPTIONAL,
    inactivity-Threshold-for-UE-Grant-Monitoring
                                                                    Inactivity-Threshold-for-UE-Grant-Monitoring
                                                                                                                         OPTIONAL.
    uE-DRX-Grant-Monitoring
                                            UE-DRX-Grant-Monitoring
                                                                                OPTIONAL,
                                            ProtocolExtensionContainer { {DRX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
DRX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DSCH-RNTI ::= INTEGER (0..65535)
DSCH-FlowControlInformation ::= SEQUENCE (SIZE(1..16)) OF DSCH-FlowControlItem
DSCH-FlowControlItem ::= SEQUENCE {
                                        SchedulingPriorityIndicator,
    dSCH-SchedulingPriority
    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
                                        SchedulingPrioritvIndicator,
    bl.ER
    iE-Extensions
                                        ProtocolExtensionContainer { {DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
DSCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass
                                            CRITICALITY ignore EXTENSION TrafficClass
                                                                                                     PRESENCE mandatory }
    { ID id-BindingID
                                            CRITICALITY ignore EXTENSION BindingID
                                                                                                     PRESENCE optional }
    -- Shall be ignored if bearer establishment with ALCAP.
```

```
PRESENCE optional } |
    { ID id-TransportLayerAddress
                                            CRITICALITY ignore EXTENSION TransportLayerAddress
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlOos
                                            CRITICALITY ignore EXTENSION
                                                                            TnlOos
                                                                                                      PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
DsField ::= BIT STRING (SIZE (8))
DTX-Cycle-2ms-Items ::= SEQUENCE {
    uE-DTX-Cycle1-2ms
                                    UE-DTX-Cycle1-2ms,
    uE-DTX-Cycle2-2ms
                                    UE-DTX-Cycle2-2ms,
    mAC-DTX-Cycle-2ms
                                    MAC-DTX-Cycle-2ms,
    iE-Extensions
                                                ProtocolExtensionContainer { { DTX-Cycle-2ms-Items-ExtIEs} }
                                                                                                                           OPTIONAL
DTX-Cycle-2ms-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
DTX-Cycle-2ms-to-Modify-Items ::= SEQUENCE {
    uE-DTX-Cvcle1-2ms
                                    UE-DTX-Cvcle1-2ms
                                                                OPTIONAL.
   uE-DTX-Cycle2-2ms
                                    UE-DTX-Cycle2-2ms
                                                                OPTIONAL.
    mAC-DTX-Cycle-2ms
                                    MAC-DTX-Cycle-2ms
                                                                OPTIONAL,
    iE-Extensions
                                                ProtocolExtensionContainer { { DTX-Cycle-2ms-to-Modify-Items-ExtIEs} } }
                                                                                                                              OPTIONAL,
DTX-Cycle-2ms-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Cycle-10ms-Items ::= SEQUENCE {
   uE-DTX-Cycle1-10ms
                                    UE-DTX-Cycle1-10ms
    uE-DTX-Cycle2-10ms
                                    UE-DTX-Cycle2-10ms,
    mAC-DTX-Cycle-10ms
                                    MAC-DTX-Cycle-10ms,
    iE-Extensions
                                                ProtocolExtensionContainer { { DTX-Cycle-10ms-Items-ExtIEs} }
                                                                                                                           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-ExtlEs 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
    cQI-DTX-Timer
                                COI-DTX-Timer,
    uE-DPCCH-burst1
                                UE-DPCCH-burst1,
                                UE-DPCCH-burst2,
    uE-DPCCH-burst2
                                ProtocolExtensionContainer { {DTX-Information-ExtIEs} } OPTIONAL,
    iE-Extensions
DTX-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
DTX-Information-to-Modify ::= CHOICE {
                        DTX-Information-to-Modify-Items,
    modify
    deactivate
                         NULL,
    . . .
DTX-Information-to-Modify-Items ::= SEQUENCE {
    e-DCH-TTI-Length-to-Modify
                                    E-DCH-TTI-Length-to-Modify
                                                                                 OPTIONAL,
    inactivity-Threshold-for-UE-DTX-Cycle2
                                                            Inactivity-Threshold-for-UE-DTX-Cycle2
                                                                                                                 OPTIONAL,
    uE-DTX-Long-Preamble
                                    UE-DTX-Long-Preamble
                                                                        OPTIONAL,
    mAC-Inactivity-Threshold
                                        MAC-Inactivity-Threshold
                                                                                 OPTIONAL,
    cOI-DTX-Timer
                                    COI-DTX-Timer
                                                                         OPTIONAL,
    uE-DPCCH-burst1
                                    UE-DPCCH-burst1
                                                                        OPTIONAL,
                                    UE-DPCCH-burst2
                                                                        OPTIONAL,
    uE-DPCCH-burst2
                                    ProtocolExtensionContainer { {DTX-Information-to-Modify-Items-ExtIEs} } OPTIONAL,
    iE-Extensions
DTX-Information-to-Modify-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- E
EARFCN ::= INTEGER (0..maxEARFCN)
EARFCN-Information ::= CHOICE {
    fDD
            EARFCN-FDD,
    tDD
            EARFCN,
    . . .
```

```
EARFCN-FDD ::= SEQUENCE {
   uL-EARFCN
                   EARFCN
    dL-EARFCN
                   EARFCN
E-AGCH-Table-Choice ::= ENUMERATED{table16B, table16B-12, ...}
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,
                                                     E-RNTI
   primary-e-RNTI
                                                                                       OPTIONAL,
    secondary-e-RNTI
                                                     E-RNTI
                                                                                       OPTIONAL,
    eRGCH-EHICH-ChannelisationCode
                                                     FDD-DL-ChannelisationCodeNumber,
                                                     ERGCH-SignatureSequence
    eRGCH-SignatureSequence
                                                                                       OPTIONAL,
    eHICH-SignatureSequence
                                                     EHICH-SignatureSequence
                                                                                       OPTIONAL,
                                                     E-Serving-Grant-Value
    serving-Grant-Value
                                                                                       OPTIONAL,
    primary-Secondary-Grant-Selector
                                                     E-Primary-Secondary-Grant-Selector OPTIONAL,
    e-RGCH-Release-Indicator
                                                     E-RGCH-Release-Indicator
                                                                                       OPTIONAL,
    iE-Extensions
                                                     ProtocolExtensionContainer { { EDCH-FDD-DL-ControlChannelInformation-ExtIEs } }
   OPTIONAL,
    . . .
EDCH-FDD-DL-ControlChannelInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional } |
    { ID id-Default-Serving-Grant-in-DTX-Cycle2
                                                            CRITICALITY ignore EXTENSION E-Serving-Grant-Value
   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,
   hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                 HARO-Process-Allocation-2ms-EDCH
                                                                                                                   OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                 E-DCH-Maximum-Bitrate
                                                                                                                   OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                 E-DCH-Processing-Overload-Level
                                                                                                                   OPTIONAL,
    e-DCH-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-SchedulingInfoPRESENCE optional
     ID id-SixteenOAM-UL-Operation-Indicator
                                                      CRITICALITY reject EXTENSION
                                                                                    SixteenQAM-UL-Operation-Indicator PRESENCE optional
    { ID id-E-AGCH-Table-Choice
                                                      CRITICALITY ignore EXTENSION E-AGCH-Table-Choice
                                                                                                                  PRESENCE conditional }.
    -- The IE shall be present if the SixteenOAM UL Operation Indicator IE is set to "Activate"--
EDCH-FDD-InformationResponse ::= SEQUENCE {
    eDCH-MACdFlow-Specific-InformationResponse
                                                          EDCH-MACdFlow-Specific-InformationResponse,
   hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                         HARO-Process-Allocation-2ms-EDCH
                                                                                                                                   OPTIONAL.
   iE-Extensions
                                                         ProtocolExtensionContainer { { EDCH-FDD-InformationResponse-ExtIEs } }
                                                                                                                                   OPTIONAL,
EDCH-FDD-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
EDCH-MACdFlow-Specific-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InformationResponseItem
EDCH-MACdFlow-Specific-InformationResponseItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                                  EDCH-MACdFlow-ID,
   bindingID
                                                  BindingID
                                                                                                                     OPTIONAL,
                                                  TransportLayerAddress
    transportLayerAddress
                                                                                                                     OPTIONAL,
                                                  HARQ-Process-Allocation-2ms-EDCH
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                                                                                     OPTIONAL,
                              ProtocolExtensionContainer { {EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs} } OPTIONAL,
   iE-Extensions
EDCH-MACdFlow-Specific-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    PRESENCE optional }, -- FDD only
EDCH-FDD-Information-To-Modify ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information
                                                  EDCH-MACdFlow-Specific-InfoToModifyList,
                                                  HARO-Process-Allocation-2ms-EDCH
   hARO-Process-Allocation-Scheduled-2ms-EDCH
                                                                                                                             OPTIONAL,
    e-DCH-Maximum-Bitrate
                                                  E-DCH-Maximum-Bitrate
                                                                                                                             OPTIONAL,
    e-DCH-Processing-Overload-Level
                                                  E-DCH-Processing-Overload-Level
                                                                                                                             OPTIONAL,
    e-DCH-Reference-Power-Offset
                                                  E-DCH-Reference-Power-Offset
                                                                                                                             OPTIONAL,
   mACeReset-Indicator
                                                  MACeReset-Indicator
                                                                                                                             OPTIONAL,
   iE-Extensions
                                                  ProtocolExtensionContainer { { EDCH-FDD-Information-To-Modify-ExtIEs } }
                                                                                                                             OPTIONAL,
EDCH-FDD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-E-DCH-PowerOffset-for-SchedulingInfo
                                                  CRITICALITY ignore EXTENSION
                                                                                E-DCH-PowerOffset-for-SchedulingInfo
                                                                                                                           PRESENCE optional }
 ID id-SixteenQAM-UL-Operation-Indicator
                                                  CRITICALITY reject EXTENSION
                                                                                SixteenQAM-UL-Operation-Indicator
                                                                                                                           PRESENCE optional }
{ ID id-E-DCH-MACdPDUSizeFormat
                                                                                                                           PRESENCE optional }
                                                  CRITICALITY reject EXTENSION
                                                                                E-DCH-MACdPDUSizeFormat
```

```
{ ID id-E-DCH-DL-Control-Channel-Grant-Information CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Grant-Information PRESENCE optional}
{ ID id-E-AGCH-Table-Choice
                                                    CRITICALITY ignore EXTENSION
                                                                                    E-AGCH-Table-Choice
                                                                                                                                PRESENCE
conditional \.
-- The IE shall be present if the SixteenOAM UL Operation Indicator IE is set to "Activate"--
E-DCH-FDD-Update-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-UpdateInformation
                                                    E-DCH-MACdFlow-Specific-UpdateInformation
                                                                                                                                         OPTIONAL,
    hARQ-Process-Allocation-Scheduled-2ms-EDCH
                                                    HARQ-Process-Allocation-2ms-EDCH
                                                                                                                                         OPTIONAL,
                                                    ProtocolExtensionContainer { { E-DCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-DCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    { ID id-E-DCH-DL-Control-Channel-Change-Information
                                                                CRITICALITY ignore EXTENSION E-DCH-DL-Control-Channel-Change-Information
    PRESENCE optional },
E-DCH-MACdFlow-Specific-UpdateInformation ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-UpdateInformation-Item
E-DCH-MACdFlow-Specific-UpdateInformation-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                    EDCH-MACdFlow-ID,
    hARO-Process-Allocation-NonSched-2ms-EDCH
                                                    HARO-Process-Allocation-2ms-EDCH
                                                                                                                                         OPTIONAL,
    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-Change-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 ::= SEOUENCE (SIZE (1..maxNrOfEDCHRLs)) OF E-DCH-DL-Control-Channel-Grant-Information-Item
E-DCH-DL-Control-Channel-Grant-Information-Item ::= SEQUENCE {
    e-DCH-RL-ID
                                            ProtocolExtensionContainer { { E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs} } OPTIONAL,
    iE-Extensions
```

```
E-DCH-DL-Control-Channel-Grant-Information-Item-ExtIEs 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-HARO-PO-FDD ::= INTEGER (0.. maxNrOfEDCH-HARO-PO-OUANTSTEPs)
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,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelInformationItem-ExtIEs } }
    iE-Extensions
                                                                                                                          OPTIONAL,
    . . .
E-DCH-LogicalChannelInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
                                            CRITICALITY reject
      ID id-MaximumMACdPDU-SizeExtended
                                                                                                        PRESENCE optional } |
                                                                     EXTENSION
                                                                                MAC-PDU-SizeExtended
                                                                                                               PRESENCE optional \, -- 1.28 Mcps TDD only
     ID id-MACes-Maximum-Bitrate-LCR
                                            CRITICALITY ignore
                                                                    EXTENSION
                                                                                MACes-Maximum-Bitrate-LCR
E-DCH-Maximum-Bitrate ::= INTEGER (0..5742,...,5743..11498)
E-DCH-PowerOffset-for-SchedulingInfo ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-Processing-Overload-Level ::= INTEGER (0..10,...)
E-DCH-Reference-Power-Offset ::= INTEGER (0.. maxNrOfEDCH-HARQ-PO-QUANTSTEPs)
E-DCH-MACdPDU-SizeList ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-MACdPDU-SizeListItem ::= SEOUENCE {
    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,
    mACd-PDU-Size-List
                                    E-DCH-MACdPDU-SizeToModifyList,
                                    ProtocolExtensionContainer { { E-DCH-LogicalChannelToModifyItem-ExtIEs } }
    iE-Extensions
                                                                                                                        OPTIONAL,
E-DCH-LogicalChannelToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-MaximumMACdPDU-SizeExtended
                                            CRITICALITY reject
                                                                                 MAC-PDU-SizeExtended
                                                                                                         PRESENCE optional } |
                                                                     EXTENSION
     ID id-MACes-Maximum-Bitrate-LCR
                                            CRITICALITY ignore
                                                                                                               PRESENCE optional }, -- 1.28 Mcps TDD only
                                                                     EXTENSION
                                                                                 MACes-Maximum-Bitrate-LCR
    . . .
E-DCH-MACdPDU-SizeToModifyList ::= SEQUENCE (SIZE (0..maxNrOfMACdPDUSize)) OF E-DCH-MACdPDU-SizeListItem
E-DCH-LogicalChannelToDelete ::= SEQUENCE (SIZE (1..maxNoOfLogicalChannels)) OF E-DCH-LogicalChannelToDeleteItem
E-DCH-LogicalChannelToDeleteItem ::= SEQUENCE {
    logicalChannelId
                                    LogicalChannelID,
                                    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,
                                                     ProtocolExtensionContainer { { EDCH-MACdFlow-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
```

```
E-DCH-MACdFlow-Multiplexing-List ::= BIT STRING ( SIZE(maxNrOfEDCHMACdFlows) )
EDCH-MACdFlow-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoItem
EDCH-MACdFlow-Specific-InfoItem ::= SEQUENCE
    eDCH-MACdFlow-ID
                                        EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                             OPTIONAL,
    tnl0oS
                                                                             OPTIONAL,
    payloadCRC-PresenceIndicator
                                        PayloadCRC-PresenceIndicator,
    maxNr-Retransmissions-EDCH
                                        MaxNr-Retransmissions-EDCH,
    trafficClass
                                        TrafficClass.
    eDCH-HARO-PO-FDD
                                        E-DCH-HARO-PO-FDD,
    eDCH-MACdFlow-Multiplexing-List
                                        E-DCH-MACdFlow-Multiplexing-List
                                                                             OPTIONAL,
    eDCH-Grant-Type-Information
                                        E-DCH-Grant-Type-Information
                                                                             OPTIONAL,
    bundlingModeIndicator
                                        BundlingModeIndicator
                                                                             OPTIONAL,
    eDCHLogicalChannelInformation
                                        E-DCH-LogicalChannelInformation,
                                        ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoItem-ExtIEs } }
    iE-Extensions
                                                                                                                           OPTIONAL
EDCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-TrCH-SrcStatisticsDescr CRITICALITY ignore EXTENSION TrCH-SrcStatisticsDescr PRESENCE optional },
    . . .
EDCH-MACdFlow-Specific-InfoToModifyList ::= SEOUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlow-Specific-InfoToModifyItem
EDCH-MACdFlow-Specific-InfoToModifyItem ::= SEQUENCE {
    eDCH-MACdFlow-ID
                                        EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                        AllocationRetentionPriority
                                                                             OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    tnl0oS
                                        Tnl0os
                                                                             OPTIONAL,
    maxNr-Retransmissions-EDCH
                                        MaxNr-Retransmissions-EDCH
                                                                             OPTIONAL,
    trafficClass
                                        TrafficClass
                                                                             OPTIONAL,
    eDCH-HARO-PO-FDD
                                        E-DCH-HARO-PO-FDD
                                                                             OPTIONAL,
    eDCH-MACdFlow-Multiplexing-List
                                        E-DCH-MACdFlow-Multiplexing-List
                                                                             OPTIONAL,
    eDCH-Grant-Type-Information
                                        E-DCH-Grant-Type-Information
                                                                             OPTIONAL,
    bundlingModeIndicator
                                        BundlingModeIndicator
                                                                             OPTIONAL,
    eDCH-LogicalChannelToAdd
                                        E-DCH-LogicalChannelInformation
                                                                             OPTIONAL,
    eDCH-LogicalChannelToModify
                                        E-DCH-LogicalChannelToModify
                                                                             OPTIONAL,
    eDCH-LogicalChannelToDelete
                                        E-DCH-LogicalChannelToDelete
                                                                             OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoToModifyItem-ExtIEs } }
                                                                                                                                 OPTIONAL,
EDCH-MACdFlow-Specific-InfoToModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
EDCH-MACdFlows-To-Delete ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF EDCH-MACdFlows-To-Delete-Item
EDCH-MACdFlows-To-Delete-Item ::= SEOUENCE {
                                        EDCH-MACdFlow-ID,
    eDCH-MACdFlow-ID
    iE-Extensions
                                        ProtocolExtensionContainer { { EDCH-MACdFlows-To-Delete-Item-ExtIEs } }
                                                                                                                        OPTIONAL.
EDCH-MACdFlows-To-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EDCH-RL-Indication ::= ENUMERATED {
    eDCH.
    non-EDCH
E-DCH-Non-Scheduled-Transmission-Grant-Items ::= SEQUENCE
    -- The following IE shall be ignored if id-Ext-Max-Bits-MACe-PDU-non-scheduled is present in E-DCH-Non-Scheduled-Transmission-Grant-Items-
ExtIEs
    maxBits-MACe-PDU-non-scheduled
                                                Max-Bits-MACe-PDU-non-scheduled.
   hARQ-Process-Allocation-NonSched-2ms
                                                HARQ-Process-Allocation-2ms-EDCH
   OPTIONAL,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs} }
   OPTIONAL,
    . . .
E-DCH-Non-Scheduled-Transmission-Grant-Items-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the maximum number of bits to be signalled exceeds maxNrOfBits-MACe-PDU-non-scheduled
    { ID id-Ext-Max-Bits-MACe-PDU-non-scheduled
                                                   CRITICALITY reject
                                                                            EXTENSION Ext-Max-Bits-MACe-PDU-non-scheduled
                                                                                                                                 PRESENCE optional },
E-DCH-TFCI-Table-Index ::= INTEGER (0..1,...,2..7)
E-DCH-Serving-cell-change-informationResponse ::= SEQUENCE {
                                            E-DCH-serving-cell-change-choice,
    e-DCH-serving-cell-outcome-choice
                                            ProtocolExtensionContainer { { E-DCH-serving-cell-change-informationResponse-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
E-DCH-serving-cell-change-informationResponse-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-choice ::= CHOICE {
    e-DCH-serving-cell-change-successful
                                                E-DCH-serving-cell-change-successful,
    e-DCH-serving-cell-change-unsuccessful
                                                E-DCH-serving-cell-change-unsuccessful,
    . . .
E-DCH-serving-cell-change-successful ::= SEQUENCE {
    e-DCH-RL-InformationList-Rsp
                                                    E-DCH-RL-InformationList-Rsp,
```

```
ProtocolExtensionContainer { { E-DCH-serving-cell-change-successful-ExtIEs} } OPTIONAL,
    iE-Extensions
E-DCH-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-RL-InformationList-Rsp ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF E-DCH-RL-InformationList-Rsp-Item
E-DCH-RL-InformationList-Rsp-Item ::= SEQUENCE {
    e-DCH-reconfigured-RL-Id
                                                RL-ID,
    e-DCH-FDD-DL-Control-Channel-Info
                                                EDCH-FDD-DL-ControlChannelInformation,
   iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-RL-InformationList-Rsp-Item-ExtIEs} } OPTIONAL,
E-DCH-RL-InformationList-Rsp-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-serving-cell-change-unsuccessful ::= SEQUENCE {
    cause
    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 {
   two-ms
                DTX-Cycle-2ms-Items,
                DTX-Cycle-10ms-Items,
    ten-ms
E-DCH-TTI-Length-to-Modify ::= CHOICE {
                DTX-Cycle-2ms-to-Modify-Items,
    two-ms
    ten-ms
                DTX-Cycle-10ms-to-Modify-Items,
    . . .
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
                                                            HARQ-Info-for-E-DCH,
```

```
hSDSCH-Configured-Indicator
                                                        HSDSCH-Configured-Indicator,
   iE-Extensions
                                     ProtocolExtensionContainer { { EDPCH-Information-FDD-ExtIEs } }
                                                                                                      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-TTI
                                             E-TTI
                                                                   OPTIONAL,
   e-DPCCH-PO
                                             E-DPCCH-PO
                                                                   OPTIONAL,
   e-RGCH-2-IndexStepThreshold
                                             E-RGCH-2-IndexStepThreshold
                                                                               OPTIONAL,
                                             E-RGCH-3-IndexStepThreshold
   e-RGCH-3-IndexStepThreshold
                                                                               OPTIONAL,
                                             HARO-Info-for-E-DCH
   hARO-Info-for-E-DCH
                                                                               OPTIONAL,
   hSDSCH-Configured-Indicator
                                             HSDSCH-Configured-Indicator
                                                                               OPTIONAL,
   iE-Extensions
                                     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-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
                                                        HARO-Info-for-E-DCH
                                                                                                                       OPTIONAL,
   hSDSCH-Configured-Indicator
                                                        HSDSCH-Configured-Indicator
                                                                                                                       OPTIONAL,
   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..maxNrofSiqSeqERGHICH-1)
E-RGCH-Release-Indicator ::= ENUMERATED {e-RGCHreleased}
ERGCH-SignatureSequence ::= INTEGER (0..maxNrofSigSegERGHICH-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
    iE-Extensions
                                    ProtocolExtensionContainer { { EDCH-Serving-RL-in-this-DRNS-ExtIEs} }
                                                                                                                     OPTIONAL,
    . . .
EDCH-Serving-RL-in-this-DRNS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
Enhanced-FACH-Information-ResponseFDD ::= SEQUENCE {
    common-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
    dedicated-HS-DSCH-RNTI-priorityQueueInfo-EnhancedFACH
                                                                        PriorityQueue-InfoList-EnhancedFACH-PCH,
    priorityQueueInfo-EnhancedPCH
                                                PriorityQueue-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,
    iE-Extensions
                                        ProtocolExtensionContainer { { Enhanced-FACH-Information-ResponseLCR-ExtIEs } }
                                                                                                                                OPTIONAL,
```

```
Enhanced-FACH-Information-ResponseLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Enhanced-FACH-Support-Indicator ::= NULL
EnhancedHSServingCC-Abort ::= ENUMERATED {abortEnhancedHSServingCC,...}
Enhanced-PCH-Capability ::= ENUMERATED {
   enhanced-pch-capable,
    enhanced-pch-not-capable
E-RNTI ::= INTEGER (0..65535)
E-TFCI ::= INTEGER (0..127)
E-TFCI-BetaEC-Boost ::= INTEGER (0..127,...)
E-TFCI-Boost-Information ::= SEQUENCE {
   e-TFCI-BetaEC-Boost
                                                E-TFCI-BetaEC-Boost,
   uL-Delta-T2TP
                                                UL-Delta-T2TP
                                                                      OPTIONAL,
   -- This IE shall be present if the E-TFCI BetaEC Boost IE value is not set to 127.
                                                ProtocolExtensionContainer { { E-TFCI-Boost-Information-ExtIEs} }
                                                                                                                OPTIONAL,
   iE-Extensions
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
   iE-Extensions
                                                ProtocolExtensionContainer { {E-TFCS-Information-ExtIEs} }
                                                                                                             OPTIONAL,
E-TFCS-Information-ExtIEs 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 ::= SEQUENCE {
    measurementTreshold
                            MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime
                            ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventB ::= SEQUENCE {
    measurementTreshold
                            MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime
                                                                OPTIONAL,
                            ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventC ::= SEQUENCE {
                                           MeasurementIncreaseDecreaseThreshold,
    measurementIncreaseDecreaseThreshold
    measurementChangeTime
                                MeasurementChangeTime,
    iE-Extensions
                            ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
    . . .
```

```
EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventD ::= SEQUENCE {
   measurementIncreaseDecreaseThreshold
                                           MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime
                                MeasurementChangeTime,
                            ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
   iE-Extensions
EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventE ::= SEQUENCE
   measurementThreshold1
                                MeasurementThreshold,
    measurementThreshold2
                                MeasurementThreshold
                                                                OPTIONAL,
    measurementHysteresisTime
                                MeasurementHysteresisTime
                                                                OPTIONAL.
                                ReportPeriodicity
    reportPeriodicity
                                                            OPTIONAL,
    iE-Extensions
                            ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
EventF ::= SEQUENCE {
   measurementThreshold1
                                MeasurementThreshold,
    measurementThreshold2
                                MeasurementThreshold
                                                                OPTIONAL,
    measurementHysteresisTime MeasurementHysteresisTime
                                                                OPTIONAL,
    reportPeriodicity
                            ReportPeriodicity
                                                        OPTIONAL,
                            ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
   iE-Extensions
EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ExtendedGSMCellIndividualOffset ::= INTEGER (-50..-11 | 11..50)
E-DCH-Information ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD,
    e-DCH-MACdFlows-Information-TDD
                                                E-DCH-MACdFlows-Information-TDD,
    e-DCH-TDD-Information
                                                E-DCH-TDD-Information,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Information-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
```

```
E-DCH-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-PUCH-Information ::= SEQUENCE {
    minCR
                                                CodeRate,
    maxCR
                                                CodeRate,
   hargInfo
                                                HARO-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-sixteenOAM-RefBetaInfo
                                                E-DCH-sixteenOAM-RefBetaInfo,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-TFCS-Information-TDD-ExtIEs } }
                                                                                                                        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 ::= SEQUENCE {
    refCodeRate
                            CodeRate-short,
    refBeta
                            RefBeta
E-DCH-MACdFlows-Information-TDD ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-InfoTDDItem
E-DCH-MACdFlow-InfoTDDItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID
                                                     EDCH-MACdFlow-ID,
    allocationRetentionPriority
                                                     AllocationRetentionPriority,
    tnlQos
                                                     TnlQos
                                                                                 OPTIONAL,
    bindingID
                                                     BindingID
                                                                                 OPTIONAL,
    transportLayerAddress
                                                     TransportLayerAddress
                                                                                 OPTIONAL,
    payloadCRC-PresenceIndicator
                                                     PayloadCRC-PresenceIndicator,
    maximum-Number-of-Retransmissions-For-E-DCH
                                                     MaxNr-Retransmissions-EDCH,
    eDCH-HARQ-PO-TDD
                                                     E-DCH-HARQ-PO-TDD,
                                                     E-DCH-MACdFlow-Multiplexing-List
    eDCH-MACdFlow-Multiplexing-List
                                                                                                            OPTIONAL,
    eDCH-Grant-TypeTDD
                                                     E-DCH-Grant-TypeTDD,
    eDCHLogicalChannelInformation
                                                     E-DCH-LogicalChannelInformation,
                                                     ProtocolExtensionContainer { { E-DCH-MACdFlow-InfoTDDItem-ExtIEs} } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
```

```
E-DCH-MACdFlow-InfoTDDItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-eDCH-MACdFlow-Retransmission-Timer-LCR CRITICALITY ignore
                                                                             EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
                                                                                                                                    PRESENCE optional
    { ID id-TrafficClass
                                                    CRITICALITY ignore
                                                                             EXTENSION TrafficClass
                                                                                                                                    PRESENCE
mandatory },
E-DCH-MACdFlow-Retransmission-Timer-LCR ::= ENUMERATED
ms10, ms15, ms20, ms25, ms30, ms35, ms40, ms45, ms50, ms55, ms60, ms65, ms70, ms75, ms80, ms85, ms90,
ms95, ms100, ms110, ms120, ms140, ms160, ms200, ms240, ms280, ms320, ms400, ms480, ms560,...
E-DCH-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,
   iE-Extensions
                                                    ProtocolExtensionContainer { { E-DCH-TDD-Information-ExtIEs } }
                                                                                                                        OPTIONAL,
E-DCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Maximum-Bitrate ::= INTEGER (0..9201,...)
E-DCH-Information-Reconfig ::= SEQUENCE {
    e-PUCH-Information
                                                E-PUCH-Information
                                                                                                                     OPTIONAL,
    e-TFCS-Information-TDD
                                                E-TFCS-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Add
                                                E-DCH-MACdFlows-Information-TDD
                                                                                                                     OPTIONAL,
    e-DCH-MACdFlows-to-Delete
                                                EDCH-MACdFlows-To-Delete
                                                                                                                     OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                E-DCH-Non-Scheduled-Grant-Info
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information
                                                E-DCH-TDD-Information
                                                                                                                     OPTIONAL,
    e-DCH-TDD-Information-to-Modify
                                                E-DCH-TDD-Information-to-Modify
                                                                                                                     OPTIONAL,
                                                ProtocolExtensionContainer { { E-DCH-Information-Reconfig-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
    . . .
```

```
E-DCH-Information-Reconfig-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-TDD-Information-to-Modify ::= SEQUENCE
    e-DCH-TDD-Information-to-Modify-List
                                            E-DCH-TDD-Information-to-Modify-List
                                                                                     OPTIONAL,
    mACeReset-Indicator
                                            MACeReset-Indicator
                                                                                      OPTIONAL,
    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 },
    . . .
E-DCH-TDD-Information-to-Modify-List ::= SEOUENCE (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-LogicalChannelToAdd
                                                     E-DCH-LogicalChannelInformation
                                                                                                                      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
                                                         CRITICALITY ignore
                                                                                 EXTENSION E-DCH-MACdFlow-Retransmission-Timer-LCR
                                                                                                                                           PRESENCE
optional }
    { ID id-TrafficClass
                                                         CRITICALITY ignore
                                                                                 EXTENSION TrafficClass
                                                                                                                                           PRESENCE
optional },
E-DCH-Information-Response ::= SEQUENCE {
    e-DCH-TDD-MACdFlow-Specific-InformationResp
                                                     E-DCH-TDD-MACdFlow-Specific-InformationResp OPTIONAL,
    e-AGCH-Specific-Information-ResponseTDD
                                                     E-AGCH-Specific-InformationRespListTDD OPTIONAL,
    e-HICH-Information-Response
                                                     E-HICH-InformationResp OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info
                                                     E-DCH-Non-Scheduled-Grant-Info OPTIONAL,
    e-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,
                                                    ProtocolExtensionContainer { { E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    iE-Extensions
   OPTIONAL,
    . . .
E-DCH-TDD-MACdFlow-Specific-InformationRespItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespListTDD ::= SEOUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-ItemTDD
E-AGCH-Specific-InformationResp-ItemTDD ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
                                                    MidambleShiftAndBurstType,
    midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode.
                                                    ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs } }
    iE-Extensions
                                                                                                                                         OPTIONAL,
E-AGCH-Specific-InformationResp-ItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-InformationResp::= SEQUENCE {
    timeslot
                                                    TimeSlot,
                                                    MidambleShiftAndBurstType,
   midambleShiftAndBurstType
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode.
    e-HICH-TimeOffset
                                                    E-HICH-TimeOffset,
                                                    ProtocolExtensionContainer { { E-HICH-InformationResp-ExtIEs } }
    iE-Extensions
                                                                                                                           OPTIONAL,
E-HICH-InformationResp-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-TimeOffset ::= INTEGER (4..44)
E-DCH-Non-Scheduled-Grant-Info ::= SEQUENCE {
    timeslotResource
                                                E-DCH-TimeslotResource
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    tddE-PUCH-Offset
                                                TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
```

```
ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-ExtIEs } }
    iE-Extensions
                                                                                                                              OPTIONAL,
E-DCH-Non-Scheduled-Grant-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-768-Information ::= SEOUENCE {
    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,
                                                    ProtocolExtensionContainer { { E-DCH-TDD-Information768-ExtIEs } }
    iE-Extensions
                                                                                                                           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,
                                                ProtocolExtensionContainer { { E-DCH-768-Information-Reconfig-ExtIEs} }
    iE-Extensions
E-DCH-768-Information-Reconfig-ExtIEs 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-Response768
                                                     E-HICH-InformationResp768
                                                                                 OPTIONAL,
    e-DCH-Non-Scheduled-Grant-Info768
                                                     E-DCH-Non-Scheduled-Grant-Info768
                                                                                         OPTIONAL.
    e-RNTI
                                                     E-RNTI.
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-DCH-768-Information-Response-ExtIEs } }
                                                                                                                                 OPTIONAL,
E-DCH-768-Information-Response-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
E-AGCH-Specific-InformationRespList768TDD ::= SEQUENCE (SIZE (1..maxNrOfEAGCHCodes)) OF E-AGCH-Specific-InformationResp-Item768TDD
E-AGCH-Specific-InformationResp-Item768TDD ::= SEQUENCE
    timeslot
    midambleShiftAndBurstType768
                                                     MidambleShiftAndBurstType768,
    tDD-ChannelisationCode768
                                                     TDD-ChannelisationCode768,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs } }
    OPTIONAL,
    . . .
E-AGCH-Specific-InformationResp-Item768TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
E-HICH-InformationResp768::= SEQUENCE {
    timeslot
                                                     TimeSlot,
                                                     MidambleShiftAndBurstType768,
    midambleShiftAndBurstType768
                                                     TDD-ChannelisationCode768,
    tDD-ChannelisationCode768
    e-HICH-TimeOffset
                                                     E-HICH-TimeOffset,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp768-ExtIEs } }
                                                                                                                              OPTIONAL,
    . . .
E-HICH-InformationResp768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-Non-Scheduled-Grant-Info768 ::= SEQUENCE
    timeslotResource
                                                 E-DCH-TimeslotResource,
    powerResource
                                                 E-DCH-PowerResource,
    repetitionPeriod
                                                 RepetitionPeriod,
    repetitionLength
                                                 RepetitionLength,
    tddE-PUCH-Offset
                                                 TddE-PUCH-Offset,
    tdd-ChannelisationCode768
                                                 TDD-ChannelisationCode768.
    iE-Extensions
                                                 ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info768-ExtIEs } }
                                                                                                                                  OPTIONAL,
E-DCH-Non-Scheduled-Grant-Info768-ExtIES 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.
                                                ProtocolExtensionContainer { { E-DCH-Information-LCR-ExtIEs} }
    iE-Extensions
                                                                                                                        OPTIONAL,
E-DCH-Information-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-PUCH-LCR-Information ::= SEQUENCE {
    minCR
                                                CodeRate,
    maxCR
                                                CodeRate,
    harqInfo
                                                HARO-Info-for-E-DCH,
    pRxdesBase
                                                E-PUCH-PRXdesBase,
                                                TDD-TPC-UplinkStepSize-LCR,
    e-PUCH-TPC-Step-Size
                                                N-E-UCCH-LCR,
    n-E-UCCH-LCR
    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
                                                                                                                        OPTIONAL,
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-
                                PRESENCE optional }|
EDCH
    { 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 },
E-DCH-Physical-Layer-Category-LCR ::= INTEGER (1..5)
```

```
Extended-E-DCH-LCRTDD-PhysicalLayerCategory ::= INTEGER (6,...)
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,
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-Specific-InformationResp-LCR-ExtIEs } }
                                                                                                                                        OPTIONAL,
```

```
E-HICH-Specific-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-Scheduled-InformationRespList-LCR-TDD ::= SEQUENCE (SIZE (1..maxNrOfEHICHCodes)) OF E-HICH-Scheduled-InformationResp-Item-LCR-TDD
E-HICH-Scheduled-InformationResp-Item-LCR-TDD ::= SEQUENCE {
    e-HICH-EI
                                                E-HICH-EI,
                                                E-HICH-InformationResp-LCR,
    e-HICH-Scheduled-InformationResp-LCR
                                                ProtocolExtensionContainer { { E-HICH-Scheduled-InformationResp-LCR-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
E-HICH-Scheduled-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-HICH-EI ::= INTEGER (0..3)
E-HICH-InformationResp-LCR::= SEQUENCE {
    timeSlotLCR
                                                    TimeSlotLCR,
                                                    MidambleShiftLCR,
    midambleShiftLCR
    tDD-ChannelisationCode
                                                    TDD-ChannelisationCode,
                                                    SignatureSequenceGroupIndex,
    signatureSequenceGroupIndex
    iE-Extensions
                                                     ProtocolExtensionContainer { { E-HICH-InformationResp-LCR-ExtIEs } }
                                                                                                                              OPTIONAL,
E-HICH-InformationResp-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
E-HICH-TimeOffset-LCR ::= INTEGER (4..15)
E-DCH-SubframeNumber-LCR ::= ENUMERATED{s0,s1}
E-DCH-TimeslotResource-LCR ::= BIT STRING (SIZE (5))
E-DCH-Non-Scheduled-Grant-Info-LCR ::= SEQUENCE {
    timeslotResource-LCR
                                                E-DCH-TimeslotResource-LCR.
    powerResource
                                                E-DCH-PowerResource,
    repetitionPeriod
                                                RepetitionPeriod,
    repetitionLength
                                                RepetitionLength,
    subframenumber
                                                E-DCH-SubframeNumber-LCR,
    tddE-PUCH-Offset
                                                TddE-PUCH-Offset,
    tdd-ChannelisationCode
                                                TDD-ChannelisationCode,
    iE-Extensions
                                                ProtocolExtensionContainer { { E-DCH-Non-Scheduled-Grant-Info-LCR-ExtIEs } }
```

```
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-Round-Trip-Time-Value ::= INTEGER(32767..103041)
-- See also mapping in [23]
Ext-Max-Bits-MACe-PDU-non-scheduled ::= INTEGER(19983..22978,...)
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,
    iE-Extensions
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-LCR-ExtIEs } }
    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,
                                            ProtocolExtensionContainer { { E-DCH-Semi-PersistentScheduling-Information-to-Modify-LCR-ExtIEs } }
    iE-Extensions
       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 ::= SEOUENCE {
   timeslot-Resource-Related-Information
                                              E-DCH-TimeslotResource-LCR,
                                              E-DCH-PowerResource,
   powerResource
   repetitionPeriodIndex
                                              RepetitionPeriodIndex,
   repetitionLength
                                              RepetitionLength,
                                              ENUMERATED {v0, v1},
   subframeNumber
   tddE-PUCH-Offset
                                              TddE-PUCH-Offset,
   tdd-ChannelisationCode
                                              TDD-ChannelisationCode,
   n-E-UCCHLCR
                                              N-E-UCCH-LCR,
                                              iE-Extensions
                                                                                                                       OPTIONAL,
Initial-E-DCH-SPS-resource-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
E-DCH-SPS-HICH-Information ::= SEQUENCE {
                                              E-HICH-Configuration,
   e-HICH-Configuration
   signatureSequenceGroupIndex
                                          SignatureSequenceGroupIndex,
   iE-Extensions
                                              ProtocolExtensionContainer { { E-DCH-SPS-HICH-Information-ExtIEs } }
                                                                                                                       OPTIONAL,
E-DCH-SPS-HICH-Information-ExtlEs 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,
    iE-Extensions
                                                    ProtocolExtensionContainer { { E-HICH-InformationResp-ExplicitConfiguration-LCR-ExtIEs } }
    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-LengthList,
    mAC-c-sh-SDU-Lengths
    fACH-InitialWindowSize
                                    FACH-InitialWindowSize,
                                    ProtocolExtensionContainer { {FACH-FlowControlInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FACH-FlowControlInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                                ::= INTEGER { unlimited(255) } (0..255)
FACH-InitialWindowSize
-- Number of frames MAC-c-sh SDUs.
-- 255 = Unlimited number of FACH data frames
FACH-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfFACHs)) OF FACH-InformationItem
FACH-InformationItem ::= SEQUENCE {
                                    TransportFormatSet,
    transportFormatSet
   iE-Extensions
                                    ProtocolExtensionContainer { { FACH-InformationItem-ExtIEs} } OPTIONAL,
FACH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Fast-Reconfiguration-Mode ::= ENUMERATED {fast,...}
Fast-Reconfiguration-Permission ::= ENUMERATED {allowed,...}
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
                                                    OPTIONAL,
    transportBearerRequestIndicator
                                        TransportBearerRequestIndicator,
    dCH-SpecificInformationList
                                        FDD-DCHs-to-ModifySpecificInformationList,
```

```
ProtocolExtensionContainer { {FDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    iE-Extensions
FDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlOos
                                        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
                                                             OPTIONAL,
                                                NULL
                                    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
                                                CRITICALITY ignore
                                                                         EXTENSION TrafficClass
                                                                                                                     PRESENCE optional }
     ID id-Unidirectional-DCH-Indicator
                                                CRITICALITY reject
                                                                         EXTENSION Unidirectional-DCH-Indicator
                                                                                                                     PRESENCE optional },
FDD-DL-ChannelisationCodeNumber
                                    ::= INTEGER (0..511)
-- According to the mapping in [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-size1,
    step-size1-5,
    step-size2,
    . . .
```

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```
SchedulingPriorityIndicator
                                         ::= INTEGER { lowest(0), highest(15) } (0..15)
F-DPCH-SlotFormat ::= INTEGER (0..9)
F-DPCH-SlotFormatSupportRequest ::= NULL
FirstRLS-Indicator ::= ENUMERATED {
    first-RLS.
    not-first-RLS
FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
FPACH-Information ::= SEQUENCE {
    timeSlotLCR
                                 TimeSlotLCR,
    tDD-ChannelisationCodeLCR
                                TDD-ChannelisationCodeLCR,
    midambleShiftLCR
                                MidambleShiftLCR,
    wΤ
                                INTEGER (1..4),
FrameHandlingPriority
                                 ::= INTEGER { lowest(0), highest(15) } (0..15)
FrameOffset
                        ::= INTEGER (0..255)
-- Frames
FrequencyBandIndicator
                            ::= ENUMERATED {
    bandI,
    bandII,
    bandIII,
    bandIV,
    bandV,
    bandVI,
    bandVII,
    bandVIII,
    bandIX,
    bandX,
    bandXI,
    bandXII,
    bandXIII,
    bandXIV,
    bandXV.
    bandXVI,
    bandXVII,
    bandXVIII,
    bandXIX,
    bandXX,
    bandXXI,
    bandXXII,
```

```
-- G
GapLength
                       ::= INTEGER (1..14)
-- Unit Slot
GapDuration
                        ::= INTEGER (1..144,...)
-- Unit Frame
GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
    SEOUENCE {
        cell-GAIgeographicalCoordinate
                                            GeographicalCoordinate,
       iE-Extensions
                                ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-CellAdditionalShapes ::= CHOICE {
    pointWithUncertainty
                                                    GA-PointWithUnCertainty,
    pointWithUncertaintyEllipse
                                                    GA-PointWithUnCertaintyEllipse,
    pointWithAltitude
                                                    GA-PointWithAltitude,
    pointWithAltitudeAndUncertaintyEllipsoid
                                                    GA-PointWithAltitudeAndUncertaintyEllipsoid,
    ellipsoidArc
                                                    GA-EllipsoidArc,
GA-AltitudeAndDirection ::= SEQUENCE {
    directionOfAltitude
                            ENUMERATED {height, depth},
    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,
```

```
glonassClockModel
                                    GANSS-GLONASSclockModel,
    sbasClockModel
                                    GANSS-SBASclockModel,
GANSS-AddIonoModelReg ::= BIT STRING (SIZE(2))
GANSS-AddNavigationModelsReg ::= BOOLEAN
GANSS-AddOrbitModels ::= CHOICE {
    navKeplerianSet
                                    GANSS-NavModel-NAVKeplerianSet,
    cnavKeplerianSet
                                    GANSS-NavModel-CNAVKeplerianSet,
    glonassECEF
                                    GANSS-NavModel-GLONASSecef,
    sbasECEF
                                    GANSS-NavModel-SBASecef,
GANSS-AddUTCModelsReg ::= BOOLEAN
GANSS-Additional-Ionospheric-Model ::= SEQUENCE {
    dataID
                                        BIT STRING (SIZE(2)),
    alpha-beta-parameters
                                        GPS-Ionospheric-Model,
                                        ProtocolExtensionContainer { GANSS-Additional-Ionospheric-Model-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-Additional-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-Additional-Navigation-Models ::= SEQUENCE {
    ganss-Transmission-Time
                                GANSS-Transmission-Time,
                                ENUMERATED { true }
    non-broadcastIndication
                                                                                                               OPTIONAL,
    ganssSatInfoNavList
                                Ganss-Sat-Info-AddNavList,
                                ProtocolExtensionContainer { { GANSS-Additional-Navigation-Models-ExtIEs } } OPTIONAL,
    ie-Extensions
    . . .
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,
                        GANSS-UTCmodelSet2,
    utcModel2
    utcModel3
                        GANSS-UTCmodelSet3,
    . . .
```

```
GANSS-Almanac ::= SEQUENCE {
    ganss-wk-number
                                   INTEGER (0..255),
    qANSS-AlmanacModel
                                   CHOICE {
        qANSS-keplerianParameters
                                       SEQUENCE {
           t.-oa
                                           INTEGER (0..255),
                                           INTEGER(0..3),
           qANSS-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 ::=
                              ::= ProtocolIE-Single-Container {{ Extension-GANSS-AlmanacModel-IE }}
Extension-GANSS-AlmanacModel
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
                                                                   ignore
                                                                               TYPE
                                                                                       GANSS-alm-keplerianMidiAlmanac
                                                                                                                              PRESENCE mandatory }
                                                   CRITICALITY
     ID id-GANSS-alm-keplerianGLONASS
                                                   CRITICALITY
                                                                   ignore
                                                                               TYPE
                                                                                       GANSS-alm-keplerianGLONASS
                                                                                                                              PRESENCE mandatory }
     ID id-GANSS-alm-ecefSBASAlmanac
                                                                                       GANSS-alm-ecefSBASAlmanac
                                                                                                                              PRESENCE mandatory }
                                                   CRITICALITY
                                                                   ignore
                                                                              TYPE
GANSS-alm-keplerianNAVAlmanac ::= SEQUENCE {
                               INTEGER (0..255),
    sat-info-NAVkpList
                               GANSS-SAT-Info-Almanac-NAVkpList,
    ie-Extensions
                               ProtocolExtensionContainer { GANSS-ALM-NAVKeplerianSet-ExtIEs } }
                                                                                                                  OPTIONAL,
    . . .
GANSS-ALM-NAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-alm-keplerianReducedAlmanac ::= SEQUENCE {
                               INTEGER (0..255),
    sat-info-REDkpList
                               GANSS-SAT-Info-Almanac-REDkpList,
```

```
ProtocolExtensionContainer { { GANSS-ALM-ReducedKeplerianSet-ExtIEs } }
   ie-Extensions
                                                                                                           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
                             ProtocolExtensionContainer { { GANSS-ALM-MidiAlmanacSet-ExtIEs } }
                                                                                                           OPTIONAL,
GANSS-ALM-MidiAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-alm-keplerianGLONASS ::= SEQUENCE {
   sat-info-GLOkpList
                             GANSS-SAT-Info-Almanac-GLOkpList,
   ie-Extensions
                             OPTIONAL,
GANSS-ALM-GlonassAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-alm-ecefSBASAlmanac ::= SEQUENCE {
   sat-info-SBASecefList
                         GANSS-SAT-Info-Almanac-SBASecefList,
                             ProtocolExtensionContainer { GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs } }
   ie-Extensions
                                                                                                           OPTIONAL,
GANSS-ALM-ECEFsbasAlmanacSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
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-ExtIEs 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-qd
                                      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)),
    cnavISCl1cp
                        BIT STRING (SIZE (13))
                                                                                          OPTIONAL,
    cnavISCl1cd
                        BIT STRING (SIZE
                                                                                         OPTIONAL,
    cnavISCl1ca
                        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,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-CommonDataInfoReq-ExtIEs } }
                                                                                                                      OPTIONAL,
    . . .
GANSS-CommonDataInfoReq-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddIonoModelReq
                                        CRITICALITY ignore EXTENSION
                                                                         GANSS-AddIonoModelReq
                                                                                                                      PRESENCE optional }
                                        CRITICALITY ignore EXTENSION
    {ID id-GANSS-EarthOrientParaReq
                                                                         GANSS-EarthOrientParaReg
                                                                                                                      PRESENCE optional } ,
    . . .
GANSS-Data-Bit-Assistance ::= SEQUENCE {
    ganssTod
                                         INTEGER (0..59,...),
    dataBitAssistancelist
                                        GANSS-DataBitAssistanceList,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ExtIEs } }
                                                                                                                      OPTIONAL,
    . . .
```

```
GANSS-Data-Bit-Assistance-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF GANSS-DataBitAssistanceItem
GANSS-DataBitAssistanceItem ::= SEQUENCE {
   satId
                                  INTEGER (0..63),
   dataBitAssistanceSqnList
                                  GANSS-DataBitAssistanceSqnList,
                                  ProtocolExtensionContainer { GANSS-DataBitAssistanceItem-ExtIEs } }
   ie-Extensions
                                                                                                               OPTIONAL,
    . . .
GANSS-DataBitAssistanceItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-DataBitAssistanceSgnList ::= SEQUENCE (SIZE (1..maxSgnType)) OF GANSS-DataBitAssistanceSgnItem
GANSS-DataBitAssistanceSqnItem ::= SEQUENCE {
   ganss-SignalId
                          GANSS-Signal-ID,
   ganssDataBits
                          BIT STRING (SIZE (1..1024)),
   ie-Extensions
                          OPTIONAL,
GANSS-DataBitAssistanceSqnItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqItem ::= SEQUENCE {
   ganssTod
                                          INTEGER (0..86399),
   ganss-Data-Bit-Assistance-ReqList
                                          GANSS-Data-Bit-Assistance-ReqList,
   iE-Extensions
                                          ProtocolExtensionContainer { { GANSS-Data-Bit-Assistance-ReqItem-ExtIEs } } OPTIONAL,
GANSS-Data-Bit-Assistance-RegItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Data-Bit-Assistance-ReqList ::= SEQUENCE {
   dGANSS-Signal-ID
                                      BIT STRING (SIZE (8)),
   ganss-DataBitInterval
                                      INTEGER (0..15),
   ganss-SatelliteInfo
                                      SEQUENCE (SIZE (1..maxGANSSSat)) OF INTEGER(0..63)
                                                                                                                    OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { GANSS-Data-Bit-Assistance-ReqList-ExtIEs } } OPTIONAL,
GANSS-Data-Bit-Assistance-RegList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
GANSS-DeltaUT1 ::= SEQUENCE {
                       BIT STRING (SIZE(11)),
   b2
                       BIT STRING (SIZE(10)),
                   ProtocolExtensionContainer { { GANSS-DeltaUT1-ExtIEs } }
    ie-Extensions
                                                                                    OPTIONAL.
GANSS-DeltaUT1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Earth-Orientation-Parameters ::= SEQUENCE {
                BIT STRING (SIZE (16)),
    Xmq
                      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-GenericDataInfoRegItem ::= 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-ReqItem
    ganss-Data-Bit-Assistance-Req
                                                                                                                         OPTIONAL,
                                                ProtocolExtensionContainer { GANSS-GenericDataInfoReqItem-ExtIEs } }
    ie-Extensions
                                                                                                                         OPTIONAL,
    . . .
GANSS-GenericDataInfoReqItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-GANSS-AddNavigationModelsReq CRITICALITY ignore EXTENSION
                                                                        GANSS-AddNavigationModelsReg
                                                                                                          PRESENCE optional }
    {ID id-GANSS-AddUTCModelsReq
                                        CRITICALITY ignore EXTENSION
                                                                        GANSS-AddUTCModelsReq
                                                                                                          PRESENCE optional }
    {ID id-GANSS-AuxInfoReq
                                        CRITICALITY ignore EXTENSION
                                                                        GANSS-AuxInfoReg
                                                                                                          PRESENCE optional }
    -- The following IE shall be present if "GANSS-ID" in "GANSS-GenericDataInfoReqItem" is "0" (SBAS)
```

```
CRITICALITY ignore EXTENSION
                                                                                                                     optional } ,
    {ID id-GANSS-SBAS-ID
                                                                         GANSS-SBAS-ID
                                                                                                 PRESENCE
GANSS-Generic-Data ::= SEQUENCE (SIZE(1..maxNoGANSS)) OF GANSS-Generic-DataItem
GANSS-Generic-DataItem ::= SEQUENCE {
    qanss-Id
                                                GANSS-TD
                                                                                                                           OPTIONAL,
    dganss-Correction
                                                DGANSSCorrections
                                                                                                                           OPTIONAL,
                                                GANSS-Navigation-Model-And-Time-Recovery
                                                                                                                           OPTIONAL,
    ganss-Navigation-Model-And-Time-Recovery
    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
                                                ProtocolExtensionContainer { { GANSS-Generic-DataItem-ExtIEs } }
                                                                                                                           OPTIONAL,
GANSS-Generic-DataItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-GANSS-Additional-Time-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Time-Models
                                                                                                                        PRESENCE optional }
      ID id-GANSS-Additional-Navigation-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-Navigation-Models
                                                                                                                        PRESENCE optional
      ID id-GANSS-Additional-UTC-Models
                                                     CRITICALITY ignore EXTENSION GANSS-Additional-UTC-Models
                                                                                                                        PRESENCE optional
     ID id-GANSS-Auxiliary-Information
                                                     CRITICALITY ignore EXTENSION GANSS-Auxiliary-Information
                                                                                                                        PRESENCE optional }
    -- The following element shall be present if "GANSS-ID" in "GANSS-Generic-DataItem" is "0" ("SBAS")
    { ID id-GANSS-SBAS-ID
                                                                                                                        PRESENCE optional },
                                                     CRITICALITY ignore EXTENSION GANSS-SBAS-ID
    . . .
GANSS-GLONASSclockModel ::= SEQUENCE {
                            BIT STRING (SIZE (22)),
    qloTau
    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-CommonDataInfoReg
                                        GANSS-CommonDataInfoReg
                                                                                                                     OPTIONAL,
    gANSS-GenericDataInfoReqList
                                        GANSS-GenericDataInfoReqList
                                                                                                                     OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { GANSS-Information-ExtIEs } }
                                                                                                                     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,
                                       ProtocolExtensionContainer { GANSS-Ionospheric-Model-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL,
GANSS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-IonosphereRegionalStormFlags ::= SEQUENCE {
    storm-flag-one
                                       BOOLEAN
    storm-flag-two
                                       BOOLEAN
    storm-flag-three
                                       BOOLEAN
    storm-flag-four
                                       BOOLEAN,
    storm-flag-five
                                       BOOLEAN,
                                       ProtocolExtensionContainer { GANSS-IonosphereRegionalStormFlags-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-IonosphereRegionalStormFlags-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NAVclockModel ::= SEQUENCE {
   navToc
                         BIT STRING (SIZE (16)),
   navaf2
                          BIT STRING (SIZE (8)),
   navaf1
                         BIT STRING (SIZE (16)),
   navaf0
                         BIT STRING (SIZE (22)),
    navTgd
                           BIT STRING (SIZE (8)),
                           ProtocolExtensionContainer { GANSS-NAVclockModel-ExtIEs } }
    ie-Extensions
GANSS-NAVclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Navigation-Model-And-Time-Recovery ::= SEQUENCE {
    ganss-Transmission-Time
                               GANSS-Transmission-Time,
    non-broadcastIndication
                               ENUMERATED { true }
                                                        OPTIONAL,
    ganssSatInfoNav
                               GANSS-Sat-Info-Nav,
                               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)),
cnavAdot BIT STRING (SIZE (25)),
    cnavDeltaNo BIT STRING (SIZE (17)), cnavDeltaNoDot BIT STRING (SIZE (23)), cnavMo BIT STRING (SIZE (33)),
    cnavE BIT STRING (SIZE (33)),
cnavOmega BIT STRING (SIZE (33)),
cnavOMEGAO BIT STRING (SIZE (33)),
cnavOMEGAO BIT STRING (SIZE (33)),
cnavDeltaOmegaDot BIT STRING (SIZE (17)),
     cnavIo
                                  BIT STRING (SIZE (33)),
     cnavIoDot.
                                 BIT STRING (SIZE (15)),
     cnavCis
                     BIT STRING (SIZE (16)),
BIT STRING (SIZE (16)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (24)),
BIT STRING (SIZE (21)),
BIT STRING (SIZE (21)),
                                 BIT STRING (SIZE (16)),
     cnavCic
     cnavCrs
     cnavCrc
     cnavCus
     cnavCuc
     ie-Extensions
                                 ProtocolExtensionContainer { GANSS-NavModel-CNAVKeplerianSet-ExtIEs } }
                                                                                                                                               OPTIONAL,
GANSS-NavModel-CNAVKeplerianSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-NavModel-GLONASSecef ::= SEQUENCE {
             BIT STRING (SIZE (5)),
     gloEn
     qloP1
                               BIT STRING (SIZE(2)),
    gloP2
                               BIT STRING (SIZE (1)),
                                BIT STRING (SIZE (2))
     aloM
                                                                                                                                               OPTIONAL,
     qloX
                                 BIT STRING (SIZE (27)),
     qloXdot
                                 BIT STRING (SIZE (24)),
     qloXdotdot
                                 BIT STRING (SIZE (5)),
     qloY
                                 BIT STRING (SIZE (27)),
     qloYdot
                                  BIT STRING (SIZE (24)),
     gloYdotdot
                                 BIT STRING (SIZE (5)),
     qloZ
                                 BIT STRING (SIZE (27)),
     gloZdot
                                 BIT STRING (SIZE (24)),
     gloZdotdot
                                 BIT STRING (SIZE (5)),
     ie-Extensions
                                  ProtocolExtensionContainer { GANSS-NavModel-GLONASSecef-ExtIEs } }
                                                                                                                                               OPTIONAL,
```

```
GANSS-NavModel-GLONASSecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   GANSS-NavModel-NAVKeplerianSet ::= SEQUENCE {
    navCuc
                              BIT STRING (SIZE (16)),
    ie-Extensions ProtocolExtensionContainer { { GANSS-NavModel-NAVKeplerianSet-ExtIEs } }
                                                                                                                                        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"
                   BIT STRING (SIZE (13))
                                                                                                                 OPTIONAL,
                       BIT STRING (SIZE (13))
BIT STRING (SIZE (4)),
BIT STRING (SIZE (30)),
BIT STRING (SIZE (30)),
BIT STRING (SIZE (25)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (17)),
BIT STRING (SIZE (18)),
BIT STRING (SIZE (10)),
BIT STRING (SIZE (10)),
BIT STRING (SIZE (10)),
    sbasAccuracy
     sbasXq
    sbasYq
     sbasZq
    sbasXqDot
     sbasYqDot
     sbasZgDot
     sbasXgDotDot
     sbaqYqDotDot
     sbasZgDotDot
                              ProtocolExtensionContainer { { GANSS-NavModel-SBASecef-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-NavModel-SBASecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
. . .
GANSS-Orbit-Model ::= CHOICE {
   qANSS-keplerianParameters
                                      SEQUENCE {
       toe-nav
                                          BIT STRING (SIZE (14)),
                                          BIT STRING (SIZE (32)),
       ganss-omega-nav
       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)),
       omega-zero-nav
                                          BIT STRING (SIZE (32)),
       c-rs-nav
                                          BIT STRING (SIZE (16)),
       c-is-nav
                                          BIT STRING (SIZE (16)),
       c-us-nav
                                          BIT STRING (SIZE (16)),
       c-rc-nav
                                          BIT STRING (SIZE (16)),
       c-ic-nav
                                          BIT STRING (SIZE (16)),
       c-uc-nav
                                          BIT STRING (SIZE (16)),
                                          ProtocolExtensionContainer { GANSS-KeplerianParametersOrb-ExtIEs } }
       ie-Extensions
                                                                                                                  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),
    ie-Extensions
                            ProtocolExtensionContainer { { GANSS-RX-Pos-ExtIEs } } OPTIONAL,
GANSS-RX-Pos-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SatelliteInformationKP ::= SEQUENCE (SIZE (1..maxGANSSSatAlmanac)) OF SEQUENCE {
    satId
                                        INTEGER (0..63),
    ganss-e-alm
                                        BIT STRING (SIZE (11)),
    ganss-delta-I-alm
                                        BIT STRING (SIZE (11)),
    ganss-omegadot-alm
                                        BIT STRING (SIZE (11)),
    ganss-svhealth-alm
                                        BIT STRING (SIZE (4)),
    ganss-delta-a-sgrt-alm
                                        BIT STRING (SIZE (17)),
    ganss-omegazero-alm
                                        BIT STRING (SIZE (16)),
    ganss-m-zero-alm
                                        BIT STRING (SIZE (16)),
    ganss-omega-alm
                                        BIT STRING (SIZE (16)),
    ganss-af-zero-alm
                                        BIT STRING (SIZE (14)),
    ganss-af-one-alm
                                        BIT STRING (SIZE (11)),
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-SatelliteInformationKPItem-ExtIEs } } OPTIONAL,
GANSS-SatelliteInformationKPItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Ganss-Sat-Info-AddNavList ::= SEQUENCE (SIZE (1..maxGANSSSat)) OF SEQUENCE {
                                INTEGER (0..63),
    satId
    svHealth
                                BIT STRING (SIZE (6)),
                             BIT STRING (SIZE (11)),
    boi
                          GANSS-AddClockModels,
GANSS-AddOrbitModels,
    ganssAddClockModels
    ganssAddOrbitModels
    ie-Extensions
                                ProtocolExtensionContainer { { Ganss-Sat-Info-AddNavList-ExtIEs } } OPTIONAL,
Ganss-Sat-Info-AddNavList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
GANSS-SAT-Info-Almanac-GLOkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    aloAlmNA
                           BIT STRING (SIZE(11)),
    qloAlmnA
                           BIT STRING (SIZE(5)),
    qloAlmHA
                           BIT STRING (SIZE(5)),
    gloAlmLambdaA
                           BIT STRING (SIZE(21)),
    qloAlmTlambdaA
                           BIT STRING (SIZE(21)),
```

```
qloAlmDeltaIA
                           BIT STRING (SIZE(18)),
    gloAkmDeltaTA
                           BIT STRING (SIZE(22)),
   gloAlmDeltaTdotA
gloAlmEpsilonA
                           BIT STRING (SIZE(7)),
                           BIT STRING (SIZE(15)),
    qloAlmOmegaA
                           BIT STRING (SIZE(16)),
    qloAlmTauA
                           BIT STRING (SIZE(10)),
    aloAlmCA
                           BIT STRING (SIZE(1)),
                           BIT STRING (SIZE(2))
    qloAlmMA
                                                                                                                   OPTIONAL,
                           ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-GLOkp-ExtIEs } }
    ie-Extensions
                                                                                                                    OPTIONAL.
GANSS-SAT-Info-Almanac-GLOkp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
    . . .
GANSS-SAT-Info-Almanac-MIDIkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
    svID
                           INTEGER (0..63),
   midiAlmE
                           BIT STRING (SIZE (11)),
   midiAlmDeltaI
                         BIT STRING (SIZE (11)),
    midiAlmOmegaDot
                         BIT STRING (SIZE (11)),
    midiAlmSgrtA
                           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)),
                    BIT STRING (SIZE (1)),
BIT STRING (SIZE (1)),
    midiAlmL1Health
   midiAlmL2Health
   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 {
    svID
                           INTEGER (0..63),
    navAlmE
                           BIT STRING (SIZE (16)),
   navAlmDeltaI
                           BIT STRING (SIZE (16)),
   navAlmOMEGADOT
                           BIT STRING (SIZE (16)),
    navAlmSVHealth
                           BIT STRING (SIZE (8)),
   navAlmSgrtA
                           BIT STRING (SIZE (24)),
                           BIT STRING (SIZE (24)),
    navAlmOMEGAo
    navAlmOmega
                           BIT STRING (SIZE (24)),
    navAlmMo
                           BIT STRING (SIZE (24)),
    navAlmaf0
                           BIT STRING (SIZE (11)),
    navAlmaf1
                           BIT STRING (SIZE (11)),
```

```
ProtocolExtensionContainer { GANSS-SAT-Info-Almanac-NAVkp-ExtIEs } }
    ie-Extensions
                                                                                                                        OPTIONAL,
GANSS-SAT-Info-Almanac-NAVkp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SAT-Info-Almanac-REDkpList ::= SEQUENCE (SIZE (1.. maxGANSSSatAlmanac)) OF SEQUENCE {
                            INTEGER (0..63),
    redAlmDeltaA
                            BIT STRING (SIZE (8)),
                      BIT STRING (SIZE (8)),
BIT STRING (SIZE (7)),
    redAlmOmega0
                          BIT STRING (SIZE (7)),
    redAlmPhi0
                     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),
                       BIT STRING (SIZE(8)),
    sbasAlmHealth
    sbasAlmXq
                          BIT STRING (SIZE(15)),
    sbasAlmYq
                          BIT STRING (SIZE(15)),
                            BIT STRING (SIZE(9)),
    sbasAlmZq
                      BIT STRING (SIZE(3)),
BIT STRING (SIZE(3)),
BIT STRING (SIZE(4)),
    sbasAlmXqdot
    sbasAlmYqDot
    sbasAlmZqDot
    sbasAlmTo
                          BIT STRING (SIZE(11)),
                          ProtocolExtensionContainer { { GANSS-SAT-Info-Almanac-SBASecef-ExtIEs } }
    ie-Extensions
                                                                                                                        OPTIONAL,
GANSS-SAT-Info-Almanac-SBASecef-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Sat-Info-Nav ::= SEQUENCE (SIZE(1..maxGANSSSat)) OF SEQUENCE {
    satId
                                 INTEGER (0..63),
    svHealth
                                 BIT STRING (SIZE(5)),
    iod
                                 BIT STRING (SIZE(10)),
    ganssClockModel
                                 GANSS-Clock-Model,
```

```
qanssOrbitModel
                                GANSS-Orbit-Model,
    ie-Extensions
                                ProtocolExtensionContainer { GANSS-Sat-Info-Nav-ExtIEs } } OPTIONAL,
GANSS-Sat-Info-Nav-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-SBAS-ID ::= ENUMERATED
                                waas,
                                eqnos,
                                msas,
                                qaqan,
GANSS-SBASclockModel ::= SEOUENCE {
                           BIT STRING (SIZE (13)),
    sbasTo
    sbasAgfo
                            BIT STRING (SIZE (12)),
    sbasAqf1
                           BIT STRING (SIZE (8)),
                            ProtocolExtensionContainer { GANSS-SBASclockModel-ExtIEs } } OPTIONAL,
    ie-Extensions
GANSS-SBASclockModel-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Signal-ID ::= INTEGER(0..7,...)
GANSS-StatusHealth ::= ENUMERATED {
  udre-scale-1dot0,
  udre-scale-0dot75,
  udre-scale-0dot5,
   udre-scale-0dot3,
   udre-scale-0dot2,
  udre-scale-0dot1,
  no-data,
   invalid-data
GANSS-Time-ID ::= INTEGER(0..7,...)
GANSS-Time-Model ::= SEQUENCE {
    ganss-time-model-Ref-Time
                                        INTEGER (0..37799),
    qanss-t-a0
                                        INTEGER (-2147483648..2147483647),
    qanss-t-a1
                                        INTEGER (-8388608..8388607)
                                                                                                                     OPTIONAL,
    ganss-t-a2
                                        INTEGER (-64..63)
                                                                                                                     OPTIONAL,
                                        ENUMERATED{gps,...,galileo,qzss,glonass},
    gnss-to-id
```

```
ganss-wk-number
                                        INTEGER (0..8191)
                                                                                                                      OPTIONAL,
    ie-Extensions
                                        ProtocolExtensionContainer { { GANSS-Time-Model-ExtIEs } }
                                                                                                                      OPTIONAL.
GANSS-Time-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-Transmission-Time ::= SEQUENCE {
    ganssDay
                                INTEGER (0..8191)
                                                                                                                     OPTIONAL,
    ganssTod
                                INTEGER (0..86399),
                                ProtocolExtensionContainer { GANSS-Transmission-Time-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-Transmission-Time-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTC-Model ::= SEQUENCE {
    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)),
                                        ProtocolExtensionContainer { { GANSS-UTC-Model-ExtIEs } }
    ie-Extensions
                                                                                                                     OPTIONAL,
GANSS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet1 ::= SEQUENCE {
                       BIT STRING (SIZE(16)),
    utcA0
    utcA1
                        BIT STRING (SIZE(13)),
    utcA2
                        BIT STRING (SIZE(7)),
    utcDeltaTls
                        BIT STRING (SIZE(8)),
    utcTot
                        BIT STRING (SIZE(16)),
                        BIT STRING (SIZE(13)),
    utcWNot
    utcWNlsf
                       BIT STRING (SIZE(8)),
    utcDN
                        BIT STRING (SIZE(4)),
    utcDeltaTlsf
                        BIT STRING (SIZE(8)),
                        ProtocolExtensionContainer { { GANSS-UTCmodelSet1-ExtIEs } }
    ie-Extensions
                                                                                         OPTIONAL,
    . . .
```

```
GANSS-UTCmodelSet1-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet2 ::= SEQUENCE {
   nA
                      BIT STRING (SIZE(11)),
   tauC
                       BIT STRING (SIZE(32)),
   deltaUT1
                      GANSS-DeltaUT1
                                                                                    OPTIONAL,
                      BIT STRING (SIZE(2))
                                                                                    OPTIONAL,
                      ProtocolExtensionContainer { { GANSS-UTCmodelSet2-ExtIEs } }
   ie-Extensions
                                                                                    OPTIONAL,
GANSS-UTCmodelSet2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GANSS-UTCmodelSet3 ::= SEQUENCE {
   utcA1wnt
                      BIT STRING (SIZE(24)),
   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)),
   utcDN
                      BIT STRING (SIZE(8)),
   utcDeltaTlsf
                      BIT STRING (SIZE(8)),
   utcStandardID
                      BIT STRING (SIZE(3)),
   ie-Extensions
                       OPTIONAL,
GANSS-UTCmodelSet3-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithAltitude ::= SEQUENCE {
   geographicalCoordinates
                              GeographicalCoordinate,
   altitudeAndDirection
                              GA-AltitudeAndDirection.
   iE-Extensions
                              ProtocolExtensionContainer { GA-PointWithAltitude-ExtIEs} } OPTIONAL,
GA-PointWithAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithAltitudeAndUncertaintyEllipsoid ::= SEQUENCE {
   geographicalCoordinates
                              GeographicalCoordinate,
   altitudeAndDirection
                              GA-AltitudeAndDirection,
   uncertaintyEllipse
                              GA-UncertaintyEllipse,
```

```
uncertaintyAltitude
                               INTEGER (0..127),
    confidence
                               INTEGER (0..127),
    iE-Extensions
                               ProtocolExtensionContainer { GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs} } OPTIONAL,
GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-PointWithUnCertaintyEllipse ::= SEQUENCE
    geographicalCoordinates
                               GeographicalCoordinate,
                               GA-UncertaintyEllipse,
    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 {
    geographicalCoordinates
                               GeographicalCoordinate,
    uncertaintyCode
                           INTEGER (0..127),
    iE-Extensions
                           ProtocolExtensionContainer { {GA-PointWithUnCertainty-ExtIEs} } OPTIONAL,
GA-PointWithUnCertainty-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
GA-AccessPointPosition ::= SEQUENCE {
    geographicalCoordinate
                               GeographicalCoordinate,
    iE-Extensions
                    ProtocolExtensionContainer { {GA-AccessPoint-ExtIEs} } OPTIONAL,
GA-AccessPoint-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GeographicalCoordinate ::= SEQUENCE {
   latitudeSign
                      ENUMERATED { north, south },
    latitude
                       INTEGER (0..8388607),
    longitude
                       INTEGER (-8388608..8388607),
```

```
ProtocolExtensionContainer { {GeographicalCoordinate-ExtIEs} } OPTIONAL,
    iE-Extensions
GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GERAN-Cell-Capability ::= BIT STRING (SIZE (16))
-- 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 {
                                GERAN-SystemInfo,
    sΙ
    pSI
                                GERAN-SystemInfo,
    . . .
GERAN-SystemInfo ::= SEQUENCE (SIZE (1..maxNrOfGERANSI)) OF
        SEOUENCE {
           qERAN-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 {
    wn₃-alm
                           BIT STRING (SIZE (8)),
    satellite-Almanac-Information
                                       SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
           data-ID
                               DATA-ID,
           sAT-ID
                               SAT-ID,
           gps-e-alm
                           BIT STRING (SIZE (16))
BIT STRING (SIZE (8)),
                               BIT STRING (SIZE (16)),
           gps-toa-alm
           gps-delta-I-alm BIT STRING (SIZE (16)),
           omegadot-alm
                               BIT STRING (SIZE (16)),
           svhealth-alm
                               BIT STRING (SIZE (8)),
           gps-a-sqrt-alm BIT STRING (SIZE (24)),
           omegazero-alm
                               BIT STRING (SIZE (24)),
           m-zero-alm
                               BIT STRING (SIZE (24)),
           qps-omega-alm
                               BIT STRING (SIZE (24)),
           gps-af-zero-alm
                               BIT STRING (SIZE (11)),
           gps-af-one-alm
                               BIT STRING (SIZE (11)),
           iE-Extensions
                               ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtIEs} }
                                                                                                           OPTIONAL,
```

```
-- This GPS-Almanac-Information is for the 1<sup>st</sup> 16 satellites
    sVGlobalHealth-alm BIT STRING (SIZE (364))
    iE-Extensions
                            ProtocolExtensionContainer { GPS-Almanac-ExtIEs} }
                                                                                         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},
    . . .
Satellite-Almanac-Information-ExtItem ::= SEOUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF
        SEQUENCE {
            dATA-ID
                                DATA-ID,
            sAT-TD
                                SAT-ID.
                                BIT STRING (SIZE (16)),
           qps-e-alm
                                BIT STRING (SIZE (8)),
           qps-toa-alm
           gps-delta-I-alm
                                BIT STRING (SIZE (16)).
            omegadot-alm
                                BIT STRING (SIZE (16)),
            svhealth-alm
                                BIT STRING (SIZE (8)),
            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)),
            qps-af-one-alm
                                BIT STRING (SIZE (11)),
            iE-Extensions
                                ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtItemIEs} }
-- 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 {
       qPSInformationItem
                                ENUMERATED {
           qPS-NavigationModel-and-TimeRecovery,
            qPS-Ionospheric-Model,
           qPS-UTC-Model,
           qPS-Almanac,
           qPS-RealTime-Integrity,
                                ProtocolExtensionContainer { { GPSInformation-ExtIEs} }
        iE-Extensions
                                                                                             OPTIONAL,
```

```
-- This IE shall be present if the Information Type IE indicates "GPS Information"
GPSInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos
                           BIT STRING (SIZE (8)).
    alpha-one-ionos
                           BIT STRING (SIZE (8)),
    alpha-two-ionos
                           BIT STRING (SIZE (8)),
    alpha-three-ionos
                           BIT STRING (SIZE (8)),
    beta-zero-ionos
                           BIT STRING (SIZE (8)),
    beta-one-ionos
                           BIT STRING (SIZE (8)),
    beta-two-ionos
                           BIT STRING (SIZE (8)),
    beta-three-ionos
                           BIT STRING (SIZE (8)),
    iE-Extensions
                            ProtocolExtensionContainer { GPS-Ionospheric-Model-ExtIEs} }
                                                                                                OPTIONAL,
    . . .
GPS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF
    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)),
                                        BIT STRING (SIZE (2)),
        ca-or-p-on-12-nav
        user-range-accuracy-index-nav
                                       BIT STRING (SIZE (4)),
                                        BIT STRING (SIZE (6)),
        sv-health-nav
        iodc-nav
                                        BIT STRING (SIZE (10)),
       12-p-dataflag-nav
                                        BIT STRING (SIZE (1)),
        sf1-reserved-nav
                                        BIT STRING (SIZE (87)),
        t-qd-nav
                                        BIT STRING (SIZE (8)),
        t-oc-nav
                                        BIT STRING (SIZE (16)),
        a-f-2-nav
                                        BIT STRING (SIZE (8)),
        a-f-1-nav
                                        BIT STRING (SIZE (16)),
        a-f-zero-nav
                                        BIT STRING (SIZE (22)),
        c-rs-nav
                                        BIT STRING (SIZE (16)),
        delta-n-nav
                                        BIT STRING (SIZE (16)),
        m-zero-nav
                                        BIT STRING (SIZE (32)),
                                        BIT STRING (SIZE (16)),
        c-uc-nav
        qps-e-nav
                                        BIT STRING (SIZE (32)),
       c-us-nav
                                        BIT STRING (SIZE (16)),
        a-sqrt-nav
                                        BIT STRING (SIZE (32)),
        t-oe-nav
                                        BIT STRING (SIZE (16)),
        fit-interval-flag-nav
                                        BIT STRING (SIZE (1)),
        aodo-nav
                                        BIT STRING (SIZE (5)),
        c-ic-nav
                                        BIT STRING (SIZE (16)),
        omega-zero-nav
                                        BIT STRING (SIZE (32)),
```

```
c-is-nav
                                       BIT STRING (SIZE (16)),
       i-zero-nav
                                       BIT STRING (SIZE (32)),
       c-rc-nav
                                       BIT STRING (SIZE (16)),
        qps-omega-nav
                                       BIT STRING (SIZE (32)),
       omegadot-nav
                                       BIT STRING (SIZE (24)),
       idot-nav
                                       BIT STRING (SIZE (14)),
        spare-zero-fill
                                       BIT STRING (SIZE (20)),
                                       ProtocolExtensionContainer { GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs} }
       iE-Extensions
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,
                               ProtocolExtensionContainer { GPS-RX-POS-ExtIEs} } OPTIONAL,
    iE-Extensions
GPS-RX-POS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
GPS-Status-Health ::= ENUMERATED {
  udre-1-0,
  udre-0-75,
  udre-0-5,
  udre-0-3,
  udre-0-1,
  no-data,
  invalid-data
GPSTOW ::= INTEGER (0..604799)
GPS-UTC-Model ::= SEQUENCE {
    a-one-utc
                           BIT STRING (SIZE (24)),
   a-zero-utc
t-ot-utc
                           BIT STRING (SIZE (32)),
                         BIT STRING (SIZE (8)),
    delta-t-ls-utc
                         BIT STRING (SIZE (8)),
    w-n-t-utc
                           BIT STRING (SIZE (8)),
    w-n-lsf-utc
                           BIT STRING (SIZE (8)),
    dn-utc
                           BIT STRING (SIZE (8)),
    delta-t-lsf-utc
                           BIT STRING (SIZE (8)),
    iE-Extensions
                           ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs} }
                                                                                       OPTIONAL,
    . . .
```

```
GPS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Guaranteed-Rate-Information ::= SEQUENCE {
                      Guaranteed-Rate OPTIONAL,
   quaranteed-UL-Rate
   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
                 HARO-MemoryPartitioning-Implicit,
   explicit
                 HARQ-MemoryPartitioning-Explicit,
   . . .
HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
                      INTEGER (1..8,...,12|14|16),
   number-of-Processes
                          ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }
   iE-Extensions
                                                                                                    OPTIONAL.
HARO-MemoryPartitioning-Implicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HARQ-MemoryPartitioning-Explicit
                              ::= SEQUENCE {
   hARQ-MemoryPartitioningList
                                   HARO-MemoryPartitioningList,
                                   ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }
   iE-Extensions
                                                                                                            OPTIONAL,
   . . .
HARQ-MemoryPartitioning-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   . . .
```

```
HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-MemoryPartitioningItem
HARO-MemoryPartitioningInfoExtForMIMO ::= SEQUENCE (SIZE (4 | 6 | 8)) OF HARO-MemoryPartitioningItem
HARO-MemoryPartitioningItem ::= SEQUENCE {
    process-Memory-Size
                                        ENUMERATED 4
                                        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,
HARQ-MemoryPartitioningItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HARO-Preamble-Mode ::= ENUMERATED {
  mode0,
   mode1
HARQ-Process-Allocation-2ms-EDCH ::= BIT STRING ( SIZE (maxNrOfEDCHHARQProcesses2msEDCH) )
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,
    cqiFeedback-CycleK
                                                CQI-Feedback-Cycle,
    cqiRepetitionFactor
                                                CQI-RepetitionFactor
                                                                                             OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k IE is set to a value greater than 0.
    ackNackRepetitionFactor
                                                AckNack-RepetitionFactor,
```

```
cqiPowerOffset
                                                CQI-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 ::= {
                                                     CRITICALITY ignore EXTENSION
 ID id-HARO-Preamble-Mode
                                                                                     HARO-Preamble-Mode
                                                                                                                                  PRESENCE optional }
 ID id-MIMO-ActivationIndicator
                                                                                     MIMO-ActivationIndicator
                                                                                                                                 PRESENCE optional }
                                                     CRITICALITY reject EXTENSION
 ID id-HSDSCH-MACdPDUSizeFormat
                                                     CRITICALITY reject EXTENSION
                                                                                     HSDSCH-MACdPDUSizeFormat
                                                                                                                                  PRESENCE optional }
 ID id-SixtyfourOAM-UsageAllowedIndicator
                                                     CRITICALITY ignore EXTENSION
                                                                                     SixtyfourOAM-UsageAllowedIndicator
                                                                                                                                  PRESENCE optional }
  ID id-UE-without-HS-SCCH-constraint-indicator
                                                     CRITICALITY ignore EXTENSION
                                                                                     NULL
                                                                                                                                  PRESENCE optional }
 ID id-EnhancedHSServingCC-Abort
                                                     CRITICALITY reject EXTENSION
                                                                                     EnhancedHSServingCC-Abort
                                                                                                                                  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,
                                                     ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }
    iE-Extensions
                                                                                                                                    OPTIONAL,
    . . .
HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-User-Plane-Congestion-Fields-Inclusion
                                                                                                                               PRESENCE optional }
                                                     CRITICALITY ignore EXTENSION User-Plane-Congestion-Fields-Inclusion
 ID id-HARO-Preamble-Mode-Activation-Indicator
                                                     CRITICALITY ignore
                                                                         EXTENSION HARO-Preamble-Mode-Activation-Indicator
                                                                                                                              PRESENCE optional }
 ID id-MIMO-InformationResponse
                                                     CRITICALITY ignore EXTENSION MIMO-InformationResponse
                                                                                                                               PRESENCE optional }
  ID id-SixtyfourQAM-DL-UsageIndicator
                                                     CRITICALITY ignore EXTENSION SixtyfourQAM-DL-UsageIndicator
                                                                                                                               PRESENCE optional }
                                                                                                                              PRESENCE optional },
 ID id-HSDSCH-TBSizeTableIndicator
                                                     CRITICALITY ignore EXTENSION HSDSCH-TBSizeTableIndicator
HS-DSCH-FDD-Secondary-Serving-Information ::= SEQUENCE
    hsscch-PowerOffset
                                                     HSSCCH-PowerOffset
                                                                                                         OPTIONAL,
    sixtyfourOAM-UsageAllowedIndicator
                                                     SixtyfourQAM-UsageAllowedIndicator
                                                                                                         OPTIONAL,
                                                     ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-ExtIEs } }
    iE-Extensions
    OPTIONAL.
    . . .
HS-DSCH-FDD-Secondary-Serving-Information-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Information-Response ::= SEQUENCE {
                                            HSSCCH-FDD-Specific-InfoList-Response
    hSSCCH-Specific-InfoList-Response
                                                                                                      OPTIONAL,
    hSPDSCH-and-HSSCCH-ScramblingCode
                                            DL-ScramblingCode
                                                                                                      OPTIONAL,
    measurement-Power-Offset
                                            Measurement-Power-Offset
                                                                                                      OPTIONAL,
                                            SixtyfourQAM-DL-UsageIndicator
    sixtyfourQAM-DL-UsageIndicator
                                                                                                      OPTIONAL,
```

```
hSDSCH-TBSizeTableIndicator
                                          HSDSCH-TBSizeTableIndicator
                                                                                                 OPTIONAL,
   iE-Extensions
                                          ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtIEs } }
   OPTIONAL.
HS-DSCH-FDD-Secondary-Serving-Information-Respons-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised ::= SEOUENCE {
   hsscch-PowerOffset
                                              HSSCCH-PowerOffset
                                                                                              OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                              SixtyfourQAM-UsageAllowedIndicator
                                                                                              OPTIONAL,
                           ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Information-To-Modify-Unsynchronised-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-FDD-Secondary-Serving-Update-Information ::= SEQUENCE {
   hsSCCHCodeChangeIndicator
                                              HSSCCH-CodeChangeIndicator
                                                                                        OPTIONAL,
                                              HS-PDSCH-Code-Change-Indicator
   hS-PDSCH-Code-Change-Indicator
                                                                                        OPTIONAL,
                                              ProtocolExtensionContainer { { HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtIEs } }
   iE-Extensions
   OPTIONAL,
    . . .
HS-DSCH-FDD-Secondary-Serving-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response ::= SEQUENCE
   hS-DSCH-Secondary-Serving-cell-choice
                                              HS-DSCH-Secondary-Serving-cell-change-choice,
                                              iE-Extensions
       OPTIONAL,
    . . .
```

```
HS-DSCH-Secondary-Serving-Cell-Change-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-cell-change-choice ::= CHOICE
    hS-Secondary-Serving-cell-change-successful
                                                        HS-Secondary-Serving-cell-change-successful,
                                                        HS-Secondary-Serving-cell-change-unsuccessful,
    hS-Secondary-Serving-cell-change-unsuccessful
HS-Secondary-Serving-cell-change-successful ::= SEQUENCE {
    hS-DSCH-FDD-Secondary-Serving-Information-Response
                                                            HS-DSCH-FDD-Secondary-Serving-Information-Response,
    hSDSCH-RNTI
                                                            HSDSCH-RNTI.
    iE-Extensions
                                        ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-successful-ExtIEs} } OPTIONAL,
HS-Secondary-Serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-Secondary-Serving-cell-change-unsuccessful ::= SEQUENCE {
                                    ProtocolExtensionContainer { { HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs} } OPTIONAL.
    iE-Extensions
HS-Secondary-Serving-cell-change-unsuccessful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-DSCH-Secondary-Serving-Remove ::= NULL
HSDSCH-Information-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                    HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                      OPTIONAL,
    priorityQueue-Info-to-Modify
                                                    PriorityQueue-InfoList-to-Modify
                                                                                                     OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                    MAChsReorderingBufferSize-for-RLC-UM
                                                                                                      OPTIONAL,
    cgiFeedback-CycleK
                                                    COI-Feedback-Cycle
                                                                                                      OPTIONAL,
                                                                                                                  -- For FDD only
    cgiRepetitionFactor
                                                    COI-RepetitionFactor
                                                                                                      OPTIONAL,
                                                                                                                  -- For FDD only
    ackNackRepetitionFactor
                                                    AckNack-RepetitionFactor
                                                                                                      OPTIONAL,
                                                                                                                  -- For FDD only
                                                    COI-Power-Offset
                                                                                                                  -- For FDD only
    cqiPowerOffset
                                                                                                      OPTIONAL,
    ackPowerOffset
                                                    Ack-Power-Offset
                                                                                                      OPTIONAL,
                                                                                                                  -- For FDD only
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                     OPTIONAL,
                                                                                                                 -- For FDD only
                                                    HSSCCH-PowerOffset
    hsscch-PowerOffset
                                                                                                     OPTIONAL,
                                                                                                                 -- For FDD only
                                                    HSSCCH-Code-Change-Grant
    hSSCCH-CodeChangeGrant
                                                                                                     OPTIONAL,
    tDDAckNackPowerOffset
                                                    TDD-AckNack-Power-Offset
                                                                                                     OPTIONAL,
                                                                                                                 -- For TDD only
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } }
                                                                                                                                    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
                                                                            HS-PDSCH-Code-Change-Grant
                                                                                                                     PRESENCE optional }
                                                                EXTENSION
     -- Applicable to FDD only
```

```
ID id-MIMO-Mode-Indicator
                                                                                 MIMO-Mode-Indicator
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                                                     PRESENCE optional }
 ID id-HSDSCH-MACdPDUSizeFormat
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 HSDSCH-MACdPDUSizeFormat
                                                                                                                     PRESENCE optional }
                                                                                 SixtyfourOAM-UsageAllowedIndicator PRESENCE optional)
  ID id-SixtyfourOAM-UsageAllowedIndicator
                                            CRITICALITY ignore
                                                                     EXTENSION
 ID id-UE-Capabilities-Info
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 UE-Capabilities-Info
                                                                                                                     PRESENCE optional }
 ID id-EnhancedHSServingCC-Abort
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 EnhancedHSServingCC-Abort
                                                                                                                     PRESENCE optional },
HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                     HSDSCH-MACdFlow-Specific-InfoList-to-Modify
                                                                                                            OPTIONAL.
    priorityQueueInfotoModifyUnsynchronised
                                                     PriorityQueue-InfoList-to-Modify-Unsynchronised
                                                                                                                        OPTIONAL,
                                                     COI-Power-Offset
    cqiPowerOffset
                                                                                     OPTIONAL,
                                                                                                 -- For FDD only
    ackPowerOffset
                                                     Ack-Power-Offset
                                                                                                  -- For FDD only
                                                                                     OPTIONAL.
    nackPowerOffset
                                                     Nack-Power-Offset
                                                                                     OPTIONAL.
                                                                                                  -- For FDD only
                                                                                     OPTIONAL,
    hsscch-PowerOffset
                                                     HSSCCH-PowerOffset
                                                                                                 -- Only for FDD
    tDDAckNackPowerOffset
                                                     TDD-AckNack-Power-Offset
                                                                                     OPTIONAL,
                                                                                                 -- For TDD only
                                                     ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs } }
    iE-Extensions
    OPTIONAL,
    . . .
HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HARO-Preamble-Mode
                                            CRITICALITY ignore
                                                                                 HARO-Preamble-Mode
                                                                                                                      PRESENCE optional }
                                                                     EXTENSION
 ID id-MIMO-Mode-Indicator
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 MIMO-Mode-Indicator
                                                                                                                     PRESENCE optional }
 ID id-SixtyfourQAM-UsaqeAllowedIndicator CRITICALITY ignore
                                                                     EXTENSION
                                                                                 SixtyfourQAM-UsageAllowedIndicator PRESENCE optional}
 ID id-EnhancedHSServingCC-Abort
                                            CRITICALITY reject
                                                                     EXTENSION
                                                                                 EnhancedHSServingCC-Abort
                                                                                                                     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 ::= {
                            CRITICALITY ignore
                                                     EXTENSION TnlOos PRESENCE optional }
    \{	ext{ID id-TrCH-SrcStatisticsDescr} 	ext{ CRITICALITY ignore EXTENSION TrCH-SrcStatisticsDescr} 	ext{ PRESENCE optional },
    . . .
```

```
HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-Response
HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-ID
                                        HSDSCH-MACdFlow-ID,
    bindingID
                                        BindingID
                                                                                 OPTIONAL.
    transportLayerAddress
                                        TransportLayerAddress
                                                                                 OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation
                                                                                OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } }
                                                                                                                                   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,
                                        TransportLaverAddress
    transportLayerAddress
                                                                                 OPTIONAL,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }
    iE-Extensions
                                                                                                                                      OPTIONAL,
    . . .
HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
                            CRITICALITY ignore
    {ID id-TnlOos
                                                    EXTENSION TnlOos 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-ExtlEs 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,
                                        ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs} }
    iE-Extensions
                                                                                                                       OPTIONAL,
HSDSCH-MACdFlows-to-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
HSDSCH-Initial-Capacity-Allocation: = SEOUENCE (SIZE (1..maxNrOfPrioQueues)) OF HSDSCH-Initial-Capacity-AllocationItem
HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPrioritvIndicator
                                    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size
                                    MACdPDU-Size,
    hSDSCH-InitialWindowSize
                                    HSDSCH-InitialWindowSize,
                                    ProtocolExtensionContainer { {HSDSCH-Initial-Capacity-AllocationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
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 ::= SEOUENCE {
    setsOfHS-SCCH-Codes
                            SetsOfHS-SCCH-Codes.
    hARO-MemoryPartitioning
                                HARO-MemoryPartitioning,
    eDCH-FDD-DL-ControlChannelInformation
                                                EDCH-FDD-DL-ControlChannelInformation
                                                                                             OPTIONAL,
    hARO-Preamble-Mode-Activation-Indicator
                                                HARO-Preamble-Mode-Activation-Indicator
                                                                                             OPTIONAL,
                            MIMO-InformationResponse
    mIMO-N-M-Ratio
                                                            OPTIONAL,
    continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                         Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
    OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCH-PreconfigurationInfo-ExtIEs} }
                                                                                                                        OPTIONAL,
    . . .
HSDSCH-PreconfigurationInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSDSCH-PreconfigurationSetup ::= SEQUENCE {
    mAChsResetScheme
                            MAChsResetScheme.
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    mAChs-Reordering-Buffer-Size-for-RLC-UM
                                                MAChsReorderingBufferSize-for-RLC-UM,
    secondaryServingCells
                                SecondaryServingCells
                                                                OPTIONAL.
    numPrimaryHS-SCCH-Codes
                                NumHS-SCCH-Codes
                                                            OPTIONAL,
    hARO-Preamble-Mode
                            HARO-Preamble-Mode
                                                                     OPTIONAL,
    mIMO-ActivationIndicator
                                    MIMO-ActivationIndicator
                                                                         OPTIONAL,
    hSDSCH-MACdPDUSizeFormat
                                    HSDSCH-MACdPDUSizeFormat
                                                                         OPTIONAL,
                                            SixtyfourOAM-UsageAllowedIndicator
    sixtyfourOAM-UsageAllowedIndicator
                                                                                         OPTIONAL,
    uE-without-HS-SCCH-constraint-indicator
                                                NULL
                                                            OPTIONAL,
    continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                     Continuous-Packet-Connectivity-HS-SCCH-Less-Information
                                                                                                                                 OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { HSDSCHPreconfigurationSetup-ExtIEs } }
    . . .
```

```
HSDSCHPreconfigurationSetup-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-PreconfiguredCodes
                                        ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HS-SCCH-PreconfiguredCodesItem
HS-SCCH-PreconfiguredCodesItem ::= SEQUENCE {
    hS-SCCH-CodeNumber
                                HS-SCCH-CodeNumber,
                            ProtocolExtensionContainer { { HS-SCCH-PreconfiguredCodesItem-ExtIEs} } OPTIONAL,
    iE-Extensions
HS-SCCH-PreconfiguredCodesItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HS-SCCH-CodeNumber ::= INTEGER (0..127)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-DSCH-serving-cell-change-information ::= SEQUENCE {
    hs-PDSCH-RLID
                                RL-ID,
    hSDSCH-FDD-Information
                                HSDSCH-FDD-Information
                                                                                                                    OPTIONAL,
                                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 },
HS-DSCH-serving-cell-change-informationResponse ::= SEQUENCE {
                                    HS-DSCH-serving-cell-change-choice,
    hS-DSCH-serving-cell-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,
                                        ProtocolExtensionContainer { { HS-serving-cell-change-successful-ExtIEs} } OPTIONAL,
    iE-Extensions
HS-serving-cell-change-successful-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-Continuous-Packet-Connectivity-HS-SCCH-Less-Information-Response
                                                                             CRITICALITY ignore EXTENSION Continuous-Packet-Connectivity-HS-SCCH-
Less-Information-Response
                                PRESENCE optional },
HS-serving-cell-change-unsuccessful ::= SEQUENCE {
    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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-HSDSCH-MACdPDUSizeFormat
                                    CRITICALITY reject
                                                                         HSDSCH-MACdPDUSizeFormat PRESENCE optional } |
                                                             EXTENSION
{ ID id-HSSICH-SIRTarget
                                    CRITICALITY ignore
                                                             EXTENSION UL-SIR
                                                                                                                     PRESENCE optional }
-- Applicable to 1.28Mcps TDD only
{ ID id-HSSICH-TPC-StepSize
                                    CRITICALITY ignore
                                                             EXTENSION TDD-TPC-UplinkStepSize-LCR
                                                                                                                      PRESENCE optional } |
-- 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.
    hARO-MemoryPartitioning
                                                    HARO-MemoryPartitioning
                                                                                                     OPTIONAL,
    -- For 1.28Mcps TDD, this HARO Memory Partitioning Information is for the first Frequency repetition, HARO Memory Partitioning Information for
Frequency repetitions 2 and on, should be defined in MultipleFreg-HSPDSCH-InformationList-ResponseTDDLCR
                                                    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 MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR
PRESENCE optional } |
-- Applicable to 1.28Mcps TDD when using multiple frequencies , This MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR is the HS-SCCH and HARQ
Memory Partitioning information for the 2nd and beyond HS-PDSCH frequencies
{ ID id-multicarrier-number
                                                                CRITICALITY ignore EXTENSION Multicarrier-Number
    PRESENCE optional }
-- Applicable for 1.28Mcps TDD when using multiple frequencies
{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 },
Multicarrier-Number ::= INTEGER (1..maxHSDPAFrequency)
HSPDSCH-TDD-Specific-InfoList-Response ::= SEOUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response
HSPDSCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot
                                                    TimeSlot,
    midambleShiftAndBurstType
                                                    MidambleShiftAndBurstType,
    iE-Extensions
                                                    ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs } }
    OPTIONAL,
    . . .
```

```
HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSPDSCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF HSPDSCH-TDD-Specific-InfoItem-Response-LCR
HSPDSCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE
    timeslotLCR
                                              TimeSlotLCR.
   midambleShiftLCR
                                              MidambleShiftLCR,
                                              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 ::= SEQUENCE (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),
    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-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR
HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR
                                                 TimeSlotLCR,
    midambleShiftLCR
                                                MidambleShiftLCR,
    first-TDD-ChannelisationCode
                                                TDD-ChannelisationCode,
    second-TDD-ChannelisationCode
                                            TDD-ChannelisationCode,
    hSSICH-InfoLCR
                                                HSSICH-InfoLCR,
                                                 ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }
   iE-Extensions
    OPTIONAL,
    . . .
HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIES RNSAP-PROTOCOL-EXTENSION ::= {
HSSCCH-TDD-Specific-InfoList-Response768 ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response768
HSSCCH-TDD-Specific-InfoItem-Response768 ::= SEQUENCE {
    timeslot
                                                     TimeSlot,
                                                     MidambleShiftAndBurstType768,
    midambleShiftAndBurstTvpe768
    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 ::= SEOUENCE {
   hsSICH-ID
                                                     HS-SICH-ID.
    timeslot
                                                     TimeSlot,
    midambleShiftAndBurstType
                                                     MidambleShiftAndBurstType,
    tDD-ChannelisationCode
                                                     TDD-ChannelisationCode,
                                                     ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }
   iE-Extensions
                                                                                                                  OPTIONAL,
```

```
HSSICH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
HSSICH-InfoLCR ::= SEQUENCE {
   hsSICH-ID
                                                   HS-SICH-ID,
   timeslotLCR
                                                   TimeSlotLCR,
    midambleShiftLCR
                                                   MidambleShiftLCR,
    tDD-ChannelisationCode
                                               TDD-ChannelisationCode,
    iE-Extensions
                                                   ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }
                                                                                                                 OPTIONAL,
    . . .
HSSICH-Info-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HS-SICH-ID-Extension
                                  CRITICALITY ignore EXTENSION HS-SICH-ID-Extension PRESENCE optional },
    -- Applicable for 1.28Mcps TDD only when the HS-SICH ID IE is more than 31
HSSICH-Info768 ::= SEQUENCE {
   hsSICH-ID
                                                   HS-SICH-ID,
    timeslot
                                                   TimeSlot,
   midambleShiftAndBurstType768
                                                   MidambleShiftAndBurstTvpe768,
    tDD-ChannelisationCode768
                                                   TDD-ChannelisationCode768,
    iE-Extensions
                                                   ProtocolExtensionContainer { { HSSICH-Info-768-ExtIEs } }
                                                                                                                 OPTIONAL,
HSSICH-Info-768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
HS-SICH-Reception-Quality-Value ::= SEQUENCE
    failed-HS-SICH HS-SICH-failed,
   missed-HS-SICH
                            HS-SICH-missed,
    total-HS-SICH
                            HS-SICH-total,
                               ProtocolExtensionContainer { { HS-SICH-Reception-Ouality-Value-ExtIEs} } OPTIONAL,
    iE-Extensions
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 [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,
    cqiPowerOffset
                                                    COI-Power-Offset
                                                                                                 OPTIONAL,
    ackPowerOffset
                                                    Ack-Power-Offset
                                                                                                 OPTIONAL,
    nackPowerOffset
                                                    Nack-Power-Offset
                                                                                                 OPTIONAL,
                                                    ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }
    iE-Extensions
                                                                                                                                 OPTIONAL,
HSDSCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ID id-HS-PDSCH-Code-Change-Indicator
                                            CRITICALITY ignore
                                                                                                                     PRESENCE optional },
                                                                    EXTENSION
                                                                               HS-PDSCH-Code-Change-Indicator
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
                                            Transport-Block-Size-List-LCR,
    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 ::= {
Transport-Block-Size-List-LCR ::= SEQUENCE (SIZE (1..maxNoOfTBSs-Mapping-HS-DSCH-SPS)) OF Transport-Block-Size-Item-LCR
Transport-Block-Size-Item-LCR ::= SEQUENCE {
    transport-Block-Size-maping-Index-LCR
                                                Transport-Block-Size-maping-Index-LCR,
    transport-Block-Size-Index-LCR
                                                Transport-Block-Size-Index-LCR,
    iE-Extensions
                                                ProtocolExtensionContainer { { Transport-Block-Size-Item-LCR-ExtIEs } }
                                                                                                                                OPTIONAL,
Transport-Block-Size-Item-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Transport-Block-Size-maping-Index-LCR ::= INTEGER (0..maxNoOfTBSs-Mapping-HS-DSCH-SPS-1)
Transport-Block-Size-Index-LCR ::= INTEGER (1..maxNoOfHS-DSCH-TBSsLCR)
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
    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 {
HS-DSCH-SPS-Operation-Indicator ::= CHOICE {
    logicalChannellevel
                                LogicalChannellevel,
    priorityQueuelevel
                                PriorityQueuelevel,
LogicalChannellevel ::= BIT STRING (SIZE (16))
PriorityQueuelevel ::= BIT STRING (SIZE (8))
HS-DSCH-Semi-PersistentScheduling-Information-to-Modify-LCR ::= SEQUENCE {
                                            Transport-Block-Size-List-LCR
    transport-Block-Size-List
                                                                                         OPTIONAL,
    repetition-Period-List-LCR
                                            Repetition-Period-List-LCR
                                                                                     OPTIONAL,
                                            SPS-Reservation-Indicator
    hS-DSCH-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 ::= SEOUENCE (SIZE (1..maxNoOf-HS-SICH-SPS)) OF HS-SICH-InformationItem-for-HS-DSCH-SPS
HS-SICH-InformationItem-for-HS-DSCH-SPS ::= SEOUENCE {
    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,
                                                 TDD-PhysicalChannelOffset,
    hS-PDSCH-Offset
    hS-PDSCH-Midamble-Configuation
                                                 MidambleShiftLCR,
    timeslot-Resource-Related-Information
                                                 HS-DSCH-TimeslotResourceLCR,
    startCode
                                                 TDD-ChannelisationCode,
    endCode
                                                 TDD-ChannelisationCode,
                                                 Transport-Block-Size-Index-LCR,
    transport-Block-Size-Index
    modulationType
                                                 ModulationSPS-LCR,
    hS-SICH-Mapping-Index
                                                HS-SICH-Mapping-Index,
    iE-Extensions
                                                 ProtocolExtensionContainer { { Initial-HS-PDSCH-SPS-Resource-ExtIEs } }
                                                                                                                                 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::= SEQUENCE {
    requestedDataValue
                            RequestedDataValue,
    iE-Extensions
                            ProtocolExtensionContainer { { InformationAvailable-ExtIEs} }
                                                                                                 OPTIONAL,
InformationAvailable-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
InformationExchangeID ::= INTEGER (0..1048575)
InformationNotAvailable ::= NULL
InformationReportCharacteristics ::= CHOICE {
    onDemand
    periodic
                           PeriodicInformation,
    onModification
                           OnModificationInformation,
InformationReportPeriodicity ::= CHOICE {
                    INTEGER (1..60,...),
    min
-- Unit min, Step 1min
                    INTEGER (1..24,...),
    hour
-- Unit hour, Step 1hour
InformationThreshold ::= CHOICE {
    dGPSThreshold
                        DGPSThreshold,
    dGANSSThreshold
                        DGANSSThreshold
```

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```
InformationType ::= SEQUENCE {
    informationTypeItem
                            ENUMERATED {
        qA-AccessPointPositionwithAltitude,
        gA-AccessPointPosition,
        iPDLParameters,
        qPSInformation,
        dGPSCorrections.
        qPS-RX-POS,
        sFNSFN-GA-AccessPointPosition.
        cell-Capacity-Class,
       nACC-Related-Data.
        mBMSBearerServiceFullAddress.
        interFrequencyCellInformation,
        gANSSInformation,
        dGANSSCorrections,
        gANSS-RX-Pos,
        mBMS-Counting-Information,
        mBMS-Transmission-Mode,
        mBMS-Neighbouring-Cell-Information,
        mBMS-RLC-Sequence-Number
    gPSInformation
                                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-q 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-Reg
                                                                                                PRESENCE conditional } |
-- The following IE shall be present if the Information Type Item IE indicates "MBMS RLC Sequence Number"
    { ID id-MBMS-RLC-Sequence-Number-Information
                                                        CRITICALITY ignore EXTENSION MBMS-RLC-Sequence-Number-Information PRESENCE conditional },
Initial-DL-DPCH-TimingAdjustment-Allowed ::= ENUMERATED
    initial-DL-DPCH-TimingAdjustment-Allowed
                       ::= ENUMERATED {active, inactive}
InnerLoopDLPCStatus
IPDLParameters ::= CHOICE {
   iPDL-FDD-Parameters
                                IPDL-FDD-Parameters,
    iPDL-TDD-Parameters
                                IPDL-TDD-Parameters,
                                                        --3.84Mcps TDD and 7.68Mcps TDD only
    extension-IPDLParameters
                                Extension-IPDLParameters
```

```
::= 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 ::= SEQUENCE (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 ::= SEQUENCE {
   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 } } OPTIONAL,
   iE-Extensions
Inter-Frequency-Cell-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Inter-Frequency-Cell-Information-SIB11 ::= SEQUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB11-Per-Indication
Inter-Frequency-Cell-Information-SIB12 ::= SEQUENCE (SIZE (0..2)) OF Inter-Frequency-Cells-Information-SIB12-Per-Indication
Inter-Frequency-Cells-Information-SIB11-Per-Indication ::= SEQUENCE {
    inter-Frequency-Cell-Indication-SIB11 Inter-Frequency-Cell-Indication,
   inter-Frequency-Cell-List-SIB11
                                      Inter-Frequency-Cell-SIB11-or-SIB12-List,
   iE-Extensions
                              ProtocolExtensionContainer { { Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtIEs } } OPTIONAL,
    . . .
Inter-Frequency-Cells-Information-SIB11-Per-Indication-ExtlEs 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)
IPDL-FDD-Parameters ::= SEQUENCE {
   iPSpacingFDD
                                IPSpacingFDD,
   iPLength
                                IPLength,
   iPOffset
                                IPOffset,
    seed
                                Seed,
    burstModeParameters
                                BurstModeParameters
                                                         OPTIONAL.
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-FDD-Parameters-ExtIEs} }
                                                                                                   OPTIONAL,
IPDL-FDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-Parameters ::= SEOUENCE {
   iPSpacingTDD
                                IPSpacingTDD,
   iPStart
                                IPStart,
   iPSlot
                                IPSlot,
    iP-P-CCPCH
                                IP-P-CCPCH,
    burstModeParameters
                                BurstModeParameters
                                                         OPTIONAL,
                                ProtocolExtensionContainer { { IPDL-TDD-Parameters-ExtIEs} }
    iE-Extensions
                                                                                                   OPTIONAL,
    . . .
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
IPDL-TDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IPDL-TDD-ParametersLCR ::= SEQUENCE {
    iPSpacingTDD
                                IPSpacingTDD,
    iPStart
                                IPStart,
    iPSub
                                IPSub,
```

```
burstModeParameters
                                BurstModeParameters
                                                         OPTIONAL,
    iE-Extensions
                                ProtocolExtensionContainer { { IPDL-TDD-ParametersLCR-ExtIEs} } OPTIONAL,
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.
IPDL-TDD-ParametersLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
IPLength ::= ENUMERATED {
    ipl5,
   ipl10,
    . . .
IPMulticastAddress ::= OCTET STRING (SIZE (4..16))
IPOffset ::= INTEGER (0..9)
IP-P-CCPCH ::= ENUMERATED {
    switchOff-1-Frame,
    switchOff-2-Frames
IPSlot ::= INTEGER (0..14)
IPSpacingFDD ::= ENUMERATED {
    ipsF5,
    ipsF7,
    ipsF10,
    ipsF15,
    ipsF20,
    ipsF30,
    ipsF40,
    ipsF50,
    . . .
IPSpacingTDD ::= ENUMERATED {
    ipsT30,
    ipsT40,
    ipsT50,
    ipsT70,
    ipsT100,
    . . .
IPStart ::= INTEGER (0..4095)
IPSub ::= ENUMERATED {
    first,
    second,
```

```
both
IdleIntervalInformation ::= SEQUENCE {
    idleIntervalInfo-k
                                               INTEGER(2..3),
    idleIntervalInfo-offset
                                               INTEGER(0..7),
LAC
                   ::= OCTET STRING (SIZE (2)) -- (EXCEPT ('0000'H|'FFFE'H))
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,...},
                                       ProtocolExtensionContainer { { LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs} } OPTIONAL,
   iE-Extensions
LCRTDD-Uplink-Physical-Channel-Capability-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- M
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,...)
    -- 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
    mACdPDU-Size
                                        MACdPDU-Size,
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } }
    iE-Extensions
                                                                                                                 OPTIONAL,
MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    mACdPDU-Size
                                        MACdPDU-Size,
    iE-Extensions
                                        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } }
                                                                                                                          OPTIONAL,
MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MACes-Guaranteed-Bitrate ::= INTEGER (0..16777215,...,16777216...256000000)
MACes-Maximum-Bitrate-LCR ::= INTEGER (0..256000000,...)
MACeReset-Indicator ::= ENUMERATED {mACeReset}
MAChsGuaranteedBitRate ::= INTEGER (0..16777215,...,16777216..256000000)
MAChsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
MAC-hsWindowSize
                       ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}
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 [9]
Max-UE-DTX-Cycle ::= ENUMERATED {
    v5, v10, v20, v40, v64, v80, v128, v160,
MBMS-Bearer-Service-Full-Address ::= SEQUENCE {
    accessPointName
                                           AccessPointName,
    iPMulticastAddress
                                           IPMulticastAddress,
                                       ProtocolExtensionContainer { { MBMS-Bearer-Service-Full-Address-ExtIEs } }
    iE-Extensions
                                                                                                                         OPTIONAL,
MBMS-Bearer-Service-Full-Address-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-Service-List
                         ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI
MBMS-Bearer-ServiceItemFDD ::=SEQUENCE{
    tmgi TMGI,
    transmissionMode
                      TransmissionMode,
```

```
ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-ExtIEs} } OPTIONAL,
    iE-Extensions
MBMS-Bearer-ServiceItemFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-ServiceItemFDD-PFL ::=SEQUENCE{
    tmgi TMGI,
    transmissionMode
                         TransmissionMode
                                               OPTIONAL,
    preferredFrequencyLayer
                               UARFCN
                                               OPTIONAL.
   iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs} } OPTIONAL,
MBMS-Bearer-ServiceItemFDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-ServiceItemTDD ::=SEQUENCE{
    tmgi TMGI,
    transmissionMode
                      TransmissionMode.
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-ExtIEs} } OPTIONAL,
    iE-Extensions
MBMS-Bearer-ServiceItemTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMS-Bearer-ServiceItemTDD-PFL ::=SEQUENCE{
           TMGI,
    tmqi
    transmissionMode TransmissionMode
                                           OPTIONAL,
   preferredFrequencyLayer
                               UARFCN
                                               OPTIONAL,
   iE-Extensions
                                   ProtocolExtensionContainer { { MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs} } OPTIONAL,
MBMS-Bearer-ServiceItemTDD-PFL-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBMSChannelTypeInfo ::= SEQUENCE {
    tMGI
                       TMGI,
    pTM-Cell-List
                       PTMCellList
                                       OPTIONAL,
   pTP-Cell-List
                      PTPCellList
                                       OPTIONAL,
   not-Provided-Cell-List NotProvidedCellList OPTIONAL,
                       ProtocolExtensionContainer { { MBMSChannelTypeInfo-ExtIEs} } OPTIONAL,
    . . .
MBMSChannelTypeInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
MBMSChannelTypeCellList ::= SEQUENCE {
                                         C-ID.
   affectedUEInformationForMBMS
                                     AffectedUEInformationForMBMS
                                                                   OPTIONAL.
   iE-Extensions
                                     ProtocolExtensionContainer { { MBMSChannelTypeCellList-ExtIEs} } OPTIONAL,
MBMSChannelTypeCellList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
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 [16]
   13-Information-2
                     L3-Information OPTIONAL,
-- This IE contains MBMS CURRENT CELL P-T-M RB INFORMATION defined in [16]
                                 ProtocolExtensionContainer { { MBMS-Neighbouring-Cell-Information-ExtIEs} } OPTIONAL,
   iE-Extensions
   . . .
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 {
   c-ID
                                 C-ID,
   mBMS-Bearer-Service-List-RLC
                                                       MBMS-Bearer-Service-List-RLC,
                                 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
                                    ::= SEQUENCE {
    tmqi
                                    TMGI,
    time-Stamp
                                    Time-Stamp.
    iE-Extensions
                                    ProtocolExtensionContainer { MBMS-Bearer-Service-List-RLCinfo-ExtIEs} }
                                                                                                                    OPTIONAL,
MBMS-Bearer-Service-List-RLCinfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MBSFN-Cluster-Identity
                           ::= INTEGER (0..65535)
MCCH-Message-List ::= SEQUENCE (SIZE (1.. maxNrOfMCCHMessages)) OF L3-Information
MCCH-Configuration-Info ::= SEQUENCE {
    secondaryCCPCHSystemInformationMBMS
                                                Secondary-CCPCH-System-Information-MBMS,
    ie-Extensions
                                                ProtocolExtensionContainer { {MCCH-Configuration-Info-ExtIEs } }
                                                                                                                    OPTIONAL,
MCCH-Configuration-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-System-Information-MBMS
                                                    ::= BIT STRING
MBSFN-Scheduling-Transmission-Time-Interval-Info-List ::=
                                                                SEQUENCE (SIZE (1.. maxNrOfMBMSL3)) OF MBSFN-Scheduling-Transmission-Time-Interval-
Item
MBSFN-Scheduling-Transmission-Time-Interval-Item
                                                    ::= SEQUENCE
    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 }|
   { ID id-Received-Total-Wideband-Power-Value-IncrDecrThres CRITICALITY reject TYPE Received-Total-Wideband-Power-Value-IncrDecrThres
   PRESENCE mandatory } |
    ID id-RT-Load-Value-IncrDecrThres CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres
                                                                         PRESENCE mandatory } |
    ID id-UpPTSInterferenceValue
                              CRITICALITY reject TYPE UpPTSInterferenceValue
                                                                          PRESENCE mandatory }
MeasurementRecoveryBehavior ::= NULL
MeasurementRecoveryReportingIndicator ::= NULL
```

```
MeasurementRecoverySupportIndicator ::= NULL
Measurement.Threshold
                              ::= CHOICE {
    sir
                                  SIR-Value.
    sir-error
                                  SIR-Error-Value,
    transmitted-code-power
                                  Transmitted-Code-Power-Value,
                                  RSCP-Value,
    rx-timing-deviation
                                  Rx-Timing-Deviation-Value,
    round-trip-time
                                  Round-Trip-Time-Value,
    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
                                                                                                                       PRESENCE mandatory
                                                     CRITICALITY reject TYPE Load-Value
     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
                                                                                                                       PRESENCE mandatory
     ID id-UL-Timeslot-ISCP-Value
                                                     CRITICALITY reject TYPE UL-Timeslot-ISCP-Value
     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-Quality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Quality-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
     MidambleConfigurationBurstType1And3 ::=
                                          ENUMERATED {v4, v8, v16}
MidambleConfigurationBurstType2 ::=
                                      ENUMERATED {v3, v6}
MidambleConfigurationLCR ::=
                              ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
MidambleShiftAndBurstType ::=
                                  CHOICE {
                                      SEQUENCE
    type1
       midambleConfigurationBurstType1And3
                                              MidambleConfigurationBurstType1And3,
       midambleAllocationMode
                                          CHOICE
           defaultMidamble
                                              NULL.
           commonMidamble
                                              NULL,
           ueSpecificMidamble
                                              MidambleShiftLong.
       midambleConfigurationBurstType2
                                          MidambleConfigurationBurstType2,
       midambleAllocationMode
                                          CHOICE
```

```
defaultMidamble
                                                NULL,
            commonMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftShort,
                                         SEQUENCE {
    type3
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                        CHOICE {
            defaultMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftLong,
MidambleShiftLong ::=
                                     INTEGER (0..15)
MidambleShiftShort ::=
                                     INTEGER (0..5)
MidambleShiftLCR ::= SEOUENCE {
    midambleAllocationMode
                                MidambleAllocationMode,
    midambleShift.
                                MidambleShiftLong
                                                         OPTIONAL,
        -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    midambleConfigurationLCR
                                MidambleConfigurationLCR,
                                ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }
    iE-Extensions
                                                                                                 OPTIONAL,
MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
MidambleShiftLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MidambleShiftAndBurstType768 ::=
                                         CHOICE {
                                         SEOUENCE
    type1
        midambleConfigurationBurstType1And3
                                                MidambleConfigurationBurstType1And3,
        midambleAllocationMode
                                            CHOICE
            defaultMidamble
                                                NULL,
            commonMidamble
                                                NULL,
            ueSpecificMidamble
                                                MidambleShiftLong,
```

```
SEQUENCE
       midambleConfigurationBurstType2-768
                                             MidambleConfigurationBurstType2-768,
       midambleAllocationMode
                                         CHOICE {
           defaultMidamble
                                             NULL,
           commonMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftShort768,
                                     SEQUENCE
   type3
       midambleAllocationMode
                                     CHOICE {
           defaultMidamble
                                             NULL,
           ueSpecificMidamble
                                             MidambleShiftLong,
MidambleConfigurationBurstType2-768 ::=
                                         ENUMERATED {v4, v8}
MidambleShiftShort768 ::=
                                     INTEGER (0..7)
MIMO-ActivationIndicator
                          ::= NULL
MIMO-InformationResponse ::= SEQUENCE {
   mIMO-PilotConfiguration
                                             MIMO-PilotConfiguration,
   mIMO-N-M-Ratio
                                             MIMO-N-M-Ratio,
   iE-Extensions
                                             ProtocolExtensionContainer { { MIMO-InformationResponse-ExtIEs } }
                                                                                                                  OPTIONAL,
    . . .
MIMO-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MIMO-Mode-Indicator ::= ENUMERATED {
   activate.
   deactivate
MIMO-N-M-Ratio ::= ENUMERATED {v1-2, v2-3, v3-4, v4-5, v5-6, v6-7, v7-8, v8-9, v9-10, v1-1,...}
MIMO-PilotConfiguration ::= CHOICE {
   primary-and-secondary-CPICH
                                         CommonPhysicalChannelID,
   normal-and-diversity-primary-CPICH
```

```
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 {
    addPriorityOueue
                                PriorityQueue-InfoItem-to-Add,
    modifyPriorityQueue
                                PriorityOueue-InfoItem-to-Modify,
                                PriorityOueue-Id,
    deletePriorityOueue
Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
    . . .
Multiple-PLMN-List ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    list-Of-PLMNs
                        List-Of-PLMNs
                                                                                      OPTIONAL,
                        ProtocolExtensionContainer { { Multiple-PLMN-List-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Multiple-PLMN-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
MAChs-ResetIndicator ::= ENUMERATED{
    mAChs-NotReset
MultipleFreq-HSPDSCH-InformationList-ResponseTDDLCR ::= SEQUENCE (SIZE (1.. maxHSDPAFrequency-1)) OF MultipleFreq-HSPDSCH-InformationItem-
ResponseTDDLCR
--Includes the 2nd through the max number of frequency repetitions
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR ::= SEQUENCE{
    hSSCCH-TDD-Specific-InfoList-Response-LCR
                                                     HSSCCH-TDD-Specific-InfoList-Response-LCR
                                                                                                 OPTIONAL,
    hARQ-MemoryPartitioning
                                                     HARQ-MemoryPartitioning
                                                                                                  OPTIONAL,
```

```
UARFCN.
   uARFCN
    -- This is the UARFCN for the second and beyond Frequency repetition.
   iE-Extensions
                                                  ProtocolExtensionContainer { { MultipleFreg-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs } }
       OPTIONAL,
    . . .
MultipleFreq-HSPDSCH-InformationItem-ResponseTDDLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
MIMO-SFMode-For-HSPDSCHDualStream ::= ENUMERATED
   sF1SF16
NACC-Related-Data ::= SEQUENCE
   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,...)
-- According to mapping in ref. [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-CellInformationItemIE RNSAP-PROTOCOL-IES ::= {
    Neighbouring-UMTS-CellInformationItem PRESENCE 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 ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem
Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
    C-TD
                                        C-ID,
    uARFCNforNu
                                        UARFCN,
    uARFCNforNd
                                        UARFCN,
    frameOffset
                                        FrameOffset
                                                            OPTIONAL,
    primaryScramblingCode
                                        PrimaryScramblingCode,
    primaryCPICH-Power
                                        PrimaryCPICH-Power
                                                                OPTIONAL
    cellIndividualOffset
                                        CellIndividualOffset
                                                                OPTIONAL,
    txDiversityIndicator
                                        TxDiversityIndicator,
    sTTD-SupportIndicator
                                        STTD-SupportIndicator
                                                                OPTIONAL,
    closedLoopModel-SupportIndicator
                                        ClosedLoopModel-SupportIndicator
                                                                            OPTIONAL,
    not-used-closedLoopMode2-SupportIndicator NULL
                                                        OPTIONAL,
                                        ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-RestrictionStateIndicator
                                                    CRITICALITY ignore
                                                                                 EXTENSION RestrictionStateIndicator
                                                                                                                       PRESENCE optional } |
      ID id-DPC-Mode-Change-SupportIndicator
                                                CRITICALITY ignore
                                                                        EXTENSION
                                                                                    DPC-Mode-Change-SupportIndicator
                                                                                                                          PRESENCE optional } |
      ID id-CoverageIndicator
                                            CRITICALITY ignore
                                                                        EXTENSION CoverageIndicator
                                                                                                                 PRESENCE optional }
      ID id-AntennaColocationIndicator
                                            CRITICALITY ignore
                                                                        EXTENSION AntennaColocationIndicator
                                                                                                                 PRESENCE optional
      ID id-HCS-Prio
                                                                                                                 PRESENCE optional }
                                            CRITICALITY ignore
                                                                        EXTENSION HCS-Prio
      ID id-CellCapabilityContainer-FDD
                                                                                                                          PRESENCE optional } |
                                            CRITICALITY ignore
                                                                        EXTENSION
                                                                                    CellCapabilityContainer-FDD
      ID id-SNA-Information
                                            CRITICALITY ignore
                                                                        EXTENSION SNA-Information
                                                                                                        PRESENCE optional }
      ID id-FrequencyBandIndicator
                                            CRITICALITY ignore
                                                                        EXTENSION FrequencyBandIndicator
                                                                                                                 PRESENCE optional }|
     ID id-Max-UE-DTX-Cycle
                                            CRITICALITY ignore
                                                                        EXTENSION Max-UE-DTX-Cycle
                                                                                                                 PRESENCE conditional }
    -- This IE shall be present if the the fifteenth bit Continuous Packet Connectivity DTX-DRX Support Indicator in the Cell Capability Container
FDD IE is set to the value "1".
                                                                                                                 PRESENCE optional } |
      ID id-Multiple-PLMN-List
                                            CRITICALITY ignore
                                                                        EXTENSION Multiple-PLMN-List
     ID id-Secondary-Serving-Cell-List
                                            CRITICALITY ignore
                                                                        EXTENSION Secondary-Serving-Cell-List
                                                                                                                 PRESENCE optional },
NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-ID
                                        UC-ID,
    uARFCN
                                        UARFCN,
    primaryScramblingCode
                                        PrimaryScramblingCode,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL.
NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }}
```

```
Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= {
     ID id-Neighbouring-GSM-CellInformation
                                                CRITICALITY ignore TYPE
                                                                            Neighbouring-GSM-CellInformationIEs PRESENCE 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
                                                                        EXTENSION CoverageIndicator
                                                                                                                    PRESENCE optional
                                            CRITICALITY ignore
      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
                                                                                                                    PRESENCE optional
                                                                        EXTENSION GERAN-Cell-Capability
      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
                                    C-ID,
    uARFCNforNt
                                    UARFCN,
    frameOffset
                                    FrameOffset
                                                        OPTIONAL,
    cellParameterID
                                    CellParameterID,
    svncCase
                                    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
                                    DPCHConstantValue OPTIONAL.
    pCCPCH-Power
                                    PCCPCH-Power
                                                            OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { Neighbouring-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    . . .
Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-RestrictionStateIndicator
                                                    CRITICALITY ignore
                                                                                 EXTENSION RestrictionStateIndicator
                                                                                                                       PRESENCE optional } |
      ID id-CoverageIndicator
                                            CRITICALITY ignore
                                                                        EXTENSION CoverageIndicator
                                                                                                                 PRESENCE optional }
      ID id-AntennaColocationIndicator
                                            CRITICALITY ignore
                                                                        EXTENSION AntennaColocationIndicator
                                                                                                                 PRESENCE optional }
      ID id-HCS-Prio
                                            CRITICALITY ignore
                                                                        EXTENSION HCS-Prio
                                                                                                                 PRESENCE optional }
      ID id-CellCapabilityContainer-TDD
                                                    CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD
                                                                                                                       PRESENCE optional } |
      ID id-SNA-Information
                                                                                                                 PRESENCE optional } |
                                                    CRITICALITY ignore EXTENSION SNA-Information
```

```
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,
    uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlotLCR
                                        TimeSlotLCR
                                                                    OPTIONAL,
    midambleShiftLCR
                                        MidambleShiftLCR
                                                                    OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
NeighbouringTDDCellMeasurementInformation768 ::= SEQUENCE
    uC-ID
                                        UC-ID,
   uARFCN
                                        UARFCN,
    cellParameterID
                                        CellParameterID,
    timeSlot
                                        TimeSlot
                                                                     OPTIONAL,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768
                                                                        OPTIONAL,
    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-ID
                                    C-ID,
    uARFCNforNt
                                    UARFCN,
```

```
frameOffset
                                    FrameOffset
                                                        OPTIONAL,
    cellParameterID
                                    CellParameterID.
    sCTD-Indicator
                           SCTD-Indicator.
    cellIndividualOffset
                                    CellIndividualOffset
                                                            OPTIONAL,
    dPCHConstantValue
                                    DPCHConstantValue OPTIONAL.
    pCCPCH-Power
                                    PCCPCH-Power
                                                            OPTIONAL,
    restrictionStateIndicator
                                    RestrictionStateIndicator
                                                                    OPTIONAL,
                                    ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-CoverageIndicator
                                           CRITICALITY ignore
                                                                    EXTENSION
                                                                               CoverageIndicator
                                                                                                                   PRESENCE optional }
      ID id-AntennaColocationIndicator
                                           CRITICALITY ignore
                                                                    EXTENSION
                                                                               AntennaColocationIndicator
                                                                                                                   PRESENCE optional }
                                                                                                                   PRESENCE optional }
      ID id-HCS-Prio
                                           CRITICALITY ignore
                                                                    EXTENSION
                                                                               HCS-Prio
      ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore
                                                                    EXTENSION
                                                                               CellCapabilityContainer-TDD-LCR
                                                                                                                   PRESENCE optional }
      ID id-SNA-Information
                                                                                                                   PRESENCE optional }
                                           CRITICALITY ignore
                                                                               SNA-Information
                                                                    EXTENSION
     ID id-Multiple-PLMN-List
                                                                                                                   PRESENCE optional },
                                            CRITICALITY ignore
                                                                    EXTENSION
                                                                               Multiple-PLMN-List
Neighbouring-E-UTRA-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfEUTRANeighboursPerRNC,...)) OF Neighbouring-E-UTRA-CellInformationItem
Neighbouring-E-UTRA-CellInformationItem ::= SEQUENCE {
                                        ECGI,
    eARFCN-Information
                                        EARFCN-Information,
                                        ProtocolExtensionContainer { { Neighbouring-E-UTRA-CellInformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Neighbouring-E-UTRA-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
NotProvidedCellList ::= SEQUENCE (SIZE (1..maxNrOfCells)) OF MBMSChannelTypeCellList
NrOfDLchannelisationcodes ::= INTEGER (1..8)
NrOfTransportBlocks
                            ::= INTEGER (0..512)
NRT-Load-Information-Value-IncrDecrThres ::= INTEGER(0..3)
NRT-Load-Information-Value ::= INTEGER(0..3)
NRTLoadInformationValue ::= SEQUENCE {
        uplinkNRTLoadInformationValue
                                            INTEGER(0..3),
        downlinkNRTLoadInformationValue
                                            INTEGER (0..3)
N-E-UCCH ::= INTEGER (1..12)
N-E-UCCH-LCR ::= INTEGER (1..8)
```

```
Number-Of-Supported-Carriers ::= ENUMERATED {
    one-one-carrier,
    one-three-carrier.
    three-three-carrier,
    one-six-carrier.
    three-six-carrier,
    six-six-carrier,
NumHS-SCCH-Codes ::= INTEGER (1..maxNrOfHSSCCHCodes)
NoOfTargetCellHS-SCCH-Order::= INTEGER (1..30)
NeedforIdleInterval ::= ENUMERATED {
    true,
    false
-- O
OnModification ::= SEQUENCE {
    measurementThreshold MeasurementThreshold,
                           ProtocolExtensionContainer { {OnModification-ExtIEs} } OPTIONAL,
    iE-Extensions
OnModification-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
OnModificationInformation ::= SEQUENCE {
    informationThreshold InformationThreshold
                                                    OPTIONAL,
                           ProtocolExtensionContainer { {OnModificationInformation-ExtIEs} } OPTIONAL,
    iE-Extensions
OnModificationInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
-- 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 [16]
PagingRecordType ::= ENUMERATED {
    imsi-qsm-map,
    tmsi-qsm-map,
    p-tmsi-gsm-map,
    imsi-ds-41,
    tmsi-ds-41,
-- See in [16]
PartialReportingIndicator ::= ENUMERATED {
    partial-reporting-allowed
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,
    iE-Extensions
                                    ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs} } OPTIONAL,
PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PC-Preamble ::= INTEGER(0..7,...)
Periodic ::= SEQUENCE {
    reportPeriodicity
                            ReportPeriodicity,
    iE-Extensions
                            ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PeriodicInformation ::= SEQUENCE {
    informationReportPeriodicity
                                        InformationReportPeriodicity,
```

```
iE-Extensions
                                        ProtocolExtensionContainer { {PeriodicInformation-ExtIEs} } OPTIONAL,
PeriodicInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Permanent-NAS-UE-Identity ::= CHOICE {
    imsi
                IMSI,
    . . .
Phase-Reference-Update-Indicator ::= ENUMERATED {
    phase-reference-needs-to-be-changed
PLCCHsequenceNumber ::= INTEGER (0..14)
PLMN-Identity ::= OCTET STRING (SIZE(3))
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
PowerOffset
                        ::= INTEGER (0..24)
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters
PRCDeviation ::= ENUMERATED {
    prcd1,
   prcd2,
   prcd5,
   prcd10,
    . . .
Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
PredictedSFNSFNDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
```

```
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
PreferredFrequencyLayerInfo ::= SEQUENCE {
    defaultPreferredFrequency
                                    UARFCN,
    additionalPreferredFrequency
                                    AdditionalPreferredFrequency
                                                                    OPTIONAL.
    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
PrimarvCCPCH-RSCP
                            ::= INTEGER (0..91)
-- Mapping of Non Negative values according to maping in [24]
PrimaryCCPCH-RSCP-Delta
                           ::= INTEGER (-5..-1,...)
-- Mapping of Negative values according to maping in [24]
PrimaryScramblingCode
                                ::= INTEGER (0..511)
PriorityLevel
                           ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority
PriorityQueue-Id ::= INTEGER (0..maxNrOfPrioQueues-1)
PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem
PriorityQueue-InfoItem ::= SEQUENCE {
    priorityOueue-Id
                                        PriorityOueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t.1
                                        T1,
    discardTimer
                                        DiscardTimer
                                                                    OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                    OPTIONAL,
   mACdPDU-Size-Index
                                        MACdPDU-Size-IndexList,
    rLC-Mode
                                        RLC-Mode,
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } }
                                                                                                                 OPTIONAL.
    . . .
PriorityQueue-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                EXTENSION MAC-PDU-SizeExtended
                                                                                                                     PRESENCE optional }
```

. . .

```
{ ID id-DL-RLC-PDU-Size-Format
                                            CRITICALITY ignore
                                                                     EXTENSION
                                                                                 DL-RLC-PDU-Size-Format PRESENCE optional },
PriorityOueue-InfoList-EnhancedFACH-PCH ::= SEOUENCE (SIZE (1..maxNrOfPrioOueues)) OF PriorityOueue-InfoItem-EnhancedFACH-PCH
PriorityQueue-InfoItem-EnhancedFACH-PCH ::= SEQUENCE {
    priorityOueue-Id
                                        PriorityOueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    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,
PriorityOueue-InfoItem-EnhancedFACH-PCH-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF ModifyPriorityQueue
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
    priorityOueue-Id
                                        PriorityQueue-Id,
    associatedHSDSCH-MACdFlow
                                        HSDSCH-MACdFlow-ID,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator,
    t.1
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize,
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index
                                        MACdPDU-Size-IndexList,
    rLC-Mode
                                        RLC-Mode,
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Add-ExtIEs } }
    iE-Extensions
                                                                                                                        OPTIONAL,
PriorityQueue-InfoItem-to-Add-ExtIEs RNSAP-PROTOCOL-EXTENSION ::=
 ID id-MaximumMACdPDU-SizeExtended
                                        CRITICALITY reject
                                                                 EXTENSION
                                                                            MAC-PDU-SizeExtended
                                                                                                                      PRESENCE optional } |
{ ID id-DL-RLC-PDU-Size-Format
                                            CRITICALITY ignore
                                                                     EXTENSION DL-RLC-PDU-Size-Format PRESENCE optional },
PriorityOueue-InfoItem-to-Modify ::= SEOUENCE {
    priorityQueue-Id
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                 OPTIONAL,
    †1
                                                                                 OPTIONAL,
    discardTimer
                                        DiscardTimer
                                                                                 OPTIONAL,
    mAC-hsWindowSize
                                        MAC-hsWindowSize
                                                                                 OPTIONAL,
                                        MAChsGuaranteedBitRate
    mAChsGuaranteedBitRate
                                                                                 OPTIONAL,
    mACdPDU-Size-Index-to-Modify
                                        MACdPDU-Size-IndexList-to-Modify
                                        ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs } } }
    iE-Extensions
                                                                                                                           OPTIONAL,
```

```
PriorityOueue-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ID id-MaximumMACdPDU-SizeExtended
                                       CRITICALITY reject
                                                                EXTENSION MAC-PDU-SizeExtended
                                                                                                                    PRESENCE optional }
{ ID id-DL-RLC-PDU-Size-Format
                                        CRITICALITY ignore
                                                                EXTENSION DL-RLC-PDU-Size-Format PRESENCE optional },
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (0..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityQueue-InfoItem-to-Modify-Unsynchronised ::= SEQUENCE {
    priorityQueueId
                                        PriorityQueue-Id,
    schedulingPriorityIndicator
                                        SchedulingPriorityIndicator
                                                                                                                    OPTIONAL.
    discardTimer
                                        DiscardTimer
                                                                                                                    OPTIONAL.
    mAChsGuaranteedBitRate
                                        MAChsGuaranteedBitRate
                                                                                                                    OPTIONAL.
    iE-Extensions
                                        ProtocolExtensionContainer { { PriorityOueue-InfoItem-to-Modify-Unsynchronised-ExtIEs} }
                                                                                                                                      OPTIONAL,
    . . .
PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
PropagationDelay
                           ::= INTEGER (0..255)
ProvidedInformation ::= SEQUENCE {
                           MBMSChannelTypeInfo
    mBMSChannelTypeInfo
                                                        OPTIONAL,
    mBMSPreferredFreqLayerInfo MBMSPreferredFreqLayerInfo
                                                                OPTIONAL,
                                    ProtocolExtensionContainer { { ProvideInformation-ExtIEs} } OPTIONAL,
    iE-Extensions
ProvideInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UpPCH-InformationList-LCRTDD
                                            CRITICALITY ignore
                                                                    EXTENSION UpPCH-InformationList-LCRTDD
                                                                                                                    PRESENCE optional },
    -- Applicable to 1.28Mcps TDD only
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,
   iE-Extensions
                           ProtocolExtensionContainer { { UpPCH-InformationItem-LCRTDD-ExtIEs} }
                                                                                                                       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 ::= SEQUENCE (SIZE (1..maxNrofCells)) OF MBMSChannelTypeCellList
-- 0
OE-Selector ::= ENUMERATED {
    selected,
    non-selected
Process-Memory-Size ::= ENUMERATED {
                                        hms800, hms1600, hms2400, hms3200, hms4000,
                                        hms4800, hms5600, hms6400, hms7200, hms8000,
                                        hms8800, hms9600, hms10400, hms11200, hms12000,
                                        hms12800, hms13600, hms14400, hms15200, hms16000,
                                        hms17600, hms19200, hms20800, hms22400, hms24000,
                                        hms25600, hms27200, hms28800, hms30400, hms32000,
                                        hms36000, hms40000, hms44000, hms48000, hms52000,
                                        hms56000, hms60000, hms64000, hms68000, hms72000,
                                        hms76000, hms80000, hms88000, hms96000, hms104000,
                                        hms112000, hms120000, hms128000, hms136000, hms144000,
                                        hms152000, hms160000, hms176000, hms192000, hms208000,
                                        hms224000, hms240000, hms256000, hms272000, hms288000,
                                        hms304000,...}
-- R
RAC
                    ::= OCTET STRING (SIZE(1))
RANAP-EnhancedRelocationInformationRequest
                                                ::= BIT STRING
RANAP-EnhancedRelocationInformationResponse
                                                ::= BIT STRING
RANAP-RelocationInformation
                                ::= BIT STRING
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
RateMatchingAttribute
                             ::= INTEGER (1..maxRateMatching)
RB-Identity
                                ::= INTEGER (0..31)
RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity
Received-Total-Wideband-Power-Value ::= Received-total-wide-band-power
```

```
Received-Total-Wideband-Power-Value-IncrDecrThres ::= INTEGER(0..620)
-- Unit dB Step 0.1dB
-- e.g. value 100 means 10dB
Reference-E-TFCI-Information ::= SEQUENCE (SIZE (1..maxNrOfRefETFCIs)) OF Reference-E-TFCI-Information-Item
Reference-E-TFCI-Information-Item ::= SEQUENCE {
    reference-E-TFCI
    -- The following IE shall be ignored if id-Ext-Reference-E-TFCI-PO is present in Reference-E-TFCI-Information-Item-ExtIEs
    reference-E-TFCI-PO
                                   Reference-E-TFCI-PO,
    iE-Extensions
                                    ProtocolExtensionContainer { { Reference-E-TFCI-Information-Item-ExtIEs} }
                                                                                                                    OPTIONAL,
    . . .
Reference-E-TFCI-Information-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    -- The following IE shall be present if the ref E-TFCI power offset to be signalled exceeds maxNrOfRefETFCI-PO-OUANTSTEPs
    { ID id-Ext-Reference-E-TFCI-PO
                                       CRITICALITY reject
                                                                EXTENSION Ext-Reference-E-TFCI-PO
                                                                                                       PRESENCE optional },
Reference-E-TFCI-PO ::= INTEGER (0.. maxNrOfRefETFCI-PO-QUANTSTEPs)
RefTFCNumber ::= INTEGER (0..15)
Released-CN-Domain ::= CHOICE {
   pSDomain
                            NULL.
    cSDomain
                            NULL,
   pS-CSDomain
                           NULL,
RepetitionLength
                           ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
   v1.
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
ReportCharacteristics ::= CHOICE {
    onDemand
                       NULL,
                        Periodic,
    periodic
    eventA
                        EventA,
    eventB
                        EventB,
                        EventC,
    eventC
```

```
EventD,
    eventD
    event.E
                        EventE.
    event.F
                        EventF.
    extension-ReportCharacteristics
                                        Extension-ReportCharacteristics
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE RNSAP-PROTOCOL-IES ::= {
    { ID id-OnModification CRITICALITY reject TYPE OnModification
                                                                        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
                    INTEGER (1..60,...),
-- Unit min, Step 1min
RequestedDataValue ::= SEOUENCE {
    qA-AccessPointPositionwithAltitude
                                                GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
    iPDLParameters
                                                IPDLParameters
                                                                                             OPTIONAL,
    dGPSCorrections
                                                DGPSCorrections
                                                                                            OPTIONAL,
    qPS-NavigationModel-and-TimeRecovery
                                                GPS-NavigationModel-and-TimeRecovery
                                                                                            OPTIONAL,
    qPS-Ionospheric-Model
                                                GPS-Ionospheric-Model
                                                                                            OPTIONAL,
    qPS-UTC-Model
                                                GPS-UTC-Model
                                                                                            OPTIONAL,
    qPS-Almanac
                                                GPS-Almanac
                                                                                             OPTIONAL,
    qPS-RealTime-Integrity
                                                GPS-RealTime-Integrity
                                                                                            OPTIONAL,
    aPS-RX-POS
                                                GPS-RX-POS
                                                                                            OPTIONAL,
    sFNSFN-GA-AccessPointPosition
                                                GA-AccessPointPositionwithOptionalAltitude OPTIONAL,
                                                ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }
    iE-Extensions
                                                                                                                 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
                                                                                                                          PRESENCE optional
                                                    CRITICALITY ignore EXTENSION NACC-Related-Data
      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
                                                    CRITICALITY ignore EXTENSION Counting-Information
                                                                                                                          PRESENCE optional
      ID id-Counting-Information
                                                    CRITICALITY ignore EXTENSION Transmission-Mode-Information
      ID id-Transmission-Mode-Information
                                                                                                                          PRESENCE optional
                                                    CRITICALITY ignore EXTENSION MBMS-Neighbouring-Cell-Information
      ID id-MBMS-Neighbouring-Cell-Information
                                                                                                                          PRESENCE optional
     ID id-RLC-Sequence-Number
                                                    CRITICALITY ignore EXTENSION RLC-Sequence-Number
                                                                                                                          PRESENCE optional },
RequestedDataValueInformation ::= CHOICE {
    informationAvailable
                                InformationAvailable,
```

```
informationNotAvailable
                             InformationNotAvailable
RestrictionStateIndicator ::= ENUMERATED {
   cellNotResevedForOperatorUse,
   cellResevedForOperatorUse,
                     ::= INTEGER (0..31)
RL-ID
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.
                         ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} } OPTIONAL,
   iE-Extensions
RL-Specific-DCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    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,
   iE-Extensions
                         ProtocolExtensionContainer { { RL-Specific-EDCH-Information-Item-ExtIEs} } OPTIONAL,
RL-Specific-EDCH-Information-Item-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
RL-Specific-EDCH-Info ::= SEQUENCE (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.
```

```
iE-Extensions
RL-Specific-EDCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
   FDD only
   . . .
RLC-Mode ::= ENUMERATED {
   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)
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [23]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [24]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power
                                 ::= INTEGER (0..621)
-- According to mapping in [23]
RT-Load-Value-IncrDecrThres ::= INTEGER(0..100)
RT-Load-Value ::= INTEGER(0..100)
RTLoadValue ::= SEQUENCE {
      uplinkRTLoadValue
                         INTEGER (0..100),
      downlinkRTLoadValue
                       INTEGER(0..100)
RxTimingDeviationForTA
                             ::= INTEGER (0..127)
-- As specified in [5], ch. 6.2.7.6
-- For 1.28Mcps TDD this IE must be set to 0.
RxTimingDeviationForTAext
                      ::= INTEGER (0..511)
-- As specified in [5] [3.84 Mcps TDD only]
```

```
RxTimingDeviationForTA768
                                        ::= INTEGER (0.. 1023)
-- As specified in [5]
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
--According to mapping in [24] [3.84Mcps TDD only]
Rx-Timing-Deviation-Value-ext ::= INTEGER (0..32767)
--According to mapping in [24] [3.84Mcps TDD only]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
--According to mapping in [24] [1.28Mcps TDD only]
Rx-Timing-Deviation-Value-768 ::= INTEGER (0..65535)
--According to mapping in [24] [7.68Mcps TDD only]
RefBeta ::= INTEGER (-15..16)
-- S
SAC
                    ::= OCTET STRING (SIZE (2))
SAI ::= SEQUENCE {
    pLMN-Identity
                        PLMN-Identity,
    1AC
                        LAC,
    sAC
                        SAC.
    iE-Extensions
                        ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SAT-ID ::= INTEGER (0..63)
SCH-TimeSlot
                            ::= INTEGER (0..6)
ScaledAdjustmentRatio
                                ::= INTEGER (0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100
SchedulingInformation
                                ::= ENUMERATED {
    included,
    not-included
SecondaryServingCells ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF SecondaryServingCellsItem
SecondaryServingCellsItem ::= SEQUENCE {
    secondaryC-ID
    numSecondaryHS-SCCH-Codes
                                    NumHS-SCCH-Codes
                                                            OPTIONAL,
                                                                                     OPTIONAL,
    sixtyfourQAM-UsageAllowedIndicator
                                            SixtyfourQAM-UsageAllowedIndicator
                                                    ProtocolExtensionContainer { { SecondaryServingCellsItem-ExtIEs} }
    iE-Extensions
                                                                                                                                 OPTIONAL,
```

```
SecondaryServingCellsItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
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,
                                            ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs} } OPTIONAL,
    iE-Extensions
Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CPICH-Information ::= SEQUENCE {
  dl-ScramblingCode
                                            DL-ScramblingCode,
   fDD-DL-ChannelisationCodeNumber
                                            FDD-DL-ChannelisationCodeNumber,
                                            ProtocolExtensionContainer { { Secondary-CPICH-Information-ExtIEs} } OPTIONAL,
  iE-Extensions
Secondary-CPICH-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CPICH-Information-Change ::= CHOICE {
new-secondary-CPICH
                                    Secondary-CPICH-Information,
secondary-CPICH-shall-not-be-used NULL,
Secondary-LCR-CCPCH-Info-TDD::= SEQUENCE {
    dl-TFCS
                                            TFCS,
    tFCI-Coding
                                            TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
                                            FACH-InformationList,
    fACH-InformationList
    pCH-InformationList
                                            PCH-InformationList,
    iE-Extensions
                                            ProtocolExtensionContainer { { Secondary-LCR-CCPCH-Info-TDD-ExtIEs} } OPTIONAL,
    . . .
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,
                                    ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Secondary-CCPCH-TDD-InformationItem-ExtlEs RNSAP-PROTOCOL-EXTENSION ::=
Secondary-LCR-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem
Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR
                                                TimeSlotLCR.
    midambleShiftLCR
                                                MidambleShiftLCR,
    tFCI-Presence
                                                TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information
                                                Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset
                                                TDD-PhysicalChannelOffset,
    repetitionLength
                                                RepetitionLength,
    repetitionPeriod
                                                RepetitionPeriod,
                                                ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
Secondary-CCPCH-TDD-InformationList768 ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-InformationItem768
Secondary-CCPCH-TDD-InformationItem768 ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    midambleShiftAndBurstType768
                                        MidambleShiftAndBurstType768,
    tFCI-Presence
                                    TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information768
                                                        Secondary-CCPCH-TDD-Code-Information768,
```

```
tDD-PhysicalChannelOffset
                                    TDD-PhysicalChannelOffset,
    repetitionLength
                                    RepetitionLength,
    repetitionPeriod
                                    RepetitionPeriod,
    iE-Extensions
                                    ProtocolExtensionContainer { Secondary-CCPCH-TDD-InformationItem768-ExtIEs} } OPTIONAL,
Secondary-CCPCH-TDD-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-Code-InformationItem
Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
    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
                                    TDD-DL-DPCH-TimeSlotFormat-LCR,
    s-CCPCH-TimeSlotFormat-LCR
                                    ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-CCPCH-TDD-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs768)) OF Secondary-CCPCH-TDD-Code-InformationItem768
Secondary-CCPCH-TDD-Code-InformationItem768 ::= SEQUENCE {
    tDD-ChannelisationCode768
                                        TDD-ChannelisationCode768,
                                    ProtocolExtensionContainer { Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs} } OPTIONAL,
    iE-Extensions
    . . .
Secondary-CCPCH-TDD-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Secondary-Serving-Cell-List ::= SEQUENCE {
    possible-Secondary-Serving-Cell-List
                                                                Possible-Secondary-Serving-Cell-List,
    iE-Extensions
                                ProtocolExtensionContainer { { Secondary-Serving-Cell-List-ExtIEs } }
                                                                                                           OPTIONAL,
```

```
Secondary-Serving-Cell-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Possible-Secondary-Serving-Cell-List ::= SEQUENCE (SIZE (1..maxNrOfHSDSCH-1)) OF Possible-Secondary-Serving-Cell
Possible-Secondary-Serving-Cell ::= SEQUENCE {
    iE-Extensions
                                ProtocolExtensionContainer { { Possible-Secondary-Serving-Cell-ExtIEs } }
                                                                                                                OPTIONAL,
Possible-Secondary-Serving-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
Seed ::= INTEGER (0..63)
Service-ID ::= OCTET STRING (SIZE (3))
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,
    sixtyfourQAM-DL-UsageIndicator
                                        SixtyfourQAM-DL-UsageIndicator
                                                                           OPTIONAL,
    hSDSCH-TBSizeTableIndicator HSDSCH-TBSizeTableIndicator
                                                                            OPTIONAL,
                                   ProtocolExtensionContainer { { SetsOfHS-SCCH-CodesItem-ExtIEs} } OPTIONAL,
   iE-Extensions
SetsOfHS-SCCH-CodesItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SFN ::= INTEGER (0..4095)
SFNSFN-FDD ::= INTEGER(0..614399)
SFNSFN-TDD ::= INTEGER(0..40961)
SFNSFN-TDD768 ::= INTEGER(0..81923)
GA-AccessPointPositionwithOptionalAltitude ::= SEQUENCE
    geographicalCoordinate
                                                GeographicalCoordinate,
    altitudeAndDirection
                                                GA-AltitudeAndDirection OPTIONAL,
```

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```
ProtocolExtensionContainer { GA-AccessPointPositionwithOptionalAltitude-ExtIEs} } OPTIONAL,
    iE-Extensions
GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s
SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s
SFNSFNMeasurementThresholdInformation::= SEQUENCE {
                                        SFNSFNChangeLimit
    sFNSFNChangeLimit
                                                                             OPTIONAL,
    predictedSFNSFNDeviationLimit
                                        PredictedSFNSFNDeviationLimit
                                                                             OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }
                                                                                                                        OPTIONAL,
SFNSFNMeasurementThresholdInformation-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfull Neighbouring Cell SFNSFNObserved Time Difference Measurement Information
                                                                                         SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
           uC-ID
                        UC-ID,
            sFNSFNValue
                                        SFNSFNValue,
            sFNSFNOuality
                                        SFNSFNOuality
                                                                         OPTIONAL,
            sFNSFNDriftRate
                                        SFNSFNDriftRate,
                                                                     OPTIONAL,
            sFNSFNDriftRateQuality
                                        SFNSFNDriftRateQuality
            sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
                                        ProtocolExtensionContainer { {
           iE-Extensions
SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs} }
                                                                                                  OPTIONAL,
    unsuccessfull \verb+Neighbouring+ CellsFNSFNObserved+ Time \verb+Difference+ Measurement+ Information
                                                                                         SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
           uC-ID
                        UC-ID,
                                ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
            iE-Extensions
ExtIEs } }
                OPTIONAL,
                        ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }
                                                                                                            OPTIONAL,
    iE-Extensions
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
    sFNSFNTimeStamp-TDD
                           SFNSFNTimeStamp-TDD,
SFNSFNTimeStamp-TDD::= SEQUENCE {
                       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)
SIR-Error-Value
                      ::= INTEGER (0..125)
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value
                      ::= INTEGER (0..63)
-- According to mapping in [11]/[14]
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
```

```
SixteenQAM-UL-Operation-Indicator ::= ENUMERATED {
    activate,
    deactivate
SixtyfourQAM-UsageAllowedIndicator ::= ENUMERATED {
    allowed,
    not-allowed
SixtyfourQAM-DL-SupportIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-supported,
    sixtyfourQAM-DL-not-supported
SixtyfourQAM-DL-UsageIndicator ::= ENUMERATED {
    sixtyfourQAM-DL-used,
    sixtyfourQAM-DL-not-used
SignatureSequenceGroupIndex ::= INTEGER (0..19)
SNA-Information ::= SEQUENCE {
    pLMN-Identity PLMN-Identity,
   listOfSNAs
                        ListOfSNAs
                                                                         OPTIONAL,
   iE-Extensions
                        ProtocolExtensionContainer { { SNA-Information-ExtIEs} } OPTIONAL,
SNA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ListOfSNAs ::= SEQUENCE (SIZE (1.. maxNrOfSNAs)) OF SNACode
SNACode ::= INTEGER (0..65535)
SpecialBurstScheduling ::= INTEGER (1..256)
S-RNTI
                        ::= INTEGER (0..1048575)
-- From 0 to 2<sup>2</sup>0-1
                        ::= SEQUENCE {
S-RNTI-Group
    sRNTI
                            S-RNTI,
    sRNTI-BitMaskIndex
                            ENUMERATED {
        b1,
        b2,
        b3,
        b4,
        b5,
        b6,
```

```
b7,
       b8,
       b9.
       b10,
       b11,
       b12,
       b13,
       b14,
       b15,
       b16.
       b17,
       b18,
       b19,...
SRB-Delay ::= INTEGER(0..7,...)
SSDT-SupportIndicator ::= ENUMERATED {
   not-Used-sSDT-supported,
    sSDT-not-supported
STTD-SupportIndicator ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
Support-8PSK ::= ENUMERATED {
    v8PSK-Supported
Support-PLCCH ::= ENUMERATED {
    vPLCCH-Supported
SyncCase ::= INTEGER (1..2,...)
SynchronisationConfiguration ::= SEQUENCE {
                  INTEGER (1..256),
   n-INSYNC-IND
   n-OUTSYNC-IND
                         INTEGER (1..256),
    t-RLFAILURE
                         INTEGER (0..255),
-- Unit seconds, Range Os .. 25.5s, Step 0.1s
                         ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs} }
   iE-Extensions
                                                                                                  OPTIONAL,
SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
SYNC-UL-ProcParameters ::= SEQUENCE {
```

```
maxSYNC-UL-transmissions
                                      ENUMERATED {v1, v2, v4, v8, ...},
    powerRampStep
                                      INTEGER (0..3, ...),
-- T
T1 ::= ENUMERATED {v10, v20, v30, v40, v50, v60, v70, v80, v90, v100, v120, v140, v160, v200, v300, v400, ...}
TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB
TDD-ChannelisationCode
                                  ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4.
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7.
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    . . .
TDD-ChannelisationCode768
                                      ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
```

```
chCode4div4,
chCode8div1,
chCode8div2,
chCode8div3,
chCode8div4,
chCode8div5,
chCode8div6,
chCode8div7.
chCode8div8,
chCode16div1,
chCode16div2,
chCode16div3,
chCode16div4,
chCode16div5,
chCode16div6,
chCode16div7,
chCode16div8,
chCode16div9,
chCode16div10,
chCode16div11,
chCode16div12,
chCode16div13,
chCode16div14,
chCode16div15,
chCode16div16,
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
                                                    OPTIONAL,
                                        ToAWS
    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
                                                                                TnlOos PRESENCE optional },
                                                                     EXTENSION
    . . .
TDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifySpecificItem
TDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
    dCH-ID
                                    DCH-ID.
   ul-CCTrCH-ID
                                    CCTrCH-ID
                                                    OPTIONAL,
    dl-CCTrCH-ID
                                    CCTrCH-ID
                                                    OPTIONAL,
    ul-TransportformatSet
                                    TransportFormatSet OPTIONAL,
    dl-TransportformatSet
                                    TransportFormatSet OPTIONAL,
    allocationRetentionPriority
                                    AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority
                                    FrameHandlingPriority OPTIONAL,
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
TDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ID id-Guaranteed-Rate-Information
                                            CRITICALITY ignore EXTENSION Guaranteed-Rate-Information
                                                                                                            PRESENCE optional } |
                                CRITICALITY ignore EXTENSION TrafficClass
     ID id-TrafficClass
                                                                                 PRESENCE optional }.
    . . .
TDD-DL-Code-Information ::= SEOUENCE ( SIZE (1...maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem
TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
```

```
ProtocolExtensionContainer { {TDD-DL-Code-InformationItem-ExtIEs} } OPTIONAL,
    iE-Extensions
TDD-DL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
                                            TDD-ChannelisationCodeLCR,
    tdd-ChannelisationCodeLCR
    tdd-DL-DPCH-TimeSlotFormat-LCR
                                            TDD-DL-DPCH-TimeSlotFormat-LCR,
                                            ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} }
   iE-Extensions
                                                                                                                          OPTIONAL,
TDD-DL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-Code-Information768 ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs768)) OF TDD-DL-Code-InformationItem768
TDD-DL-Code-InformationItem768 ::= SEQUENCE {
                                    DPCH-ID,
    tDD-ChannelisationCode768
                                    TDD-ChannelisationCode768,
   iE-Extensions
                                    ProtocolExtensionContainer { {TDD-DL-Code-InformationItem768-ExtIEs} } OPTIONAL,
TDD-DL-Code-InformationItem768-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
                               QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
                               EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK
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-size1,
```

```
step-size2,
    step-size3,
TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    . . .
TDD-UL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem
TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID
    tDD-ChannelisationCode
                                    TDD-ChannelisationCode,
    iE-Extensions
                                    ProtocolExtensionContainer { {TDD-UL-Code-InformationItem-ExtIEs} } OPTIONAL,
    . . .
TDD-UL-Code-InformationItem-ExtlEs RNSAP-PROTOCOL-EXTENSION ::= {
TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationItem
TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID
                                            DPCH-ID,
    tdd-ChannelisationCodeLCR
                                            TDD-ChannelisationCodeLCR,
    tdd-UL-DPCH-TimeSlotFormat-LCR
                                            TDD-UL-DPCH-TimeSlotFormat-LCR,
    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
                                QPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
```

```
eightPSK
                                EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
OPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..69,...)
EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)
TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
TFCI-Presence ::= ENUMERATED {
    present,
    not-present
TFCI-SignallingMode ::= ENUMERATED {
    normal,
    not-Used-split
-- The value "Not Used" shall not be used by the SRNC. The procedure shall be rejected by the DRNC if the value "Not Used" is received.
TGD
                    ::= INTEGER (0 | 15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence
TGPRC
                    ::= INTEGER (0..511)
-- 0 = infinity
                    ::= INTEGER (1.. maxTGPS)
TGPSID
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,
    . . .
```

```
::= SEQUENCE
   plmn-id PLMN-Identity,
    service-id Service-ID,
                                    ProtocolExtensionContainer { { TMGI-ExtIEs} }
    iE-Extensions
                                                                                        OPTIONAL,
TMGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TnlQos ::= CHOICE {
    dsField
                                DsField,
    genericTrafficCategory
                                GenericTrafficCategory,
                       ::= INTEGER (0..2559)
ToAWE
ToAWS
                       ::= INTEGER (0..1279)
TraceDepth
                                ::= ENUMERATED {
   minimum,
   medium,
    maximum,
TraceRecordingSessionReference ::= INTEGER (0..65535)
TraceReference
                                ::= OCTET STRING (SIZE (2..3))
TrafficClass ::= ENUMERATED {
    conversational,
    streaming,
    interactive,
    background,
    . . .
Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
    SEQUENCE {
       tGPSID
                        TGPSID,
        tGSN
                        TGSN,
        tGL1
                        GapLength,
        tGL2
                        GapLength
                                    OPTIONAL,
        tGD
                        TGD,
        tGPL1
                        GapDuration,
                                    GapDuration OPTIONAL,
       not-to-be-used-1
           -- This IE shall never be included in the SEQUENCE. If received it shall be ignored
        uL-DL-mode
                       UL-DL-mode,
        downlink-Compressed-Mode-Method
                                            Downlink-Compressed-Mode-Method
                                                                                OPTIONAL,
```

```
-- This IE shall be present if the value of the UL/DL mode IE is "DL only" or "UL/DL"
       uplink-Compressed-Mode-Method
                                           Uplink-Compressed-Mode-Method
            -- This IE shall be present if the value of the UL/DL mode IE is "UL only" or "UL/DL"
        dL-FrameType
                           DL-FrameType,
        delta-SIR1
                        DeltaSIR,
       delta-SIR-after1
                           DeltaSIR,
       delta-SIR2
                       DeltaSIR
                                   OPTIONAL,
       delta-SIR-after2 DeltaSIR OPTIONAL.
       iE-Extensions
                                ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
        . . .
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
    SEQUENCE {
       tGPSID
                        TGPSID,
       tGPRC
                        TGPRC,
        t.GCFN
                            ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        iE-Extensions
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransmissionMode
                   ::=ENUMERATED
   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
                                        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 [23] and [24]
Transmitted-Carrier-Power-Value-IncrDecrThres ::= INTEGER(0..100)
-- according to mapping in [23] and [24]
Transport-Block-Size-Index ::= INTEGER(1..maxNrOfHS-DSCHTBSs)
TUTRANGANSS ::= SEQUENCE {
    mS
                    INTEGER(0..16383),
    1s
                    INTEGER (0..4294967295)
TUTRANGANSSAccuracyClass ::= ENUMERATED {
    ganssAccuracy-class-A,
    ganssAccuracy-class-B,
    ganssAccuracy-class-C,
    . . .
TUTRANGANSSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGANSSChangeLimit
                                             INTEGER (1..256)
                                                                                                                       OPTIONAL,
    predictedTUTRANGANSSDeviationLimit
                                             INTEGER (1..256)
                                                                                                                       OPTIONAL,
    ie-Extensions
                             ProtocolExtensionContainer { { TUTRANGANSSMeasurementThresholdInformation-ExtIEs } }
                                                                                                                       OPTIONAL,
TUTRANGANSSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
TUTRANGANSSMeasurementValueInformation ::= SEQUENCE {
    LUTRANGANSS
                                    TUTRANGANSS.
    tUTRANGANSSOuality
                                    INTEGER (0..255)
                                                                                                                         OPTIONAL.
    tUTRANGANSSDriftRate
                                    INTEGER (-50..50),
    tUTRANGANSSDriftRateQuality
                                    INTEGER (0..50)
                                                                                                                         OPTIONAL,
    ie-Extensions
                                     ProtocolExtensionContainer { { TUTRANGANSSMeasurementValueInformation-ExtIEs } }
                                                                                                                        OPTIONAL,
TUTRANGANSSMeasurementValueInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GANSS-Time-ID
                                    CRITICALITY ignore
                                                             EXTENSION GANSS-Time-ID
                                                                                          PRESENCE
                                                                                                                      optional },
    . . .
TUTRANGPS ::= SEQUENCE {
   ms-part
                INTEGER (0..16383),
    ls-part
                INTEGER (0..4294967295)
TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s
TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s
TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit
                                            TUTRANGPSChangeLimit
                                                                                      OPTIONAL,
    predictedTUTRANGPSDeviationLimit
                                            PredictedTUTRANGPSDeviationLimit
                                                                                     OPTIONAL,
                                    ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }
    iE-Extensions
                                                                                                                           OPTIONAL,
TUTRANGPSMeasurementThresholdInformation-ExtIEs 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,
                               ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs} } OPTIONAL,
       iE-Extensions
                          RefTFCNumber,
    refTFCNumber
SignalledGainFactors-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS ::= SEQUENCE {
   tFCSvalues
                       CHOICE {
       no-Split-in-TFCI
                                   TFCS-TFCSList,
       not-Used-split-in-TFCI
                                   NULL,
       -- This choice shall never be made by the SRNC and the DRNC shall consider the procedure as failed if it is received.
```

```
ProtocolExtensionContainer { { TFCS-ExtIEs} }
    iE-Extensions
                                                                            OPTIONAL,
TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    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]
       iE-Extensions
                            ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }
                                                                                        OPTIONAL.
TFCS-TFCSList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TFCS-CTFC ::= CHOICE {
   ctfc2bit
                                        INTEGER (0..3),
   ctfc4bit
                                        INTEGER (0..15),
   ctfc6bit
                                        INTEGER (0..63),
    ctfc8bit
                                        INTEGER (0..255),
    ctfc12bit
                                        INTEGER (0..4095),
    ctfc16bit
                                        INTEGER (0..65535),
    ctfcmaxbit
                                        INTEGER (0..maxCTFC)
TransportFormatSet ::= SEQUENCE {
    dynamicParts
                            TransportFormatSet-DynamicPartList,
    semi-staticPart
                           TransportFormatSet-Semi-staticPart,
                           ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
   iE-Extensions
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
                                                                                    OPTIONAL,
    -- This IE shall be present if the "Transmission Time Interval" of the "Semi-static Transport Format Information" is "dynamic". Otherwise it is
absent.
    iE-Extensions
                                            ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
TDD-TransportFormatSet-ModeDP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
                                    TransmissionTimeIntervalDynamic,
       transmissionTimeInterval
                                ProtocolExtensionContainer { {TransmissionTimeIntervalInformation-ExtIEs} } OPTIONAL,
       iE-Extensions
TransmissionTimeIntervalInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [11]/[14]
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
TransportFormatManagement ::= ENUMERATED {
    cell-based,
    ue-based,
    . . .
TransportFormatSet-Semi-staticPart ::= SEQUENCE {
                           TransmissionTimeIntervalSemiStatic,
    transmissionTime
    channelCoding
                            ChannelCodingType,
    codingRate
                        CodingRate
                                                OPTIONAL
    -- 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 [7], [43]
UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
```

```
over8,
UE-Capabilities-Info ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category
                                        INTEGER (1..64,...),
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-Capabilities-Info-ExtIEs } }
                                                                                                               OPTIONAL,
UE-Capabilities-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-LCRTDD-uplink-Physical-Channel-Capability
                                                             CRITICALITY ignore
                                                                                     EXTENSION LCRTDD-Uplink-Physical-Channel-Capability
    PRESENCE optional } |
    {ID id-number-Of-Supported-Carriers
                                                             CRITICALITY reject
                                                                                     EXTENSION Number-Of-Supported-Carriers
    PRESENCE optional } |
    {ID id-MIMO-SFMode-Supported-For-HSPDSCHDualStream
                                                                 CRITICALITY ignore
                                                                                         EXTENSION MIMO-SFMode-For-HSPDSCHDualStream
        PRESENCE optional } |
    {ID id-MultiCarrier-HSDSCH-Physical-Layer-Category
                                                             CRITICALITY ignore
                                                                                                                                             PRESENCE
                                                                                     EXTENSION LCRTDD-HSDSCH-Physical-Layer-Category
optional },
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
                        UEMeasurementReportCharacteristicsEventli,
    event1i
                        UEMeasurementReportCharacteristicsEvent6a,
    event6a
                        UEMeasurementReportCharacteristicsEvent6b,
    event6b
    event.6c
                        UEMeasurementReportCharacteristicsEvent6c,
                        UEMeasurementReportCharacteristicsEvent6d,
    event6d
    extension-ReportCharacteristics
                                        UEMeasurementReportCharacteristics-Extension
UEMeasurementReportCharacteristicsEvent1h ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent1h-ExtIEs} } OPTIONAL,
    iE-Extensions
UEMeasurementReportCharacteristicsEvent1h-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent1i ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold.
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent1i-ExtIEs} } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent1i-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
UEMeasurementReportCharacteristicsEvent6a ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurement.Threshold.
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6a-ExtIEs} } OPTIONAL,
UEMeasurementReportCharacteristicsEvent6a-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6b ::= SEQUENCE {
    uEMeasurementTreshold
                                UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6b-ExtIEs} } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent6b-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsEvent6c ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    iE-Extensions
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6c-ExtIEs} } OPTIONAL,
    . . .
UEMeasurementReportCharacteristicsEvent6c-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    . . .
UEMeasurementReportCharacteristicsEvent6d ::= SEQUENCE {
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
                                ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent6d-ExtIEs} } OPTIONAL,
    iE-Extensions
UEMeasurementReportCharacteristicsEvent6d-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementReportCharacteristicsPeriodic ::= SEQUENCE
    amountofReporting
                            UEMeasurementReportCharacteristicsPeriodicAmountofReporting,
    reportingInterval
                            UEMeasurementReportCharacteristicsPeriodicReportingInterval,
   iE-Extensions
                            ProtocolExtensionContainer { {UEMeasurementReportCharacteristicsPeriodic-ExtIEs} } OPTIONAL,
UEMeasurementReportCharacteristicsPeriodicAmountofReporting::= ENUMERATED {
    r1,
    r2,
    r4,
```

```
r8,
    r16.
    r32.
    r64,
    rInfinity
UEMeasurementReportCharacteristicsPeriodicReportingInterval::= ENUMERATED {
    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 ::= {
UEMeasurementThreshold
                            ::= CHOICE {
    timeslotISCP
                               UEMeasurementThresholdDLTimeslotISCP,
                                  UEMeasurementThresholdUETransmitPower,
    uETransmitPower
    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.
    burstType
                                    UEMeasurementTimeslotInfoHCRBurstType,
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfoHCR-IEs-ExtIEs} }
    iE-Extensions
                                                                                                                 OPTIONAL,
UEMeasurementTimeslotInfoHCRBurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
    . . .
UEMeasurementTimeslotInfoHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementTimeslotInfoLCR::= SEOUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementTimeslotInfoLCR-IEs
UEMeasurementTimeslotInfoLCR-IEs ::= SEQUENCE {
    timeSlot
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfoLCR-IEs-ExtIEs} }
                                                                                                                 OPTIONAL,
    . . .
UEMeasurementTimeslotInfoLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementTimeslotInfo768::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfo768-IEs
UEMeasurementTimeslotInfo768-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
   burstType
                                    UEMeasurementTimeslotInfo768BurstType,
    iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementTimeslotInfo768-IEs-ExtIEs} }
                                                                                                                  OPTIONAL,
UEMeasurementTimeslotInfo768BurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
    . . .
UEMeasurementTimeslotInfo768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementTimeToTrigger ::= ENUMERATED {
    r0,
    r10,
```

```
r20,
    r40.
    r60.
    r80,
    r100.
    r120,
    r160,
    r200,
    r240,
    r320,
    r640,
    r1280,
    r2560.
    r5000
UEMeasurementType ::= ENUMERATED {
    primary-CCPCH-RSCP,
    dL-Timeslot-ISCP,
    uE-Transmitted-power,
UEMeasurementValue ::= CHOICE {
    uE-Transmitted-Power
                                UE-MeasurementValue-UE-Transmitted-Power,
    primary-CCPCH-RSCP
                                UE-MeasurementValue-Primary-CCPCH-RSCP,
                                UE-MeasurementValue-DL-Timeslot-ISCP,
    dL-Timeslot-ISCP
    extension-UEMeasurementValue
                                        UEMeasurementValue-Extension
UE-MeasurementValue-UE-Transmitted-Power ::= SEQUENCE {
    uEMeasurementTransmittedPowerListHCR
                                                UEMeasurementValueTransmittedPowerListHCR
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
                                                UEMeasurementValueTransmittedPowerListLCR
    uEMeasurementTransmittedPowerListLCR
                                                                                           OPTIONAL,
-- 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 ::= SEOUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerListHCR-IEs
UEMeasurementValueTransmittedPowerListHCR-IEs ::= SEQUENCE {
    timeSlot
                                    TimeSlot,
    uETransmitPower
                                    INTEGER (0..104),
    -- mapping according to [24], values 0..20 not used
    iE-Extensions
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs} }
    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 [24], values 0..20 not used
   iE-Extensions
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs} }
   OPTIONAL,
    . . .
UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTransmittedPowerList768 ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerList768-IEs
UEMeasurementValueTransmittedPowerList768-IEs ::= SEQUENCE {
   timeSlot
                                    TimeSlot.
                                    INTEGER (0..104),
    uETransmitPower
    -- mapping according to [24], values 0..20 not used
                                                ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs} }
   iE-Extensions
    OPTIONAL,
    . . .
UEMeasurementValueTransmittedPowerList768-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UE-MeasurementValue-Primary-CCPCH-RSCP::= SEQUENCE {
    primaryCCPCH-RSCP
                                        PrimaryCCPCH-RSCP
                                                                        OPTIONAL,
    primaryCCPCH-RSCP-Delta
                                        PrimaryCCPCH-RSCP-Delta
                                                                        OPTIONAL,
    iE-Extensions
                                        ProtocolExtensionContainer { { UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs} }
                                                                                                                             OPTIONAL,
UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UE-MeasurementValue-DL-Timeslot-ISCP ::= SEQUENCE {
    uEMeasurementTimeslotISCPListHCR
                                           UEMeasurementValueTimeslotISCPListHCR
                                                                                    OPTIONAL,
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD or 7.68Mcps TDD
    uEMeasurementTimeslotISCPListLCR
                                           UEMeasurementValueTimeslotISCPListLCR
                                                                                    OPTIONAL,
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD or 7.68Mcps TDD
```

```
ProtocolExtensionContainer { { UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs} }
    iE-Extensions
                                                                                                                                  OPTIONAL,
UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UEMeasurementValueTimeslotISCPList768
                                                           CRITICALITY ignore EXTENSION UEMeasurementValueTimeslotISCPList768
                                                                                                                                     PRESENCE
optional },
    . . .
UEMeasurementValueTimeslotISCPListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPListHCR-IEs
UEMeasurementValueTimeslotISCPListHCR-IEs ::= SEQUENCE {
    timeSlot
                                   TimeSlot.
    dL-TimeslotISCP
                                   DL-TimeslotISCP,
   iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs} } OPTIONAL,
    . . .
UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTimeslotISCPListLCR ::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTimeslotISCPListLCR-IEs
UEMeasurementValueTimeslotISCPListLCR-IEs ::= SEQUENCE {
    timeSlotLCR
                                   TimeSlotLCR.
    dL-TimeslotISCP
                                   DL-TimeslotISCP,
   iE-Extensions
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs} } OPTIONAL,
UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueTimeslotISCPList768 ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTimeslotISCPList768-IEs
UEMeasurementValueTimeslotISCPList768-IEs ::= SEQUENCE {
   timeSlot
                                   TimeSlot,
    dL-TimeslotISCP
                                    DL-TimeslotISCP,
                                    ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPList768-IEs-ExtIEs} } OPTIONAL,
   iE-Extensions
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,
                                ProtocolExtensionContainer { { UEMeasurementValueInformationAvailableItem-ExtIEs} }
    ie-Extensions
UEMeasurementValueInformationAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UEMeasurementValueInformationnotAvailable ::= NULL
UE-State ::= CHOICE {
                                                                 Cell-Fach-Pch-State,
    cell-fach-pch
                                                                 Ura-Pch-State,
    ura-pch
    . . .
Cell-Fach-Pch-State ::= SEQUENCE {
    d-RNTI
    iE-Extensions
                                    ProtocolExtensionContainer { { Cell-Fach-Pch-State-ExtIEs} }
                                                                                                      OPTIONAL,
Cell-Fach-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
Ura-Pch-State ::= SEQUENCE {
    srnc-id
                                    RNC-ID,
    ura-id
                                    URA-ID,
                                    ProtocolExtensionContainer { { Ura-Pch-State-ExtIEs} }
    iE-Extensions
                                                                                                 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 ::= SEOUENCE {
   timeSlot
                                  TimeSlot,
   midambleShiftAndBurstType
                                  MidambleShiftAndBurstType,
   tFCI-Presence
                                  TFCI-Presence,
   uL-Code-Information
                                  TDD-UL-Code-Information,
   iE-Extensions
                                  ProtocolExtensionContainer { {UL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
UL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeslotLCR-InformationItem
UL-TimeslotLCR-InformationItem ::= SEQUENCE {
   timeSlotLCR
                                          TimeSlotLCR.
   midambleShiftLCR
                                          MidambleShiftLCR,
   tFCI-Presence
                                          TFCI-Presence.
   uL-Code-LCR-InformationList
                                      TDD-UL-Code-LCR-Information,
   iE-Extensions
                                          ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} }
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 ::= SEQUENCE {
    timeSlot
    uL-TimeslotISCP
                               UL-TimeslotISCP,
   iE-Extensions
                                ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} } OPTIONAL,
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,
    prxUpPCHdes
                                                INTEGER (-120 .. -58, ...),
    syncUL-procParameter
                                                SYNC-UL-ProcParameters,
    mMax
                                                INTEGER (1..32),
Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
```

```
::= INTEGER (-82..173)
-- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
-- E.g. Value 173 means 17.3 dB
-- Unit dB. Step 0.1 dB.
UC-ID ::= SEQUENCE {
    rNC-ID
                        RNC-ID,
    c-ID
                        C-ID,
    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,
    iE-Extensions
                                    ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
                                                                                                                        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 [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-TnlOos
                                            CRITICALITY ignore
                                                                                 TnlOos
                                                                                                            PRESENCE optional },
                                                                     EXTENSION
    . . .
                                            ::= ENUMERATED { shall-be-included }
User-Plane-Congestion-Fields-Inclusion
-- W
-- Y
-- Z
END
```

9.3.5 Common Definitions

```
maxPrivateIEs
                                          INTEGER ::= 65535
maxProtocolExtensions
                                          INTEGER ::= 65535
maxProtocolIEs
                                          INTEGER ::= 65535
__ *********************
-- Common Data Types
__ *********************
Criticality
              ::= ENUMERATED { reject, ignore, notify }
Presence
              ::= ENUMERATED { optional, conditional, mandatory }
PrivateIE-ID ::= CHOICE {
   local
                    INTEGER (0.. maxPrivateIEs),
   qlobal
                    OBJECT IDENTIFIER
ProcedureCode
              ::= INTEGER (0..255)
ProcedureID ::= SEQUENCE {
   procedureCode
                        ProcedureCode,
                     ENUMERATED { tdd, fdd, common, ... }
   ddMode
ProtocolIE-ID
              ::= INTEGER (0..maxProtocolIEs)
TransactionID
               ::= CHOICE {
   shortTransActionId INTEGER (0..127),
   longTransActionId INTEGER (0..32767)
TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }
END
```

9.3.6 Constant Definitions

```
IMPORTS
   ProcedureCode.
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;
__ *******************
  Elementary Procedures
  ********************
id-commonTransportChannelResourcesInitialisation
                                                          ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease
                                                          ProcedureCode ::= 1
id-compressedModeCommand
                                                          ProcedureCode ::= 2
                                                          ProcedureCode ::= 3
id-downlinkPowerControl
id-downlinkPowerTimeslotControl
                                                          ProcedureCode ··= 4
id-downlinkSignallingTransfer
                                                          ProcedureCode ::= 5
id-errorIndication
                                                          ProcedureCode ::= 6
id-dedicatedMeasurementFailure
                                                          ProcedureCode ::= 7
id-dedicatedMeasurementInitiation
                                                          ProcedureCode ::= 8
id-dedicatedMeasurementReporting
                                                          ProcedureCode ::= 9
id-dedicatedMeasurementTermination
                                                          ProcedureCode ::= 10
                                                          ProcedureCode ::= 11
id-paging
id-physicalChannelReconfiguration
                                                          ProcedureCode ::= 12
id-privateMessage
                                                          ProcedureCode ::= 13
id-radioLinkAddition
                                                          ProcedureCode ::= 14
id-radioLinkCongestion
                                                          ProcedureCode ::= 34
                                                          ProcedureCode ::= 15
id-radioLinkDeletion
                                                          ProcedureCode ::= 16
id-radioLinkFailure
id-radioLinkPreemption
                                                          ProcedureCode ::= 17
id-radioLinkRestoration
                                                          ProcedureCode ::= 18
id-radioLinkSetup
                                                          ProcedureCode ::= 19
id-relocationCommit
                                                          ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation
                                                          ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit
                                                          ProcedureCode ::= 22
id-synchronisedRadioLinkReconfigurationPreparation
                                                          ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration
                                                          ProcedureCode ::= 24
id-uplinkSignallingTransfer
                                                          ProcedureCode ::= 25
id-commonMeasurementFailure
                                                          ProcedureCode ::= 26
id-commonMeasurementInitiation
                                                          ProcedureCode ::= 27
id-commonMeasurementReporting
                                                          ProcedureCode ::= 28
                                                          ProcedureCode ::= 29
id-commonMeasurementTermination
id-informationExchangeFailure
                                                          ProcedureCode ::= 30
id-informationExchangeInitiation
                                                          ProcedureCode ::= 31
id-informationReporting
                                                          ProcedureCode ::= 32
id-informationExchangeTermination
                                                          ProcedureCode ::= 33
                                                          ProcedureCode ::= 35
id-reset
                                                          ProcedureCode ::= 36
id-radioLinkActivation
id-qERANuplinkSignallingTransfer
                                                          ProcedureCode ::= 37
id-radioLinkParameterUpdate
                                                          ProcedureCode ::= 38
id-uEMeasurementFailure
                                                          ProcedureCode ::= 39
id-uEMeasurementInitiation
                                                          ProcedureCode ::= 40
id-uEMeasurementReporting
                                                          ProcedureCode ::= 41
id-uEMeasurementTermination
                                                          ProcedureCode ::= 42
```

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```
id-iurDeactivateTrace
                                                          ProcedureCode ::= 43
id-iurInvokeTrace
                                                          ProcedureCode ::= 44
id-mBMSAttach
                                                          ProcedureCode ::= 45
id-mBMSDetach
                                                          ProcedureCode ::= 46
id-directInformationTransfer
                                                          ProcedureCode ::= 48
id-enhancedRelocation
                                                          ProcedureCode ::= 49
id-enhancedRelocationCancel
                                                          ProcedureCode ::= 50
                                                          ProcedureCode ::= 51
id-enhancedRelocationSignallingTransfer
id-enhancedRelocationRelease
                                                          ProcedureCode ::= 52
id-mBSFNMCCHInformation
                                                          ProcedureCode ::= 53
******************
-- Lists
__ **********************************
maxCellSIB110rSIB12
                                       INTEGER ::= 32
                                       INTEGER ::= 8
maxCellsMeas
maxRateMatching
                                       INTEGER ::= 256
maxNoOfDSCHs
                                       INTEGER · · = 10
maxNoOfDSCHsLCR
                                       INTEGER ::= 10
maxNoOfRB
                                       INTEGER ::= 32
                                       INTEGER ::= 10
maxNoOfUSCHs
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
                                       INTEGER ::= 480
maxNrOfDPCHs768
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
                                       INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLs-2
maxNrOfUEs
                                       INTEGER ::= 4096
maxNrOfULTs
                                       INTEGER ::= 15
maxNrOfULTsLCR
                                       INTEGER ::= 6
                                       INTEGER ::= 15
maxNrOfDLTs
maxNrOfDLTsLCR
                                       INTEGER ::= 6
maxRNCinURA-1
                                       INTEGER ::= 15
maxTTI-Count
                                       INTEGER ::= 4
```

```
maxCTFC
                                        INTEGER ::= 16777215
maxNrOfNeighbouringRNCs
                                        INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC
                                        INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC
                                         INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC
                                        INTEGER ::= 256
                                        INTEGER ::= 8
maxNrOfFACHs
maxNrOfLCRTDDNeighboursPerRNC
                                        INTEGER ::= 256
                                        INTEGER ::= 16
maxIBSEG
                                        INTEGER ::= 8
maxNrOfSCCPCHs
maxNrOfSCCPCHs768
                                        INTEGER ::= 16
maxTGPS
                                        INTEGER ::= 6
maxNrOfTS
                                        INTEGER ::= 15
maxNrOfLevels
                                        INTEGER ::= 256
maxNrOfTsLCR
                                        INTEGER ::= 6
maxNoSat.
                                        INTEGER ::= 16
maxNoGPSTypes
                                        INTEGER ::= 8
maxNrOfMeasNCell
                                        INTEGER ::= 96
maxNrOfMeasNCell-1
                                        INTEGER ::= 95
                                                         -- maxNrOfMeasNCell - 1
maxResetContext
                                        INTEGER ::= 250
                                        INTEGER ::= 32
maxResetContextGroup
maxNrOfHARQProc
                                        INTEGER ::= 8
                                        INTEGER ::= 4
maxNrOfHSSCCHCodes
maxNrOfHSSICHs
                                        INTEGER ::= 4
maxNrOfHSSICHs-1
                                        INTEGER ::= 3
maxNrOfMACdFlows
                                        INTEGER ::= 8
maxNrOfMACdFlows-1
                                        INTEGER ::= 7
                                                         -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUSize
                                        INTEGER ::= 32
maxNrOfPDUIndexes
                                        INTEGER ::= 8
maxNrOfPDUIndexes-1
                                        INTEGER ::= 7
                                                         -- maxNrOfPDUIndexes - 1
maxNrOfPrioOueues
                                        INTEGER ::= 8
maxNrOfPrioQueues-1
                                        INTEGER ::= 7
                                                        -- maxNrOfPrioQueues - 1
maxNrOfSNAs
                                         INTEGER ::= 65536
maxNrOfSatAlmanac-maxNoSat
                                        INTEGER ::= 16
maxNrOfGERANST
                                        INTEGER ::= 8
                                        INTEGER ::= 16
maxNrOfInterfaces
maxNrofSiqSeqERGHICH-1
                                        INTEGER ::= 39
maxNrOfCells
                                        INTEGER ::= 65536
maxNrOfAddFreq
                                        INTEGER ::= 8
                                        INTEGER ::= 65536
maxNrOfCellsPerFreq
maxNrOfEDCHMACdFlows-1
                                        INTEGER ::= 7
maxNrOfEDCH-HARO-PO-OUANTSTEPs
                                        INTEGER ::= 6
                                        INTEGER ::= 8
maxNrOfEDPCCH-PO-QUANTSTEPs
maxNrOfEDCHHAROProcesses2msEDCH
                                        INTEGER ::= 8
                                        INTEGER ::= 19982
maxNrOfBits-MACe-PDU-non-scheduled
                                        INTEGER ::= 8
maxNrOfRefETFCIs
maxNrOfRefETFCI-PO-QUANTSTEPs
                                        INTEGER ::= 29
maxNrOfEDCHMACdFlows
                                        INTEGER ::= 8
maxNoOfLogicalChannels
                                        INTEGER ::= 16 -- only maximum 15 can be used
maxNrOfRefBetas
                                        INTEGER ::= 8
maxNrOfEAGCHCodes
                                        INTEGER ::= 4
                                        INTEGER ::= 90
maxNrOfHS-DSCHTBSs
maxNrOfHS-DSCHTBSs-HS-SCCHless
                                        INTEGER ::= 4
                                        INTEGER ::= 15
maxHS-PDSCHCodeNrComp-1
maxNrOfEHICHCodes
                                        INTEGER ::= 4
```

```
maxGANSSSat
                                        INTEGER ::= 64
maxNoGANSS
                                        INTEGER ::= 8
maxSanTvpe
                                        INTEGER ::= 8
maxNrOfBroadcastPLMNs
                                        INTEGER ::= 5
maxHSDPAFrequency
                                        INTEGER ::= 8
                                        INTEGER ::= 7
maxHSDPAFrequency-1
                                        INTEGER ::= 12
maxFrequencyinCell
                                        INTEGER ::= 11
maxFrequencvinCell-1
maxGANSSSatAlmanac
                                        INTEGER ::= 36
maxGANSSClockMod
                                        INTEGER ::= 4
maxNrOfEDCHRLs
                                        INTEGER ::= 4
maxEARFCN
                                        INTEGER ::= 65535
                                        INTEGER ::= 256
maxNrOfEUTRANeighboursPerRNC
maxNrOfMCCHMessages
                                        INTEGER ::= 5
maxNrOfMBMSL3
                                        INTEGER ::= 64
maxNrOfEDCHMACdFlowsLCR
                                        INTEGER ::= 256
                                        INTEGER ::= 255
maxNrOfEDCHMACdFlowsLCR-1
                                        INTEGER ::= 256
maxNrOfPreconfiguredNeighbours
maxNrOfHSDSCH-1
                                        INTEGER ::= 32
maxNrOfHSDSCH
                                        INTEGER ::= 33
maxGANSS-1
                                        INTEGER ::= 7
maxlengthMBMSconcatservlists
                                        INTEGER ::= 96
maxNoOfTBSs-Mapping-HS-DSCH-SPS
                                        INTEGER ::= 4
maxNoOfTBSs-Mapping-HS-DSCH-SPS-1
                                        INTEGER ::= 3
maxNoOfHS-DSCH-TBSsLCR
                                        INTEGER ::= 64
maxNoOfRepetition-Period-LCR
                                        INTEGER ::= 4
maxNoOfRepetitionPeriod-SPS-LCR-1
                                        INTEGER ::= 3
maxNoOf-HS-SICH-SPS
                                        INTEGER ::= 4
maxNoOf-HS-SICH-SPS-1
                                        INTEGER ::= 3
maxNoOfNon-HS-SCCH-Assosiated-HS-SICH
                                        INTEGER ::= 4
```

```
ProtocolIE-ID ::= 4
ProtocolIE-ID ::= 42
ProtocolIE-ID ::= 309
ProtocolIE-ID ::= 5
ProtocolIE-ID ::= 6
ProtocolIE-ID ::= 7
ProtocolIE-ID ::= 303
ProtocolIE-ID ::= 8
ProtocolIE-ID ::= 9
ProtocolIE-ID ::= 10
ProtocolIE-ID ::= 11
ProtocolIE-ID ::= 310
```

```
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-ReconfRqstFDD
                                                                             ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD
                                                                             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
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD
                                                                             ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD
                                                                             ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRgstTDD
                                                                             ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                             ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
                                                                             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-ReconfRgstTDD
                                                                             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-ReconfRgstFDD
                                                                             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-Rast
                                                                             ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rgst
                                                                             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
                                                                             ProtocolIE-ID ::= 85
id-L3-Information
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-Rqst	ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRqstFDD	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-Reporing-Object-RL-RestoreInd
                                                                             ProtocolIE-ID ::= 154
id-RT-Load-Value
                                                                             ProtocolIE-ID ::= 307
id-RT-Load-Value-IncrDecrThres
                                                                             ProtocolIE-ID ::= 308
id-S-RNTT
                                                                             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 ::= 159
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-TD
                                                                             ProtocolIE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD
                                                                             ProtocolIE-ID ::= 167
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
                                                                             ProtocolIE-ID ::= 169
id-UL-CCTrCH-InformationItem-RL-SetupRgstTDD
                                                                             ProtocolIE-ID ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
                                                                             ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRgstTDD
                                                                             ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD
                                                                             ProtocolIE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD
                                                                             ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD
                                                                             ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD
                                                                             ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRgstFDD
                                                                             ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD
                                                                             ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhvChReconfRgstTDD
                                                                             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-ReconfReadvTDD
                                                                             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
                                                                             ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureFDD
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-ReconfRgstTDD
                                                                             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		
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	::=	220
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	: :=	227
id-Unused-ProtocolIE-ID-228	ProtocolIE-ID	: :=	228
id-Unused-ProtocolIE-ID-324	ProtocolIE-ID	: :=	324
id-Unused-ProtocolIE-ID-229	ProtocolIE-ID		
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID	: :=	230
id-Unused-ProtocolIE-ID-29	ProtocolIE-ID	: :=	29
id-Unused-ProtocolIE-ID-225	ProtocolIE-ID	: :=	225
id-GA-Cell	ProtocolIE-ID	: :=	232
id-GA-CellAdditionalShapes	ProtocolIE-ID		
id-Unused-ProtocolIE-ID-246	ProtocolIE-ID		
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID		
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD	ProtocolIE-ID		
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRgstTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID		
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID		
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID		
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID		
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD	ProtocolIE-ID		
id-USCHs-to-Add	ProtocolIE-ID		
id-USCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID		
id-USCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID		
id-USCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID		
id-USCH-Information	ProtocolIE-ID		
id-USCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID		
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID		
id-DL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID		
id-UL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID		
id-ClosedLoopMode1-SupportIndicator	ProtocolIE-ID		
id-Unused-ProtocolIE-ID-277	ProtocolIE-ID		
id-STTD-SupportIndicator	ProtocolIE-ID		
id-CFNReportingIndicator	ProtocolIE-ID		
id-CNOriginatedPage-PagingRqst	ProtocolIE-ID		
id-InnerLoopDLPCStatus	ProtocolIE-ID		
id-PropagationDelay	ProtocolIE-ID		
id-RxTimingDeviationForTA	ProtocolIE-ID		
id-timeSlot-ISCP	ProtocolIE-ID		
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-PhyChReconfRgstTDD	ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rgst-TDD	ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRgstTDD	ProtocolIE-ID ::= 139
id-RestrictionStateIndicator	ProtocolIE-ID ::= 142
id-Load-Value	ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 233
id-OnModification	ProtocolIE-ID ::= 234 ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value	ProtocoliE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres	ProtocoliE-ID ::= 236 ProtocolIE-ID ::= 237
id-SFNSFNMeasurementThresholdInformation	ProtocoliE-ID ::= 237
id-Transmitted-Carrier-Power-Value	ProtocoliE-ID ::= 238 ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 240
id-TUTRANGPSMeasurementThresholdInformation	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
id-CommonTransportChannelResourcesInitialisationNotRequired	ProtocolIE-ID ::= 250
id-DelayedActivation	ProtocolIE-ID ::= 312
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 313
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 314
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 315
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 316
id-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-RgstTDD	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
id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 516
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

'1 mpp pr ppgy m' cl . n . w 1'5 r rgp pr p	D . 3.TD TD
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-AdditionRqstTDD	ProtocolIE-ID ::= 484
id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 485
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 486
id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 487
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 488
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 489
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 490
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 491
id-UL-TimingAdvanceCtrl-LCR	ProtocolIE-ID ::= 492
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 493
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD	ProtocolIE-ID ::= 494
id-HS-SICH-Reception-Quality	ProtocolIE-ID ::= 495
id-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 496
id-HSSICH-Info-DM-Rprt	ProtocolIE-ID ::= 497
id-HSSICH-Info-DM-Rqst	ProtocolIE-ID ::= 498
id-HSSICH-Info-DM	ProtocolIE-ID ::= 499
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 500
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 501
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 502
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 503
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 504
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 505
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 506
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 507
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD	ProtocolIE-ID ::= 508
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD	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 ::= 522
	ProtocolIE-ID ::= 523 ProtocolIE-ID ::= 524
<pre>id-RL-ParameterUpdateIndicationFDD-RL-Information-Item id-Phase-Reference-Update-Indicator</pre>	ProtocolIE-ID ::= 524 ProtocolIE-ID ::= 525
<u>-</u>	
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-Rqst	ProtocolIE-ID ::= 553
id-MeasurementRecoveryBehavior	ProtocolIE-ID ::= 554
id-MeasurementRecoveryReportingIndicator	ProtocolIE-ID ::= 555
id-MeasurementRecoverySupportIndicator	ProtocolIE-ID ::= 556
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
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-PhyChReconfRqstTDD768	ProtocolIE-ID ::= 626
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-RLAdditionReq-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
id-Extended-Round-Trip-Time-Value	ProtocolIE-ID ::= 663
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 ::= 699 ProtocolIE-ID ::= 700
id-GANSS-Generic-Data	ProtocolIE-ID ::= 700 ProtocolIE-ID ::= 701
id-TUTRANGANSSMeasurementThresholdInformation	ProtocolIE-ID ::= 701 ProtocolIE-ID ::= 702
<pre>id-TUTRANGANSSMeasurementValueInformation id-Ext-Reference-E-TFCI-PO</pre>	ProtocolIE-ID ::= 703 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-Rast-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-PhysicalLaverCategory
                                                                             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 ::= 742
id-MaximumNumber-Of-Retransmission-For-SchedulingInfo-LCRTDD
                                                                             ProtocolIE-ID ::= 743
id-E-DCH-RetransmissionTimer-For-SchedulingInfo-LCRTDD
                                                                             ProtocolIE-ID ::= 744
id-E-PUCH-PowerControlGAP
                                                                             ProtocolIE-ID ::= 745
id-HSDSCH-TBSizeTableIndicator
                                                                             ProtocolIE-ID ::= 746
id-UE-without-HS-SCCH-constraint-indicator
                                                                             ProtocolIE-ID ::= 747
id-DGANSS-Corrections-Req
                                                                             ProtocolIE-ID ::= 748
id-E-AGCH-Table-Choice
                                                                             ProtocolIE-ID ::= 749
                                                                             ProtocolIE-ID ::= 750
id-RANAP-EnhancedRelocationInformationRequest
id-RANAP-EnhancedRelocationInformationResponse
                                                                             ProtocolIE-ID ::= 751
id-Common-EDCH-MAC-d-Flow-Specific-InformationFDD
                                                                             ProtocolIE-ID ::= 752
id-Common-EDCH-Support-Indicator
                                                                             ProtocolIE-ID ::= 753
id-E-RNTI
                                                                             ProtocolIE-ID ::= 754
id-Released-CN-Domain
                                                                             ProtocolIE-ID ::= 755
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rgst
                                                                             ProtocolIE-ID ::= 756
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rsp
                                                                             ProtocolIE-ID ::= 757
                                                                             ProtocolIE-ID ::= 758
id-MBMS-Bearer-Service-in-MBMS-Cell-InfEx-Rprt
id-MBMS-Cell-InfEx-Rast
                                                                             ProtocolIE-ID ::= 759
id-MBMS-Cell-InfEx-Rsp
                                                                             ProtocolIE-ID ::= 760
                                                                             ProtocolIE-ID ::= 761
id-MBMS-Cell-InfEx-Rort
id-Counting-Information
                                                                             ProtocolIE-ID ::= 762
id-Transmission-Mode-Information
                                                                             ProtocolIE-ID ::= 763
id-MBMS-Neighbouring-Cell-Information
                                                                             ProtocolIE-ID ::= 764
id-MBMS-RLC-Sequence-Number-Information
                                                                             ProtocolIE-ID ::= 765
id-RLC-Sequence-Number
                                                                             ProtocolIE-ID ::= 766
id-Neighbouring-E-UTRA-CellInformation
                                                                             ProtocolIE-ID ::= 767
id-MBSFN-Cluster-Identity
                                                                             ProtocolIE-ID ::= 769
```

id-MCCH-Configuration-Info	ProtocolIE-ID ::= 770
id-MCCH-Message-List	ProtocolIE-ID ::= 771
id-MBSFN-Scheduling-Transmission-Time-Interval-Info-List	ProtocolIE-ID ::= 772
id-GANSS-Time-ID	ProtocolIE-ID ::= 773
id-GANSS-AddIonoModelReq	ProtocolIE-ID ::= 774
id-GANSS-EarthOrientParaReq	ProtocolIE-ID ::= 775
id-GANSS-AddNavigationModelsReq	ProtocolIE-ID ::= 776
id-GANSS-AddUTCModelsReq	ProtocolIE-ID ::= 777
id-GANSS-AuxInfoReq	ProtocolIE-ID ::= 778
id-GANSS-SBAS-ID	ProtocolIE-ID ::= 779
id-GANSS-ID	ProtocolIE-ID ::= 780
id-GANSS-Additional-Ionospheric-Model	ProtocolIE-ID ::= 781
id-GANSS-Earth-Orientation-Parameters	ProtocolIE-ID ::= 782
id-GANSS-Additional-Time-Models	ProtocolIE-ID ::= 783
id-GANSS-Additional-Navigation-Models	ProtocolIE-ID ::= 784
id-GANSS-Additional-UTC-Models	ProtocolIE-ID ::= 785
id-GANSS-Auxiliary-Information	ProtocolIE-ID ::= 786
id-MinimumReducede-DPDCH-GainFactor	ProtocolIE-ID ::= 787
id-Enhanced-FACH-Information-ResponseLCR	ProtocolIE-ID ::= 788
id-Common-EDCH-MAC-d-Flow-Specific-InformationLCR	ProtocolIE-ID ::= 789
id-HSDSCH-PreconfigurationSetup	ProtocolIE-ID ::= 790
id-HSDSCH-PreconfigurationInfo	ProtocolIE-ID ::= 791
id-NoOfTargetCellHS-SCCH-Order	ProtocolIE-ID ::= 792
id-EnhancedHSServingCC-Abort	ProtocolIE-ID ::= 793
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
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

END

9.3.7 Container Definitions

```
__ *********************
-- Container definitions
__ *********************
RNSAP-Containers {
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
                  &criticality
   CRITICALITY
                  &Value
```

```
PRESENCE
                   &presence
     -- Class Definition for Protocol IEs
__ *********************
RNSAP-PROTOCOL-IES-PAIR ::= CLASS {
   &id
                ProtocolIE-ID
                                           UNIQUE,
   &firstCriticality
                      Criticality,
   &FirstValue,
   &secondCriticality
                       Criticality,
   &SecondValue,
   &presence
                   Presence
WITH SYNTAX {
                &id
   FIRST CRITICALITY
                       &firstCriticality
   FIRST TYPE
                   &FirstValue
                       &secondCriticality
   SECOND CRITICALITY
                   &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
                     &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} ::= SEOUENCE {
                RNSAP-PROTOCOL-IES.&id
                                                 ({IEsSetParam}),
   criticality
                 RNSAP-PROTOCOL-IES.&criticality
                                                        ({IEsSetParam}{@id}),
                                                        ({IEsSetParam}{@id})
   value
                    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}),
   secondValue
                     RNSAP-PROTOCOL-IES-PAIR. & Second Value
                                                               ({IEsSetParam}{@id})
-- Container Lists for Protocol IE Containers
__ ********************
ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES : IESSetParam} ::=
```

END

```
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}),
                                                             ({ExtensionSetParam}{@id}),
   criticality
                     RNSAP-PROTOCOL-EXTENSION.&criticality
   extensionValue
                        RNSAP-PROTOCOL-EXTENSION. & Extension
                                                             ({ExtensionSetParam}{@id})
    *****
  Container for Private IEs
PrivateIE-Container {RNSAP-PRIVATE-IES : IEsSetParam} ::=
   SEQUENCE (SIZE (1..maxPrivateIEs)) OF
   PrivateIE-Field {{IEsSetParam}}
PrivateIE-Field {RNSAP-PRIVATE-IES : IESSetParam} ::= SEQUENCE
                                              ({IEsSetParam}),
                 RNSAP-PRIVATE-IES.&id
   criticality
                 RNSAP-PRIVATE-IES.&criticality
                                                     ({IEsSetParam}{@id}),
                                             ({IEsSetParam}{@id})
   value
                 RNSAP-PRIVATE-IES.&Value
```

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 ref. [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.

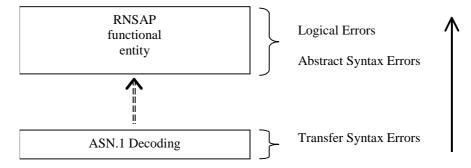


Figure 34: Protocol Errors in RNSAP

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 $T_{Preempt}$ 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.

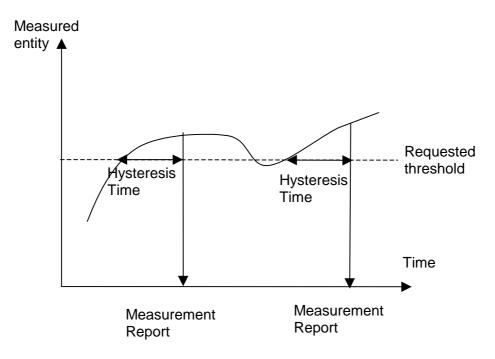


Figure B.1: Event A reporting with Hysteresis Time specified

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.

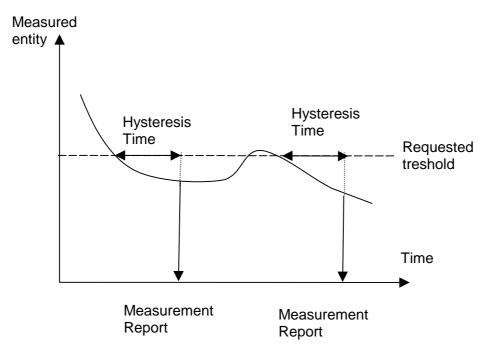


Figure B.2: Event B reporting with Hysteresis Time specified

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.

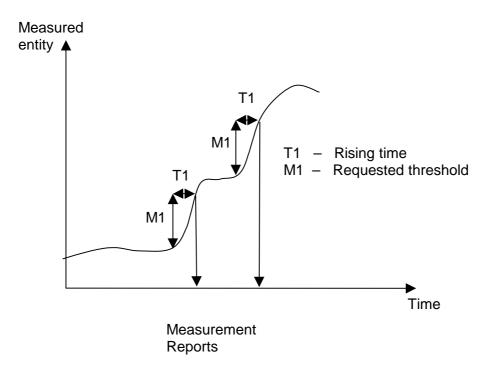


Figure B.3: Event C reporting

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.

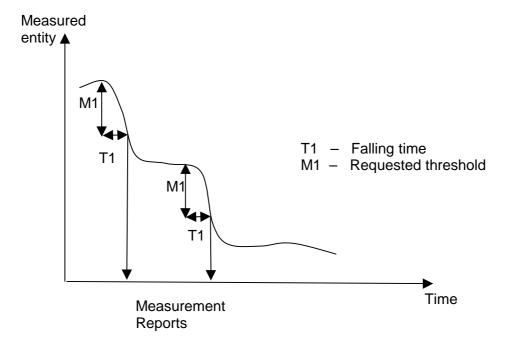


Figure B.4: Event D reporting

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.

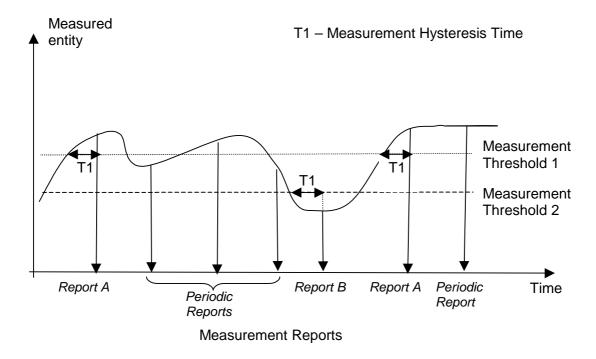
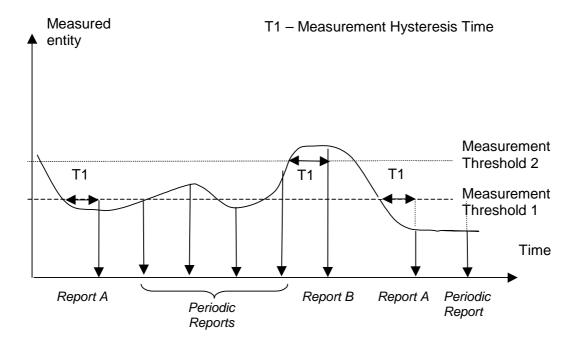


Figure B.5: Event E reporting with Hysteresis Time specified and Periodic Reporting requested

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

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	M				_	,
Α	M				YES	reject
В	M				YES	reject
>E		1 <maxe></maxe>			EACH	ignore
>>F		1 <maxf></maxf>			-	
>>>G		03,			EACH	ignore
>>H		1 <maxh></maxh>			EACH	ignore
>>>G		03,			EACH	ignore and notify
>>G	M				YES	reject
>>J		1 <maxj></maxj>			-	
>>>G		03,			EACH	reject
С	М				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.

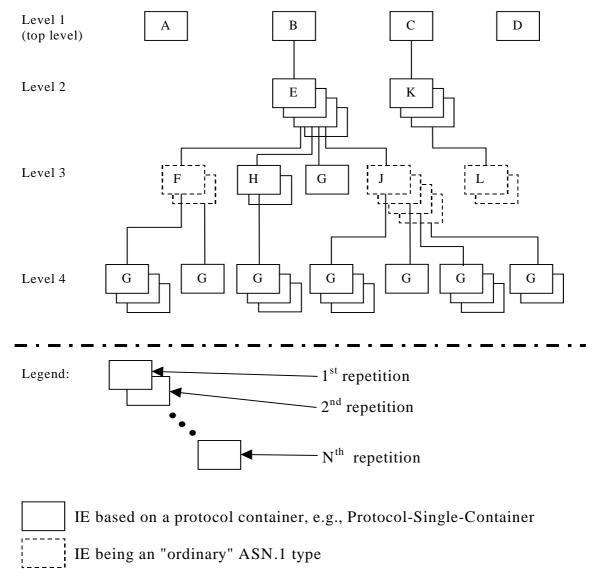
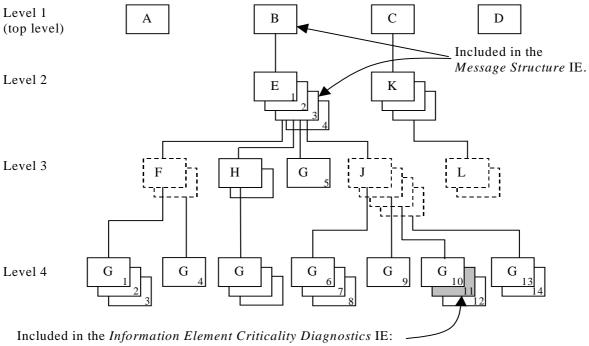


Figure C.1: Example of content of a received RNSAP message based on the EXAMPLE MESSAGE

C.3 Content of Criticality Diagnostics

C.3.1 Example 1



- a) IE ID IE
- b) Repetition Number IE

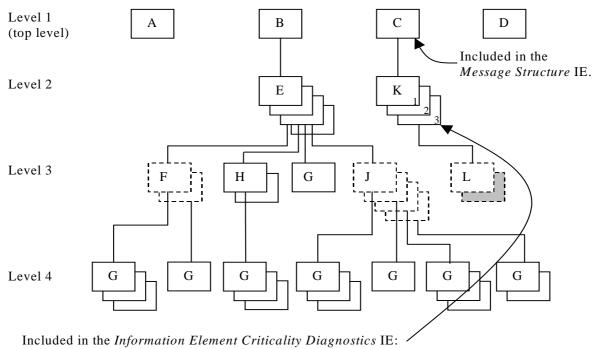
Figure C.2: Example of a received RNSAP message containing a not comprehended IE

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

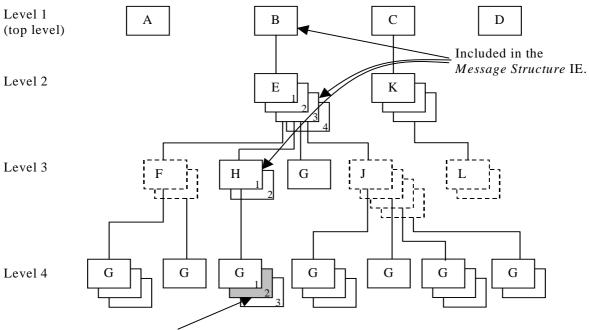
Figure C.3: Example of a received RNSAP message containing a not comprehended IE

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 and notify	Criticality for IE on the reported level, i.e. level 2.	
IE ID	id-K	IE ID from the reported level, i.e. level 2.	
Repetition Number	3	Repetition number on the reported level, i.e. level 2.	
Type of Error	not underst ood		
Message Structu	ire, first rep	etition	
>IE ID	id-C	IE ID from the lowest level above the reported level, i.e. level 1.	

Note 4. The IE L on level 3 cannot be reported individually included in the *Message Structure* IE since it has no criticality of its own.

C.3.3 Example 3



Included in the Information Element Criticality Diagnostics IE:

- a) IE ID IE
- b) Repetition Number IE

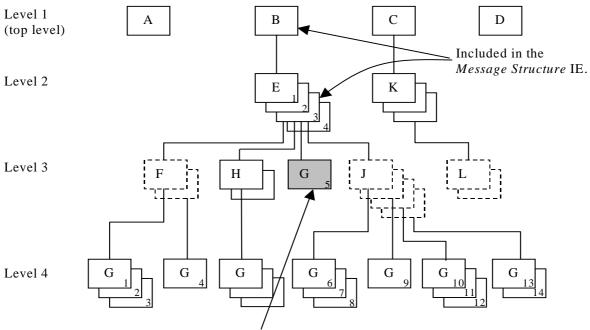
Figure C.4: Example of a received RNSAP message containing a not comprehended IE

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, <i>first rep</i> e	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, <i>third rep</i>	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

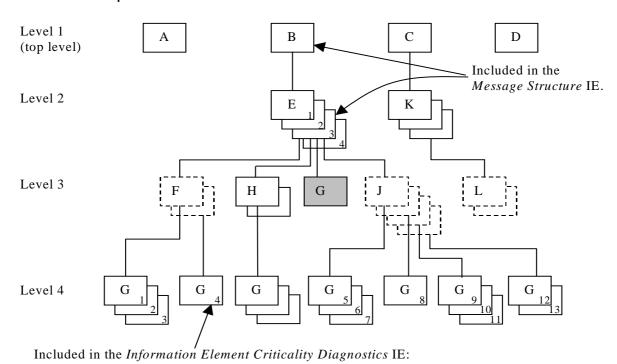
Figure C.5: Example of a received RNSAP message containing a not comprehended IE

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 IEb) 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 Number	4	Repetition number up to the missing IE on the reported level, i.e. level 3. (Since the IE E (level 2) is the lowest level included in the <i>Message Structure</i> IE there have been four occurrences of IE G within the IE E (level 2) up to the missing occurrence.		
Type of Error	missing			
Message Structur	re, first repe	etition		
>IE ID	id-B	IE ID from level 1.		
Message Structur	Message Structure, second repetition			
>IE ID	id-E	IE ID from the lowest level above the reported level, i.e. level 2.		
>Repetition Number	3	Repetition number from the lowest level above the reported level, i.e. level 2.		

Note 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 ::= {
G-List2 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container \{ \{G2\text{-}IEs\} \}
G2-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY ignore TYPE G PRESENCE mandatory }
H-List ::= SEQUENCE (SIZE (1..maxH)) OF ProtocolIE-Single-Container { {H-IEs} }
H-IES RNSAP-PROTOCOL-IES ::= {
   H ::= SEQUENCE {
                 G-List3 OPTIONAL,
   iE-Extensions
                             ProtocolExtensionContainer { {H-ExtIEs} } OPTIONAL,
H-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
G-List3 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G3-IEs} }
G3-IES RNSAP-PROTOCOL-IES ::= {
   { ID id-G CRITICALITY notify TYPE G PRESENCE mandatory }
G-List1 ::= ProtocolIE-Single-Container { G1-IEs} }
G1-IES RNSAP-PROTOCOL-IES ::= {
```

```
{ ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
J-List ::= SEQUENCE (SIZE (1..maxJ)) OF J
J ::= SEQUENCE {
                  G-List4 OPTIONAL,
   iE-Extensions ProtocolExtensionContainer { {J-ExtIEs} } OPTIONAL,
          RNSAP-PROTOCOL-EXTENSION ::= {
J-ExtIEs
G-List4 ::= SEQUENCE (SIZE (1..3, ...)) OF ProtocolIE-Single-Container { G4-IEs} }
G4-IES RNSAP-PROTOCOL-IES ::= {
  { ID id-G CRITICALITY reject TYPE G PRESENCE mandatory }
C ::= SEQUENCE {
                  K-List,
   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,
   iE-Extensions ProtocolExtensionContainer { {K-ExtIEs} } OPTIONAL,
}
K-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
L-List ::= SEQUENCE (SIZE (1..maxL)) OF L
L ::= SEQUENCE {
                  M OPTIONAL,
   L-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
ExampleMessage-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

Annex D (normative): DRNS Behaviour at SRNC or RNSAP Signalling Bearer Failure

This annex describes the DRNC actions in the event of SRNC or RNSAP Signalling Bearer failure when all or some of the UE Contexts related to the SRNC need to be removed in DRNC.

D.1 Detection of SRNC or RNSAP Signalling Bearer/Connection Failure

Termination of all or some of the UE Contexts in DRNC which are related to an SRNC may be triggered due to failure of SRNC, RNSAP Signalling Bearer or the Iur signalling connection of an UE(s).

D.1.1 Termination of all UE Contexts Related to a Specific SRNC

Termination of all UE Contexts in DRNC which are related to a specific SRNC is triggered if the RNSAP Signalling Bearer failure is detected by the RNSAP according to the procedure described in the sub-clause 4.5.1.5.1 of TS 25.420. By "all" UE Contexts, it means all UEs having dedicated and/or common channel resources.

D.1.2 Termination of Specific UE Context

Termination of a specific UE Context in DRNC is triggered for an UE which has dedicated transport channel resources according to the procedure described in the sub-clause 4.5.1.5.2 of TS 25.420.

D.2 DRNC Actions at UE Context Termination

When termination of the UE Context is required, the DRNC shall remove any common and/or dedicated radio resources related to the UE Context. The DRNC shall also initiate release of the dedicated or common user plane resources that were involved in these UE contexts. In addition, if it is possible the DRNC shall release the RRC connection.

Annex E (informative): Change History

TSG #	TSG Doc.	CR	Rev	Subject/Comment	New
03/2008	-	-	-	Release 8 version created based on v7.8.0	8.0.0
39	RP-080083	1354	1	Introduction of Improved L2 for Uplink	8.0.0
40	RP-080307	1358		Introduction of LCR TDD 64QAM in RNSAP	8.1.0
40	RP-080404	1360	2	Mechanism for Scheduling Information transmission on MAC-e PDU alone for 1.28	8.1.0
				Mcps TDD in EUL	
40	RP-080295	1366	1	Extended power control gap for E-PUCH in LCR TDD	8.1.0
40	RP-080296	1368	1	Support of octet aligned HS-DSCH transport block sizes for non-64QAM	8.1.0
40	RP-080299	1371	2	RL Parameter Update for E-DCH FDD DL Control Channel Information	8.1.0
40	RP-080298	1373	1	Clarification on Transport Bearer Not Requested Indicator	8.1.0
40	RP-080298	1376		ASN.1 and tabular misalignment	8.1.0
40	RP-080298	1380		Power Control Gap IE handling	8.1.0
40	RP-080294		1	Use of UL DPDCH Indicator For E-DCH Operation IE for unsynchronised RL	8.1.0
				reconfiguration	
40	RP-080300	1385	1	GANSS Corrections	8.1.0
40	RP-080308	1386		introduction of feature indicator	8.1.0
41	RP-080581	1387		Introduction of flexible E-DCH MAC-d PDU size indicator	8.2.0
41		1391		DRX-DTX and F-DPCH	8.2.0
41	RP-080578			Description of Priority Queue ID for Enhanced Cell_FACH	8.2.0
41	RP-080579			Correction of SixtyfourQAM-DL-UsageIndicator	8.2.0
41	RP-080589		1	Introduction of Enhanced Relocation	8.2.0
41	RP-080587		2	Introduction of Enhanced Uplink in Cell_FACH	8.2.0
41	RP-080576		2	Addition of 16QAM AG table choice IE	8.2.0
41	RP-080576		1	Adding abnormal conditions to Continuous Packet Connectivity	8.2.0
42	RP-080852		1	Support for additional navigation satellite systems in RNSAP	8.3.0
42	RP-080849		2	Enable to dynamically control the MBMS services in MBSFN	8.3.0
42	RP-080856		1	, ,	8.3.0
	RP-080838			Correction on the range of E-DCH MAC-d Flow Specific Information	
42			1	Indication of E-DPCCH Power Boosting capability	8.3.0
42	RP-080842			Indication of Combination of 64QAM and MIMO	8.3.0
42	RP-080850	1418	2	Introduction of the Enhanced CELL_FACH, CELL_PCH, URA_PCH state for 1.28Mcps TDD	8.3.0
42	RP-080849	1419	2	Introduction of MBMS Improved Solution	8.3.0
42	RP-080858	1420		Correction on procedural text for Enhanced Uplink in Cell_FACH	8.3.0
42	RP-080848	1421	1	Inter-RAT Mobility to/from E-UTRAN	8.3.0
42	RP-080840	1422		Cause values for Enhanced Relocation	8.3.0
42	RP-080838	1424		Correction on Usage for Transport Bearer Not Requested Indicator	8.3.0
42	RP-080856	1427		Fixing Typo in 5.1 RNSAP Procedure Modules	8.3.0
42	RP-080851	1428	2	Introduction of HS-DSCH Serving Cell Change Enhancements	8.3.0
42	RP-080853		1	Introduction of Dual Carrier	8.3.0
42	RP-080841	1430		Correction of tabular format for IE Priority Queue Information for Enhanced FACH/PCH	8.3.0
42	RP-080855		1	Improved EUL power control at UE power limitation	8.3.0
42	RP-080838			Correction of power control gap for 1.28Mcps TDD	8.3.0
43	RP-090075		2	Addition of MBR Parameter for 1.28Mcps TDD Enhanced Uplink	8.4.0
43	RP-090092		2	Introduction of Continuous Packet Connectivity in RNSAP for LCR TDD	8.4.0
43	RP-090074			Addition of Multi-carrier HS-DSCH physical layer category for 1.28Mcps TDD	8.4.0
43	RP-090074			RNSAP Support of measurements on E-UTRAN	8.4.0
43	RP-090072		'	Addition of MAC-hs Reset Indicator IE into RADIO LINK ADDITION FAILURE message	8.4.0
43	RP-090072		1	Addition of DCH Indicator For E-DCH-HSDPA Operation IE into RADIO LINK	8.4.0
43	RP-090072	1452		CONGESTION INDICATION message Addition of F-DPCH Slot Format IE in RADIO LINK SETUP FAILURE and RADIO LINK	8.4.0
				ADDITION FAILURE message	
43	RP-090072	1453		Clarification of the relation between HS-SCCH less HS-PDSCH second code and first code	8.4.0
43	RP-090078	1455	1	Various GANSS Corrections to RNSAP	8.4.0
43	RP-090095		t e	RNSAP Dual Carrier corrections	8.4.0
43	RP-090076		-	Minor corrections of RNSAP before freezing	8.4.0
43	RP-090078		1	Correction of MBMS improvements	8.4.0
43	RP-090075		3	Indication of MBMS capability over fur interface	8.4.0
43	RP-090075		1	Introduction of MIMO for 1.28Mcps TDD	8.4.0
40			-		
42		1466		Correction on MBSFN MCCH Information message	8.4.0
43	RP-090076			ACN 4 Correction on Transport Degree Not Degree to displace in DL Consider E. DOLL	0 1 0
43 43	RP-090078			ASN.1 Correction on Transport Bearer Not Requested Indicator in RL Specific E-DCH Information	8.4.0
	RP-090073			Information	
43	RP-090073	1468 1469	2		8.4.0 8.4.0 8.4.0

43	RP-090095	1478	1	Some Corrections for Dual Carrier HSDPA	8.4.0
43	RP-090077	1479		Corrections related to enhanced HS-DSCH serving cell change	8.4.0
43	RP-090260	1480		RNSAP Dual Carrier corrections, alignment with NBAP	8.4.0
March	=	-	-	Minor corrections before freezing	8.4.1
2009				-	

History

Document history					
V8.1.0	November 2008	Publication			
V8.2.0	November 2008	Publication			
V8.3.0	January 2009	Publication			
V8.4.1	April 2009	Publication			