

**TSG-RAN Meeting #8
Düsseldorf, Germany, 21 - 23 June 2000**

TSGRP#8(00)0243

Title: Agreed CRs to TS 25.423

Source: TSG-RAN WG3

Agenda item: 5.3.3

Tdoc_Num	Specification	CR_Num	Revision_Nu	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Nu
R3-001470	25.423	084	3	Number of DL channelisation code	F	agreed	3.1.0	3.2.0
R3-001479	25.423	138		Section 9.1 alignment	D	agreed	3.1.0	3.2.0
R3-001483	25.423	102	1	Introduction of Rx Timing Deviation measurement	B	agreed	3.1.0	3.2.0
R3-001487	25.423	120	1	Definition of UE context	F	agreed	3.1.0	3.2.0
R3-001502	25.423	127	1	Reference for the limited power increase algorithm	F	agreed	3.1.0	3.2.0
R3-001519	25.423	125	1	Correction of DPCH Constant value IE	C	agreed	3.1.0	3.2.0
R3-001521	25.423	094	1	"More stringent power control behaviour	F	agreed	3.1.0	3.2.0
R3-001541	25.423	116	1	Correction of CR implementation on version	F	agreed	3.1.0	3.2.0
R3-001564	25.423	103	2	Change of definition of the Quality Estimation (QE)	F	agreed	3.1.0	3.2.0
R3-001570	25.423	090	3	DL Initial Power after Handover	F	agreed	3.1.0	3.2.0
R3-001574	25.423	117	2	Alignment of Common TrCH init with RRC	C	agreed	3.1.0	3.2.0
R3-001592	25.423	074	6	Modifications related to DSCH and [TDD USCH]	C	agreed	3.1.0	3.2.0

R3-001593	25.423	089	5	Timing adjustment IE for Closed loop Tx Diversity	B	agreed	3.1.0	3.2.0
R3-001612	25.423	108	2	Downlink power balancing	F	agreed	3.1.0	3.2.0
R3-001615	25.423	133	2	LCS support on lur	B	agreed	3.1.0	3.2.0
R3-001616	25.423	113	2	Transport bearer related parameters	F	agreed	3.1.0	3.2.0
R3-001617	25.423	106	2	RNSAP support for switching from CELL-DCH	C	agreed	3.1.0	3.2.0
R3-001638	25.423	140	1	Transforming tabular format Choices to ASN.1	D	agreed	3.1.0	3.2.0
R3-001639	25.423	128	2	Handling of measurements non	F	agreed	3.1.0	3.2.0

3GPP TSG-RAN WG3 Meeting #13, Hawaii, USA

Document R3-001592

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 74r6

Current Version: 3.1.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG-RAN#8**

list expected approval meeting # here ↑

for approval **X**
for information

strategic (for SMG use only)
non-strategic

Form: CR cover sheet, version 2 for 3GPP and SMG

The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:

(at least one should be marked with an X)

(U)SIM ME UTRAN / Radio Core Network

Source:

R-WG3

Date:

25 May 2000

Subject:

Modifications related to DSCH and USCH [TDD] on Iur

Work item:

Category:

(only one category shall be marked with an X)

F Correction
A Corresponds to a correction in an earlier release
B Addition of feature
C Functional modification of feature **X**
D Editorial modification

Release:

Phase 2
Release 96
Release 97
Release 98
Release 99 **X**
Release 00

Reason for change:

Current RNSAP signalling does not support DSCH nor USCH on Iur. This CR fills the gap.

Clauses affected:

3.2, 8.3.1 - 8.3.4, 9.1.3 – 9.1.8, 9.1.11, 9.1.12, 9.1.36, 9.2.23, 9.2.26a, 9.2.1.53, 9.2.1.54, 9.2.2.x1, 9.2.2.x2, 9.2.3.x, 9.3.3, 9.3.4, 9.3.6

Other specs affected:

Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:

CR074r6 includes mainly editorial changes (highlighted in **green**) compared to CR074r5:

- Alignment of the IE ordering for DSCH/USCH to that applied for DCH.
- “MAC-c/sh SDU length” generalised for application with FACH, DSCH, and USCH, i.e. the former “MAC-c SDU length” disappears.

Comment to **CR074r5** (R3-001569) in comparison to CR074r4 (R3-001496): changes are shown by **yellow** shadow, and result from aligning with the **range bounds** specified in CR121 for 25.433 (R3-001376):

- ch. 9.2.1.53, TFCS: CTFC-DSCH renamed to CTFC(Field2) etc., and CTFC-DCH to CTFC(field1); MaxCTFC-DCH and MaxCTFC-DSCH replaced by MaxCTFC;
- ASN.1: maxCTFC imported; TFCS redefined (as in R3-001376).
- ASN.1: Maxrange-List: More rangebounds defined (copied from R3-001376 with correction maxCTFC = 16777215)).

The changes of this CR to 25.423 v.3.1.0 and the underlying principles for DSCH and USCH are summarised as follows:

- New Information Elements for DSCH and USCH handling have been included in RNSAP messages, and specified in chapter 9.2.1.
- Procedural text for DSCH/USCH has been added.
- TFS and TFCS of DSCH (and USCH) are determined by the SRNC, as for DCH;
- The DRNC cannot downgrade or otherwise change TFS or TFCS.
- QoS parameters in RL Setup Request etc included: BLER, Scheduling priority indicator, ...
- SDU lengths for each scheduling priority level are in "RL Setup Response" etc, for DSCH. (This tells SRNC which SDU lengths are allowed, within the additional restrictions imposed at Frame Protocol level.)
- FACH Priority Indicator mapped to "Scheduling Priority indicator".
- MAC-c/sh SDU length has been introduced for DSCH/USCH, and is also applied for the FACH in place of the former MAC-c SDU length.
- MAC-c has been replaced by MAC-c/sh in tabular message format as well as in ASN.1 expressions.

In the ASN.1 part (ch. 9.3.6), the following constants related to DSCH/USCH on Iur are defined:

maxCodeNumComp-1	INTEGER ::= 255
maxRateMatching	INTEGER ::= 256
maxNbMACcshSDULength	INTEGER ::= 16
maxNoCodeGroups	INTEGER ::= 256
maxNoOfRB	INTEGER ::= 32
maxNoTFCIGroups	INTEGER ::= 256
maxNrOfTFCS	INTEGER ::= 1024
maxNrOfTFS	INTEGER ::= 32
maxTTI-Count	INTEGER ::= 4
maxCTFC	INTEGER ::= 16777215
maxTFCI1Combs	INTEGER ::= 512
maxTFCI2Combs	INTEGER ::= 1024

This extends the range definitions in CR088 (R3-001126) and CR092 (R3-001193) agreed at R3#12. Those ranges which are defined in CR088 and CR092 have been left unchanged here, to avoid collision with these CRs.

RAN WG3 contact person for this CR: achim.brandt



help.doc

<----- double-click here for help and instructions on how to create a CR.

3G TS 25.423 V3.1.0 (2000-03)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Radio Access Network; UTRAN Iur Interface RNSAP Signalling (Release 1999)



The present document has been developed within the 3rd Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organisational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organisational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organisational Partners' Publications Offices.

3.2 Abbreviations

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

ASN.1	Abstract Syntax Notation One
BLER	Block Error Rate
CCCH	Common Control Channel
CCPCH	Common Control Physical Channel
CCTrCH	Coded Composite Transport Channel
CFN	Connection Frame Number
CN	Core Network
CPICH	Common Pilot Channel
CRNC	Controlling RNC
DCH	Dedicated Channel
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DRNC	Drift RNC
DRNS	Drift RNS
DRX	Discontinuous Reception
DSCH	Downlink Shared Channel
EP	Elementary Procedure
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
IE	Information Element
MAC	Medium Access Control
PCPCH	Physical Common Packet Channel
PDU	Protocol Data Unit
RAB	Radio Access Bearer
RACH	Random Access Channel
RL	Radio Link
RLC	Radio Link Control
RLS	Radio Link Set
RNS	Radio Network Subsystem
RNSAP	Radio Network Subsystem Application Part
RNTI	Radio Network Temporary Identifier
RRC	Radio Resource Control
RSCP	Received Signal Code Power
SCH	Synchronisation Channel
SDU	Signalling Data Unit
SFN	System Frame Number
SRNC	Serving RNC
SRNS	Serving RNS
SSDT	Site Selection Diversity Transmit
TDD	Time Division Duplex
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
UARFCN	UTRA Absolute Radio Frequency Channel Number
UE	User Equipment
UL	Uplink
URA	UTRAN Registration Area
USCH	Uplink Shared Channel
UTRAN	UMTS Terrestrial Radio Access Network

8.3 DCH 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

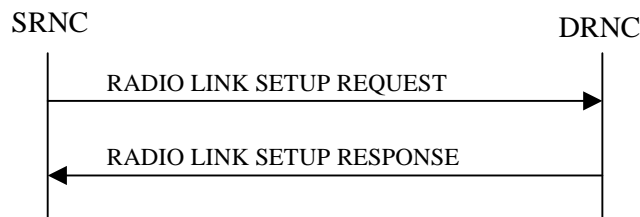


Figure 1: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH and DSCH (if any).

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[TDD – The DRNS shall use the *RB Identity* IE list inside the USCH information group to map each *RB Identity* IE to the corresponding USCH.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs and for each DSCH [TDD – and USCH]. This information shall be sent to the SRNC in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[TDD – If the DSCH Information is included in the RADIO LINK SETUP REQUEST message, the DRNC shall send a valid set of *Scheduling Priority* IE and *MAC-c/sh SDU lengths* IE parameters to the SRNC in the message RADIO LINK SETUP RESPONSE message].

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH and DSCH of the RL in the RADIO LINK SETUP RESPONSE message.]

[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 [TDD - and USCH] of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD- Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control IE* is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.1.3 Unsuccessful Operation

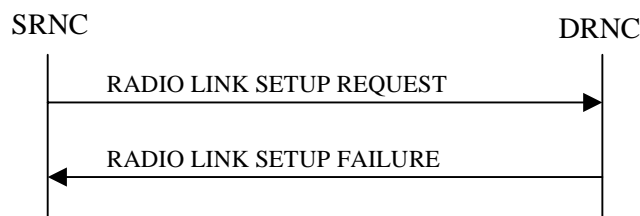


Figure 2: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLS can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. 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.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected DCH" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a 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;
- Unknown C-ID;
- [FDD - Macrodiversity Combining not Possible];
- Requested Configuration not Supported;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

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 the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

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 or more additional RLs towards a UE when there is already at least one RL established to the concerning 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.

[FDD – The Radio Link Addition procedure serves to establish one or more new Radio Links which do not contain the DSCH. If the DSCH shall be moved into a new Radio Link, the Radio Link reconfiguration procedure shall be applied.]

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

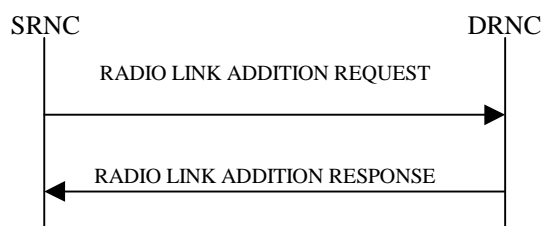
8.3.2.2 Successful Operation

Figure 3: 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 reception, 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 Diversity Control Field 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), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

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

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

[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 the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

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

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

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

[TDD - If the radio link to be added includes a DSCH, the DRNC shall send a set of valid *Scheduling Priority* IE and *MAC-c/sh SDULength* IE parameters to the SRNC in the message RADIO LINK ADDITION RESPONSE message.][FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK ADDITION RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK ADDITION REQUEST message requested SSDT activation and the RADIO LINK ADDITION RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the DRNS.]

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink 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.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control* IE was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

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

8.3.2.3 Unsuccessful Operation

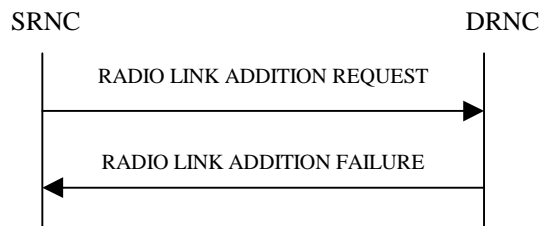


Figure 4: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one RL is unsuccessful, the DRNC shall send a RADIO LINK ADDITION FAILURE as response.

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.

Typical cause values are:

Radio Network Layer Causes:

- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- Macrodiversity Combining not Possible;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure.

Miscellaneous Causes:

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

8.3.2.4 Abnormal Conditions

-

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 shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.3.2 Successful Operation

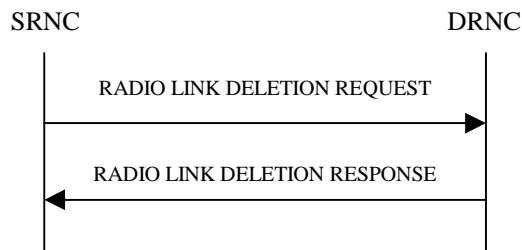


Figure 5: Radio Link Deletion procedure, Successful Operation

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 in the message and release all associated resources and 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 then the DRNC shall also release the UE context, unless the UE is using common resources in the DRNS.

8.3.3.3 Unsuccessful Operation

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8.3.3.4 Abnormal Conditions

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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 all Radio Links 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

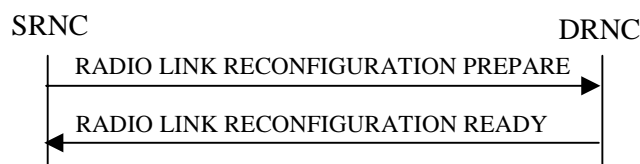


Figure 6: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the 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 the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code 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 as a *Channelisation Code (DL)* IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

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 [TDD – the CCTrCH of] the new configuration.

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 [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS 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 exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR IE* and *Minimum Uplink SIR IE* for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added IE* group or the *DCH to be Modified IE* group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added IE* group and the *DCH to be Modified IE* group shall be included only for one of the combined Radio Links.

DSCH Addition/Modification/Deletion:

The DRNC shall use any included DSCH information for the DSCHs to be added/modified/deleted in the RADIO LINK RECONFIGURATION PREPARE message, 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.

To add or modify each DSCH, 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*.

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.

The DRNS shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE* and the *Binding ID IE* of the DSCHs being added or modified.

USCH Addition/Modification/Deletion [TDD]

The DRNC shall use any included USCH information for the USCHs to be added/modified/deleted in the RADIO LINK RECONFIGURATION PREPARE message, 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.

To add or modify each USCH, 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*.

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.

The DRNS shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE* and the *Binding ID IE* of the USCHs being added or modified.

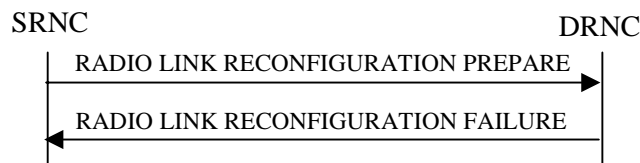


Figure 7: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

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 regard the Synchronised Radio Link Reconfiguration procedure as having failed.

- If the requested Synchronised Radio Link Reconfiguration 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.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected DCH" the DRNS shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

In which cases to include only the *Cause* IE on message level and in which cases the *Cause* IE also shall be included for a specific RL is FFS.

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.

Protocol Causes:

- Transaction not Allowed.

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 regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

8.4.1.2 Successful Operation

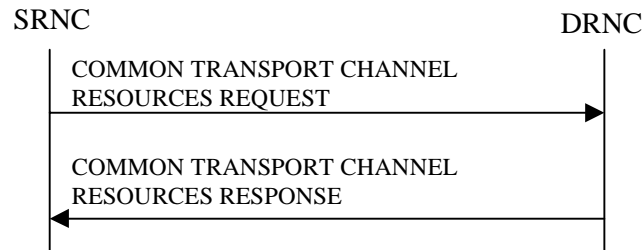


Figure 8: Common Transport Channel Resources Initialisation procedure, Successful Operation

The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST to the DRNC.

Upon reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall respond by sending a COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message to the SRNC.

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 and include the *Binding Identity* and *Transport Layer Address* IEs in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer not Requested", the DRNC shall use the transport bearer for the indicated by the *Transport Bearer ID* IE.

The DRNC shall include the *FACH Priority Indicator* IE and *FACH Initial Window Size* 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 there exists multiple Secondary CCPCHs in the cell where the UE is located, the DRNC may include in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message the *FACH Info for optional S-CCPCH* IE group to be used by the UE which is different from the Secondary CCPCH used by the UE at reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message. If the DRNC includes the *FACH Info for optional S-CCPCH* IE group, then it shall also include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class for the new Secondary CCPCH.

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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		1			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C- SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset	Power offset for the TFCI bits.	–	
>>PO2	M		Power Offset	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC control	M				–	
DSCH Information		0..1			YES	reject
>DSCH Info		1..<maxn oofDSCHs>			EACH	reject
>> DSCH ID	M				–	
>>TrCh Source Statistics Descriptor	M				–	
>>Transport Format Set	M			For DSCH	–	
>>Allocation/Retention Priority	M				–	
>>Scheduling Priority Indicator	M				–	
>>BLER	M				–	
>PDSCH RL ID	M		RL ID			
>Transport Format Combination Set	M			For DSCH	–	
RL Information		1...<maxn oofRLs>			EACH	notify
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Propagation Delay	O				–	
>Diversity Control Field	C – NotFirstRL				–	
>Initial DL TX Power	O		DL Power		–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell ID	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the RL Information .
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

Range bound	Explanation
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofRLs	Maximum number of RLs 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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL CCTrCH Information		<i>0..<maxno of CCTrCHs></i>		For DCH and USCH	EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the UL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
DL CCTrCH Information		<i>0..<maxno of CCTrCHs></i>		For DCH and DSCH	EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the DL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
>TDD TPC Downlink Step Size	M				–	
DCH Information		<i>0..<maxno of DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped	–	
>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
DSCH Information		<i>0 to <maxno of DSCHs></i>			GLOBAL	reject
>DSCH ID	M				–	
>CCTrCH ID	M			DL CCTrCH in which the DSCH is mapped	–	
>TrCh Source Statistics Descriptor	M				–	
>Transport Format Set	M			For DSCH	–	

>Allocation/Retention Priority	M				–	
>Scheduling Priority Indicator	M				–	
>BLER	M				–	
USCH Information		0 to <maxnoof USCHs>			GLOBAL	reject
>USCH ID	M				–	
>CCTrCH ID	M			UL CCTrCH in which the USCH is mapped	–	
>TrCh Source Statistics Descriptor	M				–	
>Transport Format Set	M			For USCH	–	
>Allocation/Retention Priority	M				–	
>Scheduling Priority Indicator	M				–	
>RB Info		1 to <maxnoof RB>		All Radio Bearers using this USCH	–	
>>RB Identity	M				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Primary CCPCH RSCP	O				–	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofUSCHs	Maximum number of USCHs for one UE.
MaxnoofRBs	Maximum number of Radio Bearers for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.

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	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1..<maxno ofRLs>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
> Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $T_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>Transport Format Set				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		1.. <maxIBSEG>			–	
>>>>IB SG POS	M				–	
>DL Code Information		1.. <maxnoofDLCodes>			–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	C-NotFirstRL				–	
>CHOICE <i>diversity Indication</i>						
>> <i>Combining</i>					YES	ignore
>>>RL ID	M			Reference RL ID for the combining	–	
>>> <i>Non Combining or IE not</i>				"IE not	YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
<i>present</i>				present" is equivalent to "First RL".		
>>>DCH Information Response		0..<maxno ofDCHs>		Only one DCH per set of co-ordinated DCHs shall be included	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>DSCH Information Response		0..1			YES	ignore
>>DSCH Information		1..<Maxno ofDSCHs >			–	
>>>>DSCH ID	M				–	
>>>>Priority Indicator		1..16		Provide Information for each priority class used	–	
>>>>Scheduling Priority Indicator	M			For DSCH	–	
>>>>MAC-c/sh SDU Length		1..<MaxNbMAC-c/shSDUL ength>			–	
>>>>>MAC-c/sh SDU Length	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>>PDSCH code mapping	M			PDSCH code mapping to be used	–	
>Neighbouring Cell Information		0..<maxno of neighbourin gRNCs>			EACH	ignore
>> RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxno ofFDDneig hbours>				
>>>>C-Id	M					
>>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>>Frame Offset	O				–	
>>>>Primary Scrambling	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Code						
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxno ofTDDneigh hours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		YES	ignore
Downlink SIR Target	M		Uplink SIR		YES	ignore
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
NotFirstRL	The IE is present only if the RL is not the first RL in the RL Information
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell.
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>UL Interference per Time Slot		1 .. <maxnoof ULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>UL CCTrCH Information		0..<maxno ofCCTrCHs>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>> DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		0..<maxno ofCCTrCHs>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DCH Information Response		1..<maxno ofDCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	GLOBAL	ignore
>>DCH ID	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>DSCH Information Response		0 .. <Maxnoof DSCHs>			GLOBAL	ignore
>>DSCH ID	M				–	
>>Priority Indicator		1..16		Provide Information for each priority class used	–	
>>>Scheduling Priority Indicator	M			For DSCH	–	
>>>MAC-c/sh SDU Length		1..<MaxNbMAC-c/shSDULength>			–	
>>>>MAC-c/sh SDU Length	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>>Transport Format Management	M				–	
>USCH Information Response		0 .. <Maxnoof USCHs>			GLOBAL	ignore
>>USCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>>Transport Format Management	M				–	
>Neighbouring Cell Information	O	0..<maxno ofneighboringRNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxnofFDDneighbours>			–	
>>>C-Id	M				–	
>>>UARFCN	M			Corresponds to Nu [TS25.104	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]	–	
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Cell Individual Offset	O				–	
>>>Primary CPICH Power	O				–	
>>>Tx diversity Indicator	O				–	
>>>STTD Support Indicator	O				–	
>>>Closed Loop	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
mode1 Support Indicator						
>>>Closed Loop mode2 Support Indicator	O				–	
>>Per TDD Cell Information		<i>0..<maxno ofTDDneighbours></i>			–	
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDPCHs	Maximum number of DPCHs for one CCTrCH.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofUSCHs	Maximum number of USCHs for one UE.
MaxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

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				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
Unsuccessful RL Information Response		<i>1..<maxn ofRLs></i>			EACH	ignore
>RL ID	M				–	
>Cause	M				–	
Successful RL Information Response		<i>0..<maxn ofRLs-1></i>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>DL Code Information		<i>1..<maxn ofDL Codes></i>			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				–	
>CHOICE <i>diversity Indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL ID for the combining	–	
>>Non Combining or IE not present				"IE not present" is equivalent to "First RL".	YES	ignore
>>>DCH Information Response		<i>0..<maxn ofDCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>DSCH Information Response		<i>0..<maxn ofDSCHs></i>			GLOBAL	ignore
>>DSCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>Neighbouring Cell Information	O	<i>0..<maxn of neighbourin gRNCs></i>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Identifier						
>>Per FDD Cell Information		0..<maxno ofFDDneigh hours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxno ofTDDneigh hours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell

9.1.5.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Unsuccessful RL Information Response		1			YES	ignore
>RL ID	M				–	
>Cause	M				–	
Criticality Diagnostics	O				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				YES	reject
Transaction ID	M				–	
Uplink SIR Target	M		Uplink SIR		YES	reject
RL Information		1..<maxnoofRLs-1>			EACH	notify
>RL ID	M				–	
>C-Id	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Diversity Control Field	M				–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell Identity	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Range bound	Explanation
MaxnoofRLs	Maximum number of radio links for one UE
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-Id	M				–	
>Frame Offset	M				–	
>Diversity Control Field	M				–	
>Primary CCPCH RSCP	O				–	

9.1.7 RADIO LINK ADDITION RESPONSE

9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
RL Information Response		1..<maxnoof RLS-1>			EACH	ignore
>RL ID	M				-	
>RL Set ID	M				-	
>SAI	M				-	
>UL Interference Level	M				-	
> Secondary CCPCH Info		0..1			-	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [8]	-	
>>DL Scrambling Code	M				-	
>>FDD DL Channelisation Code Number	M				-	
>>TFCS	M			For the DL.	-	
>>Secondary CCPCH Slot Format	M				-	
>>TFCI presence	C - SlotFormat				-	
>>MultiplexingPosition	M				-	
>>STTD Indicator	M				-	
>> FACH/PCH Information		1 .. <maxFACHcount+1>			-	
TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	-	
>> Scheduling Information		1			-	
>>>IB_SG REP	M				-	
>>> Segment Information		1.. <maxIBSEG >			-	
>>>>IB_SG POS	M				-	
> DL Code Information		1..<maxnoof DLCodes>			GLOBAL	ignore
>>DL Scrambling Code	M				-	
>>FDD DL Channelisation Code Number	M				-	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>> <i>Combining</i>					YES	ignore
>>>RL ID	M			Reference RL-Id	-	
>> <i>Non combining</i>					YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>>DCH Information Response		<i>1..<maxnoof DCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		<i>0..<maxnoof neighbouringRNCs></i>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		<i>0..<maxnoof FDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxnoof TDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.7.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		1			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>UL Interference per Time Slot		1.. <maxnoofULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>UL CCTrCH Information		0.. <i><maxnoof CCTrCHs></i>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1.. <i><maxnoOf fDPCHs></i>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		0.. <i><maxnoof CCTrCHs></i>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1.. <i><maxnoOf fDPCHs></i>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>> <i>Combining</i>					YES	ignore
>>>RL ID	M			Reference RL	–	
>> <i>Non combining</i>					YES	ignore
>>>DCH Information Response		1.. <i><maxnoof DCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Address						
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>DSCH Information Response		0 .. <Maxnoof DSCHs>			GLOBAL	ignore
>>DSCH ID	M				–	
>>Priority Indicator		1..16		Provide Information for each priority class used	–	
>>>Scheduling Priority Indicator	M			DSCH priority indicator	–	
>>>MAC-c/sh SDU Length		1..<MaxNb MAC-c/shSDULEngth>			–	
>>>>MAC-c/sh SDU Length	M				–	
>>CHOICE diversity Indication					–	
>>>Non combining					–	
>>>>BindingID	M				–	
>>>>Transport Layer Address	M				–	
>USCH Information Response		0 .. <Maxnoof USCHs>			GLOBAL	ignore
>>USCH ID	M				–	
>>CHOICE diversity Indication					–	
>>>Non combining					–	
>>>>BindingID	M				–	
>>>>Transport Layer Address	M				–	
>Neighbouring Cell Information		0..<maxnoof neighbouringRNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxnoof FDDneighbours>			–	
>>>C-Id	M				–	
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]	–	
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Cell Individual Offset	O				-	
>>>Tx diversity Indicator	O				-	
>>>STTD Support Indicator	O				-	
>>>Closed Loop mode1 Support Indicator	O				-	
>>>Closed Loop mode2 Support Indicator	O				-	
>>Per TDD Cell Information		<i>0..<maxnoof TDDneighbours></i>			-	
>>>C-Id	M				-	
>>>JARFCN	M			Corresponds to Nt [TS25.105]	-	
>>>Frame Offset	O				-	
>>>Cell Parameter ID	M				-	
>>>Sync Case	M				-	
>>>Time Slot	C-Case1				-	
>>>SCH Time Slot	C-Case2				-	
>>>Cell Individual Offset	O				-	
>>>DPCH Constant Value	O				-	
>>>PCCPCH Power	O				-	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1
Case2	This IE is present only if Sync Case = Case2.

Range Bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofUSCHs	Maximum number of USCHs for one UE.
MaxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxnoOfDPCHs	Maximum number of DPCH in one CCTrCH
MaxnoofCCTrCHs	number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

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				YES	reject
Transaction ID	M				-	
Unsuccessful RL Information Response		1..<maxnoof RLS-1>			EACH	ignore
>RL ID	M				-	
>Cause	M				-	
Successful RL Information Response		0..<maxnoof RLS-2>			EACH	ignore
>RL ID	M				-	
>RL Set ID	M				-	
>SAI	M				-	
>UL Interference Level	M				-	
>DL Code Information		1..<maxnoof DL Codes>			GLOBAL	ignore
>>DL scrambling code	M				-	
>>FDD DL channelisation code Number	M				-	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL-Id	-	
>>Non combining					YES	ignore
>>>DCH Information Response		1..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	-	
>>>>DCH ID	M				-	
>>>>Binding ID	M				-	
>>>>Transport Layer Address	M				-	
>SSDT Support Indicator	M				-	
>Minimum Uplink SIR	M		Uplink SIR		-	
>Maximum Uplink SIR	M		Uplink SIR		-	
>Maximum Allowed UL Tx Power	M				-	
>Neighbouring Cell Information		0..<maxnoof neighbouring RNCs>			EACH	ignore
>>RNC-Id	M				-	
>>CN PS Domain Identifier	O				-	
>>CN CS Domain Identifier	O				-	
>>Per FDD Cell Information		0..<maxnoof FDD neighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	-	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				-	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxnoof TDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information

9.1.8.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Unsuccessful RL Information Response		1			YES	ignore
>RL ID	M				-	
>Cause	M				-	
Criticality Diagnostics	O				YES	ignore

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		<i>0..1</i>			YES	reject
>UL Scrambling code	O				-	
>UL SIR Target	O		Uplink SIR		-	
>Min UL Channelisation Code Length	O				-	
>Max Number of UL DPDCHs	C – CodeLen				-	
>Puncture Limit	O			For the UL.	-	
>TFCS	O			TFCS for the UL.	-	
>UL DPCCH Slot Format	O				-	
>SSDT Cell Identity Length	O				-	
>S-Field Length	O				-	
DL DPCH Information		<i>0..1</i>			YES	reject
>TFCS	O			TFCS for the DL.	-	
>DL DPCH Slot Format	O				-	
>TFCI Signalling Mode	O				-	
>TFCI Presence	C- SlotFormat				-	
>MultiplexingPosition	O				-	
DCHs to Modify		<i>0..<maxnoofDCHs></i>			GLOBAL	reject
>DCH ID	M				-	
>Transport Format Set	O			For the UL.	-	
>Transport Format Set	O			For the DL.	-	
>Allocation/Retention Priority	O				-	
>Frame Handling Priority	O				-	
>UL FP Mode	O				-	
>ToAWS	O				-	
>ToAWE	O				-	
>DRAC Control	O				-	
DCHs to Add		<i>0..<maxnoofDCHs></i>			GLOBAL	reject
>DCH ID	M				-	
>DCH Combination Indicator	O				-	
>Limited Power Increase	M				-	
>Tr Ch Source Statistics Descriptor	M				-	
>Transport Format Set	M			For the UL.	-	
>Transport Format Set	M			For the DL.	-	
>BLER	M			For the UL.	-	
>BLER	M			For the DL.	-	
>Allocation/Retention Priority	M				-	
>Frame Handling Priority	M				-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>Payload CRC Presence Indicator	M				-	
>UL FP Mode	M				-	
>QE-Selector	M				-	
>ToAWS	M				-	
>ToAWE	M				-	
>DRAC Control	M				-	
DCHs to Delete		0..<maxnoofDCHs>			GLOBAL	reject
>DCH ID	M				-	
DSCH to modify		0..1			YES	reject
> DSCH Info		0..<maxnoofDSCHs >			-	
>> DSCH ID	M				-	
>>TrCh Source Statistics Descriptor	O					
>>Transport Format Set	O			For DSCH	-	
>>Allocation/Retention Priority	O				-	
>>Scheduling Priority Indicator	O				-	
>>BLER	O				-	
>PDSCH RL ID	O		RL ID		-	
>Transport Format Combination Set	O			For DSCH	-	
DSCH to add		0..1			YES	reject
>DSCH Info		1..<maxnoofDSCHs >			-	
>> DSCH ID	M				-	
>>TrCh Source Statistics Descriptor	M				-	
>>Transport Format Set	M			For DSCH	-	
>>Allocation/Retention Priority	M				-	
>>Scheduling Priority Indicator	M				-	
>>BLER	M				-	
>PDSCH RL ID	M		RL ID		-	
>Transport Format Combination Set	M			For DSCH	-	
DSCHs to delete		0..1			YES	reject
> DSCH Info		1..<maxnoofDSCHs >			-	
>> DSCH ID	M				-	
RL Information		0..<maxnoofRLs>			EACH	reject
>RL ID	M				-	
>SSDT Indication	O				-	
>SSDT Cell Identity	C - SSDTIndON				-	

Condition	Explanation
SSDTIndON	The IE may be present if the SSDT Indication is set to 'SSDT Active in the UE'.
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.

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

9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		<i>0..<maxno of CCTrCHs></i>		For DCH and USCH	EACH	notify
>CCTrCH ID	M				–	
>TFCS	O			For the UL.	–	
>TFCI Coding	O				–	
>Puncture Limit	O				–	
DL CCTrCH Information		<i>0..<maxno of CCTrCHs></i>		For DCH and DSCH	EACH	notify
>CCTrCH ID	M				–	
>TFCS	O			For the DL.	–	
>TFCI Coding	O				–	
>Puncture Limit	O				–	
DCHs to Modify		<i>0..<maxno of DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH Id	O			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH Id	O			DL CCTrCH in which the DCH is mapped	–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
DCHs to Add		<i>0..<maxno of DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH Id	M			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH Id	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Indicator	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence	M				–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Indicator						
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
DCHs to Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M				–	
DSCHs to Modify		<i>0..<maxn oofDSCH s></i>			GLOBAL	reject
>DSCH ID	M				–	
>CCTrCH Id	O			DL CCTrCH in which the DSCH is mapped.	–	
>TrCh Source Statistics Descriptor	O				–	
>Transport Format Set	O				–	
>Allocation/Retention Priority	O				–	
>Scheduling Priority Indicator	O				–	
>BLER	O				–	
DSCHs to Add		<i>0..<maxn oofDSCH s></i>			GLOBAL	reject
>DSCH ID	M				–	
>CCTrCH Id	M			DL CCTrCH in which the DSCH is mapped.	–	
>TrCh Source Statistics Descriptor	M					
>Transport Format Set	M					
>Allocation/Retention Priority	M					
>Scheduling Priority Indicator	M					
>BLER	M				–	
DSCHs to Delete		<i>0..<maxn oofDSCH s></i>			GLOBAL	reject
>DSCH ID	M				–	
USCHs to Modify		<i>0..<maxn oofUSCH s></i>			GLOBAL	reject
>USCH ID	M				–	
>CCTrCH Id	O			UL CCTrCH in which the USCH is mapped.	–	
>TrCh Source Statistics Descriptor	O				–	
>Transport Format Set	O				–	
>Allocation/Retention Priority	O				–	
>Scheduling Priority Indicator	O				–	
>BLER	O				–	
>RB Info		1 to <maxnoof RB>		All Radio Bearers using this USCH	–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>RB Identity	M				–	
USCHs to Add		<i>0..<maxnoofUSCHs></i>			GLOBAL	reject
>USCH ID	M				–	
>CCTrCH Id	M			UL CCTrCH in which the USCH is mapped.	–	
>TrCh Source Statistics Descriptor	M				–	
>Transport Format Set	M				–	
>Allocation/Retention Priority	M				–	
>Scheduling Priority Indicator	M				–	
>BLER	M				–	
>RB Info		1 to <maxnoofRB>		All Radio Bearers using this USCH	–	
>>RB Identity	M				–	
USCHs to Delete		<i>0..<maxnoofUSCHs></i>			GLOBAL	reject
>USCH ID	M				–	

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.
MaxnoofRBs	Maximum number of Radio Bearers 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	M				YES	reject
Transaction ID	M				–	
RL Information Response		<i>0..<maxno ofRLs></i>			EACH	ignore
>RL ID	M				–	
>Maximum Uplink SIR	O		Uplink SIR		–	
>Minimum Uplink SIR	O		Uplink SIR		–	
>Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		1.. <maxIBSEG>			–	
>>>>IB_SG POS	M				–	
>Downlink Code Information		<i>0..<maxno ofDLCode s></i>			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>DCH to be Added		<i>0..<maxno ofDCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included.	GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				The IE group shall be included only once per DCH per set of combined RLs.		
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>DCH to be Modified		<i>0..<maxno ofDCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included. The IE group shall be included only once per DCH per set of combined RLs.	GLOBAL	ignore
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>DSCH to be Added or Modified		0..1			YES	ignore
>>DSCH Information		1 .. <Maxnoof DSCHs>			–	
>>>DSCH ID	M				–	
>>>Priority Indicator		1..16		Provide Information for each priority class used	–	
>>>>Scheduling Priority Indicator	M			DSCH priority indicator	–	
>>>>MAC-c/sh SDU Length		1..<MaxNbMAC-c/shSDULength>			–	
>>>>MAC-c/sh SDU Length	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>>PDSCH code mapping	M			PDSCH code mapping to be used	–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs.
MaxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofRLs	Maximum number of RLs for a UE.
MaxnoofDLCodes	Maximum number of Downlink Channelisation Codes.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.12.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		0..1			YES	ignore
>RL ID	M				–	
>Maximum Uplink SIR	O		Uplink SIR		–	
>Minimum Uplink SIR	O		Uplink SIR		–	
>UL CCTrCH Information		0..<maxnoof CCTrCHs>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1..<maxnoof DPCHs>			GLOBAL	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	O				–	
>>>Burst Type	O				–	
>>>Midamble Shift	O				–	
>>>Time Slot	O				–	
>>>TDD Physical Channel Offset	O				–	
>>>Repetition Period	O				–	
>>>Repetition Length	O				–	
>>>TFCI Presence	O				–	
>DL CCTrCH Information		0..<maxnoof CCTrCHs>		For DCH	GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1..<maxnoof DPCHs>			GLOBAL	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	O				–	
>>>Burst Type	O				–	
>>>Midamble Shift	O				–	
>>>Time Slot	O				–	
>>>TDD Physical Channel Offset	O				–	
>>> Repetition Period	O				–	
>>>Repetition Length	O				–	
>>>TFCI Presence	O				–	
>DCH to be Added		0..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included. The IE group shall be included only once per DCH per set of combined RLs.	GLOBAL	ignore
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>DCH to be Modified		0..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall	GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				be included. The IE group shall be included only once per DCH per set of combined RLs.		
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>DSCH to be Added or Modified		0 .. <Maxnoof DSCHs>			GLOBAL	ignore
>>DSCH ID	M				–	
>>Priority Indicator		1..16		Provide Information for each priority class used	–	
>>>Scheduling Priority Indicator	M			DSCH priority indicator	–	
>>>MAC-c/sh SDU Length		1..<MaxNb MAC-c/shSDULength>			–	
>>>>MAC-c/sh SDU Length	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>USCH to be Added or Modified		0 .. <Maxnoof USCHs>			GLOBAL	ignore
>>USCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
Criticality Diagnostics	O				YES	ignore

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofDSCHs	Maximum number of DSCHs for one UE.
MaxnoofUSCHs	Maximum number of USCHs for one UE.
MaxNbMAC-c/shSDULength	Maximum number of different MAC-c/sh SDU lengths
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
Maxnoof DPCHs	Maximum number of DPCHs in one CCTrCH.

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCH coupled to PRACH or PCPCH		1			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M		Scheduling Priority Indicator		–	
>>>MAC-c/sh SDU Length		1..<MaxNb MACcshSD ULength>			GLOBAL	ignore
>>>>MAC-c/sh SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional S-CCPCH		0..1			YES	ignore
>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [7]	–	
>DL Scrambling Code	M				–	
>FDD DL Channelisation Code Number	M				–	
>TFCS	M			For the DL.	–	
>Secondary CCPCH Slot Format	M				–	
>MultiplexingPosition	M				–	
>STTD Indicator	M				–	
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M		Scheduling Priority Indicator		–	
>>>MAC-c/sh SDU Length		1..<MaxNb MACcshSD ULength>			GLOBAL	ignore
>>>>MAC-c/sh SDU Length	M				–	
>>FACH Initial Window Size	M				–	
Transport Layer Address	O				YES	ignore
Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcshSDULength	Maximum number of different MAC-c/sh SDU Lengths.

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCHs coupled to PRACH		1			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M		Scheduling Priority Indicator		–	
>>>MAC-c/sh SDU Length		1..<MaxNbMACcshSDULength>			GLOBAL	ignore
>>>>MAC-c/sh SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional group of S-CCPCHs		0..1			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>Secondary CCPCH	M	1..<MaxnoofSCCPCHs>			GLOBAL	ignore
>>TDD Channelisation Code	M				–	
>>Time Slot	M				–	
>>Burst Type	M				–	
>>Midamble shift	M				–	
>>TDD Physical Channel Offset	M				–	
>>Repetition Period	M				–	
>>Repetition Length	M				–	
>>>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>>>FACH Priority Indicator	M		Scheduling Priority Indicator		–	
>>>>>MAC-c/sh SDU Length		1..<MaxNbMACcshSDULength>			GLOBAL	ignore
>>>>>>MAC-c/sh SDU Length	M				–	
>>>>FACH Initial Window Size	M				–	
>>>>Transport Layer Address	O				YES	ignore
>>>>Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcshSDULength	Maximum number of different MAC-c/sh SDU Lengths.
MaxnoofSCCPCHs	TBD

9.2.1.22 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 (0..255)	Number of frames (MAC- c/sh SDUs.) 255 = Unlimited number of FACH data frames.

9.2.1.23 (Void)

9.2.1.24 Frame Handling Priority

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Frame Handling Priority			INTEGER (0..15)	0=Lowest Priority, ... 15=Highest Priority

9.2.1.25 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 (0..255)	Frames

9.2.1.26 **MAC-c/sh** SDU Length

Indicates the **MAC-c/sh** SDU Length which is used for FACH, 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 (1..5000)	Size of the MAC-c/sh SDU in number of bits.

9.2.1.x 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 (0..255)	

9.2.1.y Scheduling Priority Indicator

Indicates the relative priority of the DSCH or USCH data frame. Used by the DRNC when scheduling DSCH or USCH traffic.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Scheduling Priority Indicator			INTEGER (0..15)	Relative priority of the DSCH or USCH data frame: 0=Lowest Priority ... 15=Highest Priority

9.2.1.53 Transport Format Combination Set

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

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

Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

Method #2 - Explicit

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE DSCH				
>No split in TFCI				This choice is made if : a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Node B communication contexts are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFC zero, the second to 1 and so on.
>>>CTFC	M		INTEGER(0..MaxCTFC)	Integer number calculated according to ref. [16].
>>>>CHOICE Gain Factors	C-PhysChan			
>>>>>Signalled Gain Factors				
>>>>>>Gain Factor β_c	M		Integer (0..15)	For UL DPCCH or control part of PRACH in FDD
>>>>>>Gain Factor β_d	M		Integer (0..15)	For UL DPDCH or data part of PRACH in FDD
>>>>>>Reference TFC nr	O		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
>There is a split in the TFCI				This choice is made if : a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Node B communication contexts is assigned one or more DSCH transport channels
>>Transport format combination_DCH		1 to <MaxTFCI_1_Combinations>		The first instance of the parameter <i>Transport format combination_DCH</i> corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		Integer(0..MaxCTFC)	Integer number calculated according to [16] . The calculation of CTFC ignores any DSCH transport channels which may be assigned
>>Choice Signalling method				
>>> TFCI range				
>>>>TFC mapping on DSCH		1 to <MaxNoTFCIGroups>		
>>>>>Max TFCI(field2) value	M		Integer(1..1023)	This is the Maximum value in the range of TFCI(field2) values for which the specified

>>>>CTFC(field 2)	M		Integer(0..MaxCTFC)	CTFC(field2) applies Integer number calculated according to [16]. The calculation of CTFC ignores any DCH transport channels which may be assigned
>>>Explicit				
>>>>Transport format combination_DSCH		1 to <MaxTFCI_2_Comb>		The first instance of the parameter <i>Transport format combination_DSCH</i> corresponds to TFCI (field 2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>CTFC(field2)	M		Integer(0..MaxCTFC)	Integer number calculated according to [16]. The calculation of CTFC ignores any DCH transport channels which may be assigned

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH or PRACH channel in FDD, not when the TFCS is used for other physical channels.

Range bound	Explanation
MaxnoofTFCS	The maximum number of Transport Format Combinations
MaxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1))
MaxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2))
MaxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [16].
	EMBED
	EMBED

9.2.1.54 Transport Format Set

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transport Format Set				
>Dynamic Transport Format Information		1..<maxTFcount>		
>>Number of Transport blocks	M		INTEGER (0..4095)	
>>Transport Block Size	C – Blocks		INTEGER (1..5000)	Bits
>CHOICE mode				
>>TDD				
>>>Transmission time interval	C-TTIdynamic	1..<maxTTIcount>	Enumerated(10, 20, 40, 80)	
>Semi-static Transport Format Information				
>>Transmission time interval	C-TTIsemistatic		ENUMERATED (10, 20, 40, 80)	msec
>>Type of channel coding	M		ENUMERATED (No coding, Convolutional, Turbo)	
>>Coding Rate	C – Coding		ENUMERATED (1/2, 1/3)	
>>Rate matching attribute	M		INTEGER (1..maxRM)	
>>CRC size	M		ENUMERATED (0, 8, 12, 16, 24)	
>>CHOICE mode				
>>>TDD				
>>>>2 nd interleaving mode	M		Enumerated (Frame related, Timeslot related)	

Condition	Explanation
Blocks	This IE is only present if "Number of Transport Blocks" is greater than 0.
Coding	This IE is only present if IE "Type of channel coding" is "Convolutional" or "Turbo"
TTIdynamic	This IE is mandatory if not defined as semistatic parameter. Otherwise it is absent.
TTIsemistatic	This IE is mandatory if not defined as dynamic parameter. Otherwise it is absent.

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 .
MaxTTIcount	The amount of different TTI that are possible for that transport format.

9.2.2.X1 Min DL Channelisation Code Length

Minimum DL channelisation code length (spreading factor) of a supported by the UE on the PDSCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Min DL Channelisation Code Length			ENUMERATED(4,8,16,32,64,128,256)	

9.2.2.16 Min UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is supported by UE. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Min UL Channelisation Code Length			ENUMERATED(4,8,16,32,64,128,256)	

9.2.2.17 Multiplexing Position

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Multiplexing Position			ENUMERATED(Fixed, Flexible)	

9.2.2.18 Pattern Duration (PD)

Pattern duration is the total time of then compressed mode pattern (all consecutive TGPs) expressed in number of frames.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PD			INTEGER(0..2047, ...)	Frames If the value is set to '0', the Pattern Duration shall be interpreted as 'infinite'

9.2.2.X2 PDSCH code mapping

This IE indicates the association between each possible value of TFCI(field 2) and the corresponding PDSCH channelisation code. There are three ways which the UTRAN must choose between in order to signal the mapping information, these are described below. The signalling capacity consumed by the different methods will typically vary depending on the way in which the UTRAN configures usage of the DSCH.

Method #1 - Using code range

The mapping is described in terms of a number of groups, each group associated with a given spreading factor. The UE maps TFCI(field2) values to PDSCH codes in the following way. The PDSCH code used for TFCI(field 2) = 0, is given by the SF and code number = 'PDSCH code start' of Group = 1. The PDSCH code used for TFCI(field 2) = 1, is given by the SF and code number = 'PDSCH code start' + 1. This continues, with unit increments in the value of TFC

mapping to unit increments in code number up until the point that code number = 'PDSCH code stop'. The process continues in the same way for the next group with the TFCI(field 2) value used by the UE when constructing its mapping table starting at the largest value reached in the previous group plus one. In the event that 'PDSCH code start' = 'PDSCH code stop' (as may occur when mapping the PDSCH root code to a TFCI (field 2) value) then this is to be interpreted as defining the mapping between the channelisation code and a single TFCI (ie. TFCI(field 2) should not be incremented twice).

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

Method #2 - Using TFCI range

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

Method #3 - Explicit

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

Information Element/Group name	Presence	Range	IE type and reference	Semantics description
DL Scrambling Code	M		INTEGER (0..15)	Scrambling code on which PDSCH is transmitted. 0= Primary scrambling code of the cell 1...15 = Secondary scrambling code

<i>Choice signalling method</i>				
<i>code range</i>				
PDSCH code mapping		1 to <MaxNoCodeGroups>		
Spreading factor	M		Enumerated(4, 8, 16, 32, 64, 128, 256)	
multi-code info	M		Integer(1..16)	This parameter indicates the number of PDSCH transmitted to the UE. The PDSCH codes all have the same SF as denoted by the Spreading factor parameter. Contiguous codes are assigned, starting at the channelisation code denoted by the spreading factor and code number parameter and including all codes, with code numbers up to and including 'code number' - 1 + 'multi-code info'. Note that 'code number' - 1 + 'multi-code info' will not be allowed to exceed 'maxCodeNumComp' - 1
Code number	M		Integer(0..maxCodeNumComp-1)	PDSCH code start, Numbering as described in [16]
Code number	M		Integer(0..maxCodeNumComp-1)	PDSCH code stop, Numbering as described in [16]
<i>TFCI range</i>				
DSCH mapping		1 to <MaxNoTFCIGroups>		
Max TFCI(field2) value	M		Integer(1..1023)	This is the maximum value in the range of TFCI(field 2) values for which the specified PDSCH code applies
Spreading factor	M		Enumerated(4, 8, 16, 32, 64, 128, 256)	SF of PDSCH code
multi-code info	M		Integer(1..16)	Semantics as described for this parameter above
Code number	M		Integer(0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [16]
<i>Explicit</i>				
PDSCH code		1 to MaxTFCI_2_Combs		The first instance of the parameter PDSCH code corresponds to TFCI (field2) = 0, the second to TFCI(field 2) = 1 and so on.
Spreading factor	M		Enumerated(4, 8, 16, 32, 64, 128, 256)	SF of PDSCH code
multi-code info	M		Integer(1..16)	Semantics as described for this parameter above
Code number	M		Integer(0..maxCodeNumComp-1)	Code number of PDSCH code. Numbering as described in [16]

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

9.2.3.x 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 (0..31)	In line with [16], ch. 10.3.4.11

9.2.3.x 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 (0..255)	

9.2.3.x 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 Management			ENUMERATED (Cell Based, UE Based)	

1 9.3.3 PDU Definitions

```

2  -- *****
3  --
4  -- PDU definitions for RNSAP.
5  --
6  -- *****
7
8  RNSAP-PDU-Contents -- { object identifier to be allocated }--
9  DEFINITIONS AUTOMATIC TAGS ::=
10
11  BEGIN
12
13  -- *****
14  --
15  -- IE parameter types from other modules.
16  --
17  -- *****
18
19  IMPORTS
20      AllocationRetentionPriority,
21      AllowedQueuingTime,
22      BLER,
23      BindingID,
24      BurstType,
25      C-ID,
26      C-RNTI,
27      CCTrCH-ID,
28      CellIndividualOffset,
29      CFN,
30      CFNOffset,
31      ClosedLoopModel-SupportIndicator,
32      ClosedLoopMode2-SupportIndicator,
33      CN-CS-DomainIdentifier,
34      CN-PS-DomainIdentifier,
35      Cause,
36      CellParameterID,
37      ChipOffset,
38      CompressedModeMethod,
39      CriticalityDiagnostics,
40      D-FieldLength,
41      D-RNTI,
42      D-RNTI-ReleaseIndication,
43      DCH-CombinationInd,
44      DCH-ID,
45      DL-DPCH-SlotFormat,
46      DL-SIRTarget,
47      DL-FrameType,
48      DL-Power,
49      DL-ScramblingCode,
50      DPCHConstantValue,
51      DPCH-ID,
52      DRACControl,
53      DRXCycleLengthCoefficient,
54      DedicatedMeasurementType,
55      DedicatedMeasurementValue,
56      DiversityControlField,
57      DiversityMode,
58      DSCH-ID,
59      FACH-InitialWindowSize,
60
61      SchedulingPriorityIndicator,
62      FDD-DL-ChannelisationCodeNumber,
63      FDD-S-CCPCH-Offset,
64      FDD-TPC-DownlinkStepSize,
65      FrameHandlingPriority,
66      FrameOffset,
67      GapPeriod,
68      GapPositionMode,
69      IB-SG-POS,
70      IB-SG-REP,
71      IMSI,
72      L3-Information,
73      LimitedPowerIncrease,
74      MAC-c-sh-SDU-Length,
75      MaximumAllowedULTxPower,
76      MaxNrOfUL-DPCHs,

```

77 MeasurementFilterCoefficient,
 78 MeasurementID,
 79 MidambleShift,
 80 MinUL-ChannelisationCodeLength,
 81 MultipleURAsIndicator,
 82 MultiplexingPosition,
 83 PD,
 84 PDSCHCodeMapping,
 85 PayloadCRC-PresenceIndicator,
 86 PCCPCH-Power,
 87 PowerAdjustmentType,
 88 PowerControlMode,
 89 PowerOffset,
 90 PowerResumeMode,
 91 PrimaryCCPCH-RSCP,
 92 PrimaryCPICH-EcNo,
 93 PrimaryCPICH-Power,
 94 PrimaryScramblingCode,
 95 PropagationDelay,
 96 PunctureLimit,
 97 QE-Selector,
 98 RANAP-RelocationInformation,
 99 RB-Identity,
 100 RL-ID,
 101 RL-Set-ID,
 102 RNC-ID,
 103 RepetitionLength,
 104 RepetitionPeriod,
 105 ReportCharacteristics,
 106 S-FieldLength,
 107 S-RNTI,
 108 SCH-TimeSlot,
 109 SAI,
 110 SN,
 111 SSST-CellID,
 112 SSST-CellID-Length,
 113 SSST-Indication,
 114 SSST-SupportIndicator,
 115 STTD-Indicator,
 116 STTD-SupportIndicator,
 117 ScaledMaxAdjustmentPeriod,
 118 ScaledMaxAdjustmentStep,
 119 ScramblingCodeChange,
 120 SecondaryCCPCH-SlotFormat,
 121 SyncCase,
 122 TDD-ChannelisationCode,
 123 TDD-PhysicalChannelOffset,
 124 TDD-TPC-DownlinkStepSize,
 125 TFCI-Coding,
 126 TFCI-Presence,
 127 TFCI-SignallingMode,
 128 TGD,
 129 TGL,
 130 TimeSlot,
 131 ToAWE,
 132 ToAWS,
 133 TransmitDiversityIndicator,
 134 TransportBearerID,
 135 TransportBearerRequestIndicator,
 136 TFCS,
 137 **TransportFormatManagement,**
 138 TransportFormatSet,
 139 TransportLayerAddress,
 140 TrCH-SrcStatisticsDescr,
 141 TxDiversityIndicator,
 142 UARFCN,
 143 UC-ID,
 144 UL-DeltaSIR,
 145 UL-DeltaSIRAfter,
 146 UL-DL-CompressedModeSelection,
 147 UL-DPCCH-SlotFormat,
 148 UL-InterferenceLevel,
 149 UL-SIR,
 150 UL-FP-Mode,
 151 UL-ScramblingCode,
 152 URA-ID,
 153 USCH-ID
 154 FROM RNSAP-IEs

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155
156     PrivateIE-Container{},
157     ProtocolExtensionContainer{},
158     ProtocolIE-ContainerList{},
159     ProtocolIE-ContainerPair{},
160     ProtocolIE-ContainerPairList{},
161     ProtocolIE-Container{},
162     RNSAP-PRIVATE-IES,
163     RNSAP-PROTOCOL-EXTENSION,
164     RNSAP-PROTOCOL-IES,
165     RNSAP-PROTOCOL-IES-PAIR
166 FROM RNSAP-Containers
167
168     maxNoOfDSCHs,
169     maxNoOfRB,
170     maxNoOfUSCHs,
171     maxNrOfCCTrCHs,
172     maxNrOfDCHs,
173     maxNrOfDL-Codes,
174     maxNrOfDPCHs,
175     maxNrOfMACcshSDU-Length,
176     maxNrOfRLs,
177     maxNrOfRLSets,
178     maxNrOfRLs-1,
179     maxNrOfRLs-2,
180     maxNrOfSCCPCHs,
181     maxNrOfULTs,
182     maxNrOfCMpatterns,
183     maxRNCinURA,
184     maxNrOfNeighbouringRNCs,
185     maxNrOfFDDNeighboursPerRNC,
186     maxNrOfTDDNeighboursPerRNC,
187     maxFACHCountPlus1,
188     maxIBSEG,
189
190     id-AllRLItem-DM-Rprt,
191     id-AllRLItem-DM-Rsp,
192     id-AllRL-SetItem-DM-Rprt,
193     id-AllRL-SetItem-DM-Rsp,
194     id-AllowedQueuingTime,
195     id-BindingID,
196     id-C-ID,
197     id-C-RNTI,
198     id-CFN,
199     id-CN-CS-DomainIdentifier,
200     id-CN-PS-DomainIdentifier,
201     id-Cause,
202     id-CellItem-PagingRqst,
203     id-CM-PatternInformationItem-CompressedModePrep,
204     id-CM-PatternInformationList-CompressedModePrep,
205     id-CombiningItem-RL-AdditionFailureFDD,
206     id-CombiningItem-RL-AdditionRspFDD,
207     id-CombiningItem-RL-AdditionRspTDD,
208     id-CombiningItem-RL-SetupFailureFDD,
209     id-CombiningItem-RL-SetupRspFDD,
210     id-CriticalityDiagnostics,
211     id-D-RNTI,
212     id-D-RNTI-ReleaseIndication,
213     id-DCH-AddListIE-RL-ReconfReadyFDD,
214     id-DCH-AddListIE-RL-ReconfReadyTDD,
215     id-DCH-AddListIE-RL-ReconfRsp,
216     id-DCH-AddList-RL-ReconfPrepFDD,
217     id-DCH-AddList-RL-ReconfPrepTDD,
218     id-DCH-AddList-RL-ReconfRqstFDD,
219     id-DCH-AddList-RL-ReconfRqstTDD,
220     id-DCH-DeleteList-RL-ReconfPrepFDD,
221     id-DCH-DeleteList-RL-ReconfPrepTDD,
222     id-DCH-DeleteList-RL-ReconfRqstFDD,
223     id-DCH-DeleteList-RL-ReconfRqstTDD,
224     id-DCH-Information-RL-SetupRqstFDD,
225     id-DCH-InformationList-RL-SetupRqstTDD,
226     id-DCH-ModifyListIE-RL-ReconfReadyFDD,
227     id-DCH-ModifyListIE-RL-ReconfReadyTDD,
228     id-DCH-ModifyListIE-RL-ReconfRsp,
229     id-DCH-ModifyList-RL-ReconfPrepFDD,
230     id-DCH-ModifyList-RL-ReconfPrepTDD,
231     id-DCH-ModifyList-RL-ReconfRqstFDD,
232     id-DCH-ModifyList-RL-ReconfRqstTDD,

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233 id-DCH-InformationResponseListIE-RL-SetupRspTDD,
 234 id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
 235 id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
 236 id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
 237 id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
 238 id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
 239 id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
 240 id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
 241 id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
 242 id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
 243 id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
 244 id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
 245 id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
 246 id-DL-CodeInformationListIE-RL-AdditionRspFDD,
 247 id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
 248 id-DL-CodeInformationListIE-RL-SetupFailureFDD,
 249 id-DL-DPCH-Information-RL-ReconfPrepFDD,
 250 id-DL-DPCH-Information-RL-SetupRqstFDD,
 251 id-DL-DPCH-Information-RL-ReconfRqstFDD,
 252 id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
 253 id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
 254 id-DL-DPCH-InformationItem-RL-SetupRspTDD,
 255 id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
 256 id-DL-SIRTarget,
 257 id-DLReferencePower,
 258 id-DLReferencePowerList-DL-PC-Rqst,
 259 id-DL-ReferencePowerInformation-DL-PC-Rqst,
 260 id-DRXCycleLengthCoefficient,
 261 id-DedicatedMeasurementObjectType-DM-Rprt,
 262 id-DedicatedMeasurementObjectType-DM-Rqst,
 263 id-DedicatedMeasurementObjectType-DM-Rsp,
 264 id-DedicatedMeasurementType,
 265 id-DiversityIndicationItem-RL-AdditionFailureFDD,
 266 id-DiversityIndicationItem-RL-AdditionRspFDD,
 267 id-DiversityIndicationItem-RL-AdditionRspTDD,
 268 id-DiversityIndicationItem-RL-SetupFailureFDD,
 269 id-DiversityIndicationItem-RL-SetupRspFDD,
 270 id-DSCH-AddList-RL-ReconfPrepTDD,
 271 id-DSCH-Add-RL-ReconfPrepFDD,
 272 id-DSCH-DeleteList-RL-ReconfPrepTDD,
 273 id-DSCH-Delete-RL-ReconfPrepFDD,
 274 id-DSCH-InformationItem-RL-SetupRqstFDD,
 275 id-DSCH-InformationListIE-RL-AdditionRspTDD,
 276 id-DSCH-InformationListIEs-RL-SetupRspTDD,
 277 id-DSCH-InformationList-RL-SetupRqstTDD,
 278 id-DSCH-InformationResponseItem-RL-SetupRspFDD,
 279 id-DSCH-InformationResponseListIE-RL-AdditionFailureFDD,
 280 id-DSCH-InformationResponseListIE-RL-SetupFailureFDD,
 281 id-DSCH-Information-RL-SetupRqstFDD,
 282 id-DSCH-ModifyList-RL-ReconfPrepTDD,
 283 id-DSCH-Modify-RL-ReconfPrepFDD,
 284 id-DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD,
 285 id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
 286 id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
 287 id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
 288 id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
 289 id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
 290 id-IMSI,
 291 id-L3-Information,
 292 id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspFDD,
 293 id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspTDD,
 294 id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
 295 id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
 296 id-MaxAdjustmentPeriod,
 297 id-MaxAdjustmentStep,
 298 id-MeasurementFilterCoefficient,
 299 id-MeasurementID,
 300 id-MultipleURAsIndicator,
 301 id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
 302 id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
 303 id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
 304 id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
 305 id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
 306 id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
 307 id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
 308 id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
 309 id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
 310 id-Neighbouring-CellInformationItem-RL-SetupRsp,

311 id-NonCombiningItem-RL-AdditionFailureFDD,
312 id-NonCombiningItem-RL-AdditionRspFDD,
313 id-NonCombiningItem-RL-AdditionRspTDD,
314 id-NonCombiningOrIENotPresenItem-RL-SetupFailureFDD,
315 id-NonCombiningOrIENotPresenItem-RL-SetupRspFDD,
316 id-PagingArea-PagingRqst,
317 id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
318 id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
319 id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
320 id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
321 id-PowerAdjustmentType,
322 id-ProcedureScope-DL-PC-Rqst,
323 id-RANAP-RelocationInformation,
324 id-RL-Information-PhyChReconfRqstFDD,
325 id-RL-Information-PhyChReconfRqstTDD,
326 id-RL-Information-RL-AdditionRqstFDD,
327 id-RL-Information-RL-AdditionRqstTDD,
328 id-RL-Information-RL-DeletionRqst,
329 id-RL-Information-RL-FailureInd,
330 id-RL-Information-RL-ReconfPrepFDD,
331 id-RL-Information-RL-RestoreInd,
332 id-RL-Information-RL-SetupRqstFDD,
333 id-RL-Information-RL-SetupRqstTDD,
334 id-RL-InformationItem-DM-Rprt,
335 id-RL-InformationItem-DM-Rqst,
336 id-RL-InformationItem-DM-Rsp,
337 id-RL-InformationItem-RL-SetupRqstFDD,
338 id-RL-InformationList-RL-AdditionRqstFDD,
339 id-RL-InformationList-RL-DeletionRqst,
340 id-RL-InformationList-RL-ReconfPrepFDD,
341 id-RL-InformationResponse-RL-AdditionRspTDD,
342 id-RL-InformationResponse-RL-ReconfReadyTDD,
343 id-RL-InformationResponse-RL-SetupRspTDD,
344 id-RL-InformationResponseItem-RL-AdditionRspFDD,
345 id-RL-InformationResponseItem-RL-ReconfReadyFDD,
346 id-RL-InformationResponseItem-RL-ReconfRsp,
347 id-RL-InformationResponseItem-RL-SetupRspFDD,
348 id-RL-InformationResponseList-RL-AdditionRspFDD,
349 id-RL-InformationResponseList-RL-ReconfReadyFDD,
350 id-RL-InformationResponseList-RL-ReconfRsp,
351 id-RL-InformationResponseList-RL-SetupRspFDD,
352 id-RLItem-DM-Rprt,
353 id-RLItem-DM-Rqst,
354 id-RLItem-DM-Rsp,
355 id-RL-ReconfigurationFailure-RL-ReconfFail,
356 id-RL-ReconfigurationFailureList-RL-ReconfFail,
357 id-RL-Set-InformationItem-DM-Rprt,
358 id-RL-Set-InformationItem-DM-Rqst,
359 id-RL-Set-InformationItem-DM-Rsp,
360 id-RL-Set-Information-RL-FailureInd,
361 id-RL-Set-Information-RL-RestoreInd,
362 id-RL-SetItem-DM-Rprt,
363 id-RL-SetItem-DM-Rqst,
364 id-RL-SetItem-DM-Rsp,
365 id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
366 id-ReportCharacteristics,
367 id-Reporting-Object-RL-FailureInd,
368 id-Reporting-Object-RL-RestoreInd,
369 id-S-RNTI,
370 id-SAI,
371 id-SRNC-ID,
372 id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
373 id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
374 id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
375 id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
376 id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
377 id-TransportBearerID,
378 id-TransportBearerRequestIndicator,
379 id-TransportLayerAddress,
380 id-UC-ID,
381 id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
382 id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
383 id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
384 id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
385 id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
386 id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
387 id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
388 id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,

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389 id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
390 id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
391 id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
392 id-UL-DPCH-Information-RL-ReconfPrepFDD,
393 id-UL-DPCH-Information-RL-ReconfRqstFDD,
394 id-UL-DPCH-Information-RL-SetupRqstFDD,
395 id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
396 id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
397 id-UL-DPCH-InformationItem-RL-SetupRspTDD,
398 id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
399 id-UL-SIRTarget,
400 id-URA-ID,
401 id-URAIItem-PagingRqst,
402 id-UnsuccessfulRL-InformationResponse,
403 id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
404 id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
405 id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
406 id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
407 id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
408 id-USCH-AddList-RL-ReconfPrepTDD,
409 id-USCH-DeleteList-RL-ReconfPrepTDD,
410 id-USCH-InformationListIE-RL-AdditionRspTDD,
411 id-USCH-InformationListIEs-RL-SetupRspTDD,
412 id-USCH-InformationList-RL-SetupRqstTDD,
413 id-USCH-ModifyList-RL-ReconfPrepTDD,
414 id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD
415 FROM RNSAP-Constants;
416
417 -- *****
418 --
419 -- Common Container List
420 --
421 -- *****
422
423 DPCH-IE-ContainerList { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
424 1, maxNrOfDPCHs, { IEsSetParam } }
425 RL-IE-ContainerList0 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
426 0, maxNrOfRLs, { IEsSetParam } }
427 RL-IE-ContainerList1 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
428 1, maxNrOfRLs, { IEsSetParam } }
429 RL-IE-ContainerList1-1 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
430 1, maxNrOfRLs-1, { IEsSetParam } }
431 RL-IE-ContainerList0-1 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
432 0, maxNrOfRLs-1, { IEsSetParam } }
433 RL-IE-ContainerList0-2 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
434 0, maxNrOfRLs-2, { IEsSetParam } }
435 RL-Set-IE-ContainerList { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
436 1, maxNrOfRLSets, { IEsSetParam } }
437 CCTrCH-IE-ContainerList0 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
438 0, maxNrOfCCTrCHs, { IEsSetParam } }
439 CCTrCH-IE-ContainerList1 { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
440 1, maxNrOfCCTrCHs, { IEsSetParam } }
441 DSCH-IE-ContainerList { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
442 1, maxNoOfDSCHs, { IEsSetParam } }
443 USCH-IE-ContainerList { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList {
444 1, maxNoOfUSCHs, { IEsSetParam } }
445
446 -- *****
447 --
448 -- RADIO LINK SETUP REQUEST FDD
449 --
450 -- *****
451
452 RadioLinkSetupRequestFDD ::= SEQUENCE {
453 protocolIEs ProtocolIE-Container {{RadioLinkSetupRequestFDD-IEs}},
454 protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-
455 Extensions}} OPTIONAL,
456 ...
457 }
458
459 RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
460 { ID id-S-RNTI CRITICALITY reject TYPE S-RNTI PRESENCE
461 mandatory } |
462 { ID id-D-RNTI CRITICALITY reject TYPE D-RNTI PRESENCE
463 optional } |
464 { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime
465 PRESENCE optional } |

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```

466     { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-
467 SetupRqstFDD PRESENCE mandatory } |
468     { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-
469 SetupRqstFDD PRESENCE mandatory } |
470     { ID id-DCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DCH-InformationList-RL-
471 SetupRqstFDD PRESENCE mandatory } |
472     { ID id-DSCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DSCH-Information-RL-
473 SetupRqstFDD PRESENCE optional } |
474     { ID id-RL-Information-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationList-RL-
475 SetupRqstFDD PRESENCE mandatory },
476     ...
477 }
478
479 UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
480     ul-ScramblingCode UL-ScramblingCode,
481     minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
482     maxNrOfUL-DPCHs MaxNrOfUL-DPCHs OPTIONAL
483     -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 -- ,
484     ul-PunctureLimit PunctureLimit,
485     ul-TFCS TFCS,
486     ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat,
487     ul-SIRTarget UL-SIR OPTIONAL,
488     diversityMode DiversityMode,
489     d-FieldLength D-FieldLength OPTIONAL
490     -- This IE is present only if Feed Back mode diversity is activated -- ,
491     sSDT-CellIdLength SSdT-CellID-Length OPTIONAL,
492     s-FieldLength S-FieldLength OPTIONAL,
493     iE-Extensions ProtocolExtensionContainer { {UL-DPCH-Information-RL-
494 SetupRqstFDD-ExtIEs} } OPTIONAL,
495     ...
496 }
497
498 UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
499     ...
500 }
501
502 DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
503     tFCS TFCS,
504     dl-DPCH-SlotFormat DL-DPCH-SlotFormat,
505     tFCI-SignallingMode TFCI-SignallingMode,
506     tFCI-Presence TFCI-Presence OPTIONAL
507     -- This IE is present if Slot Format is from 12 to 16 -- ,
508     multiplexingPosition MultiplexingPosition,
509     powerOffsetInformation SEQUENCE {
510         po1-ForTFCI-Bits PowerOffset,
511         po2-ForTPC-Bits PowerOffset,
512         po3-ForPilotBits PowerOffset,
513         ...
514     },
515     fdd-dl-TPC-DownlinkStepSize FDD-TPC-DownlinkStepSize,
516     iE-Extensions ProtocolExtensionContainer { {DL-DPCH-Information-RL-
517 SetupRqstFDD-ExtIEs} } OPTIONAL,
518     ...
519 }
520
521 DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
522     ...
523 }
524
525 DCH-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
526 InformationItem-RL-SetupRqstFDD
527
528 DCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
529     dCH-ID DCH-ID,
530     dCH-CombinationInd DCH-CombinationInd OPTIONAL,
531     limitedPowerIncrease LimitedPowerIncrease,
532     trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
533     ul-transportFormatSet TransportFormatSet,
534     dl-transportFormatSet TransportFormatSet,
535     ul-BLER BLER,
536     dl-BLER BLER,
537     allocationRetentionPriority AllocationRetentionPriority,
538     frameHandlingPriority FrameHandlingPriority,
539     payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
540     ul-FP-Mode UL-FP-Mode,
541     qE-Selector QE-Selector,
542     toAWS ToAWS,
543     toAWE ToAWE,

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544         dRACControl                DRACControl,
545         iE-Extensions                ProtocolExtensionContainer { {DCH-InformationItem-RL-
546 SetupRqstFDD-ExtIEs} } OPTIONAL,
547         ...
548     }
549
550 DCH-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
551     ...
552 }
553
554 DSCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
555     dSCH-Information                DSCH-Info-RL-SetupRqstFDD,
556     pdSCH-RL-ID                    RL-ID,
557     tFCS                            TFCS,
558     iE-Extensions                ProtocolExtensionContainer { {DSCH-Information-RL-
559 SetupRqstFDD-ExtIEs} } OPTIONAL,
560     ...
561 }
562
563 DSCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
564     ...
565 }
566
567 DSCH-Info-RL-SetupRqstFDD ::= DSCH-IE-ContainerList { {DSCH-InformationItemIEs-RL-SetupRqstFDD} }
568
569 DSCH-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
570     { ID id-DSCH-InformationItem-RL-SetupRqstFDD    CRITICALITY reject    TYPE DSCH-InformationItem-
571 RL-SetupRqstFDD    PRESENCE mandatory },
572     ...
573 }
574
575 DSCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
576     dSCH-ID                        DSCH-ID,
577     trCH-SrcStatisticsDescr        TrCH-SrcStatisticsDescr ,
578     transportFormatSet            TransportFormatSet,
579     allocationRetentionPriority    AllocationRetentionPriority,
580     schedulingPriorityIndicator    SchedulingPriorityIndicator,
581     bLER                          BLER,
582     iE-Extensions                ProtocolExtensionContainer { {DSCH-InformationItem-RL-
583 SetupRqstFDD-ExtIEs} } OPTIONAL,
584     ...
585 }
586
587 DSCH-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
588     ...
589 }
590
591
592 RL-InformationList-RL-SetupRqstFDD ::= RL-IE-ContainerList1 { {RL-InformationItemIEs-RL-
593 SetupRqstFDD} }
594
595 RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
596     { ID id-RL-InformationItem-RL-SetupRqstFDD    CRITICALITY notify    TYPE RL-InformationItem-RL-
597 SetupRqstFDD    PRESENCE mandatory },
598     ...
599 }
600
601 RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
602     rL-ID                          RL-ID,
603     c-ID                            C-ID,
604     frameOffset                    FrameOffset,
605     chipOffset                    ChipOffset,
606     propagationDelay              PropagationDelay    OPTIONAL,
607     diversityControlField          DiversityControlField    OPTIONAL
608     -- This IE is present only if the RL is not the first one in the RL-InformationList-RL-
609 SetupRqstFDD --,
610     dl-InitialTX-Power            DL-Power    OPTIONAL,
611     primaryCPICH-EcNo            PrimaryCPICH-EcNo    OPTIONAL,
612     sSDT-CellID                 SSDT-CellID    OPTIONAL,
613     transmitDiversityIndicator    TransmitDiversityIndicator    OPTIONAL,
614     -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
615     iE-Extensions                ProtocolExtensionContainer { {RL-InformationItem-RL-
616 SetupRqstFDD-ExtIEs} } OPTIONAL,
617     ...
618 }
619
620 RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
621     ...

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```

622 }
623
624 RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
625   ...
626 }
627
628 -- *****
629 --
630 -- RADIO LINK SETUP REQUEST TDD
631 --
632 -- *****
633
634 RadioLinkSetupRequestTDD ::= SEQUENCE {
635   protocolIEs          ProtocolIE-Container      {{RadioLinkSetupRequestTDD-IEs}},
636   protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-
637 Extensions}}          OPTIONAL,
638   ...
639 }
640
641 RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
642   { ID id-S-RNTI          CRITICALITY reject   TYPE S-RNTI          PRESENCE
643 mandatory } |
644   { ID id-D-RNTI          CRITICALITY reject   TYPE D-RNTI          PRESENCE
645 optional } |
646   { ID id-AllowedQueuingTime CRITICALITY reject   TYPE AllowedQueuingTime
647 PRESENCE optional } |
648   { ID id-UL-CCH-InformationList-RL-SetupRqstTDD CRITICALITY notify   TYPE UL-CCH-
649 InformationList-RL-SetupRqstTDD PRESENCE optional } |
650   { ID id-DL-CCH-InformationList-RL-SetupRqstTDD CRITICALITY notify   TYPE DL-CCH-
651 InformationList-RL-SetupRqstTDD PRESENCE optional } |
652   { ID id-DCH-InformationList-RL-SetupRqstTDD CRITICALITY reject   TYPE DCH-InformationList-RL-
653 SetupRqstTDD PRESENCE optional } |
654   { ID id-DSCH-InformationList-RL-SetupRqstTDD CRITICALITY ignore   TYPE DSCH-
655 InformationList-RL-SetupRqstTDD PRESENCE optional } |
656   { ID id-USCH-InformationList-RL-SetupRqstTDD CRITICALITY ignore   TYPE USCH-
657 InformationList-RL-SetupRqstTDD PRESENCE optional } |
658   { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject   TYPE RL-Information-RL-
659 SetupRqstTDD PRESENCE mandatory },
660   ...
661 }
662
663 UL-CCH-InformationList-RL-SetupRqstTDD ::= CCH-IE-ContainerList1 { {UL-CCH-
664 InformationItemIEs-RL-SetupRqstTDD} }
665
666 UL-CCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
667   { ID id-UL-CCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify   TYPE UL-CCH-
668 InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
669   ...
670 }
671
672 UL-CCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
673   cCCH-ID          CCH-ID,
674   ul-TFCS          TFCS,
675   tFCI-Coding      TFCI-Coding,
676   ul-PunctureLimit PunctureLimit,
677   iE-Extensions   ProtocolExtensionContainer { {UL-CCH-InformationItem-RL-
678 SetupRqstTDD-ExtIEs} } OPTIONAL,
679   ...
680 }
681
682 UL-CCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
683   ...
684 }
685
686 DL-CCH-InformationList-RL-SetupRqstTDD ::= CCH-IE-ContainerList1 { {DL-CCH-
687 InformationItemIEs-RL-SetupRqstTDD} }
688
689 DL-CCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
690   { ID id-DL-CCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify   TYPE DL-CCH-
691 InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
692   ...
693 }
694
695 DL-CCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
696   cCCH-ID          CCH-ID,
697   dl-TFCS          TFCS,
698   tFCI-Coding      TFCI-Coding,
699   dl-PunctureLimit PunctureLimit,

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```

700     tdd-TPC-DownlinkStepSize      TDD-TPC-DownlinkStepSize,
701     iE-Extensions                  ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-
702 SetupRqstTDD-ExtIEs} } OPTIONAL,
703     ...
704 }
705
706 DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
707     ...
708 }
709
710 DCH-InformationList-RL-SetupRqstTDD      ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
711 InformationItem-RL-SetupRqstTDD
712
713 DCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
714     dCH-ID                          DCH-ID,
715     ul-cCTrCH-ID                     CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
716     dl-cCTrCH-ID                     CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
717     dCH-CombinationInd               DCH-CombinationInd    OPTIONAL,
718     limitedPowerIncrease             LimitedPowerIncrease,
719     trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
720     ul-transportFormatSet           TransportFormatSet,
721     dl-transportFormatSet           TransportFormatSet,
722     ul-BLER                          BLER,
723     dl-BLER                          BLER,
724     allocationRetentionPriority       AllocationRetentionPriority,
725     frameHandlingPriority            FrameHandlingPriority,
726     payloadCRC-PresenceIndicator     PayloadCRC-PresenceIndicator,
727     ul-FP-Mode                      UL-FP-Mode,
728     toAWS                            ToAWS,
729     toAWE                            ToAWE,
730     iE-Extensions                  ProtocolExtensionContainer { {DCH-InformationItem-RL-
731 SetupRqstTDD-ExtIEs} } OPTIONAL,
732     ...
733 }
734
735 DCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
736     ...
737 }
738
739 DSCH-InformationList-RL-SetupRqstTDD ::= DSCH-IE-ContainerList {{DSCH-InformationItem-RL-
740 SetupRqstTDD} }
741
742 DSCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
743     dSCH-ID                          DSCH-ID,
744     dl-ccTrCHID                      CCTrCH-ID,
745     trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
746     transportFormatSet              TransportFormatSet,
747     allocationRetentionPriority       AllocationRetentionPriority,
748     schedulingPriorityIndicator       SchedulingPriorityIndicator,
749     bLER                             BLER,
750     iE-Extensions                  ProtocolExtensionContainer { {DSCH-InformationItem-RL-
751 SetupRqstTDD-ExtIEs} } OPTIONAL,
752     ...
753 }
754
755 DSCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
756     ...
757 }
758
759 USCH-InformationList-RL-SetupRqstTDD ::= USCH-IE-ContainerList {{USCH-InformationItem-RL-
760 SetupRqstTDD} }
761
762 USCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
763     uSCH-ID                          USCH-ID,
764     ul-CCTrCH-ID                     CCTrCH-ID,
765     trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
766     transportFormatSet              TransportFormatSet,
767     allocationRetentionPriority       AllocationRetentionPriority,
768     schedulingPriorityIndicator       SchedulingPriorityIndicator,
769     rb-Info                          RB-Info,
770     iE-Extensions                  ProtocolExtensionContainer { {USCH-InformationItem-RL-
771 SetupRqstTDD-ExtIEs} } OPTIONAL,
772     ...
773 }
774
775 USCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
776     ...
777 }

```

```

778
779 RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity
780
781 RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
782     rL-ID                RL-ID,
783     c-ID                 C-ID,
784     frameOffset         FrameOffset,
785     primaryCCPCH-RSCP   PrimaryCCPCH-RSCP    OPTIONAL,
786     iE-Extensions       ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-
787     ExtIEs} } OPTIONAL,
788     ...
789 }
790
791 RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
792     ...
793 }
794
795 RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
796     ...
797 }
798
799 -- *****
800 --
801 -- RADIO LINK SETUP RESPONSE FDD
802 --
803 -- *****
804
805 RadioLinkSetupResponseFDD ::= SEQUENCE {
806     protocolIEs           ProtocolIE-Container    {{RadioLinkSetupResponseFDD-IEs}},
807     protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-
808     Extensions}}
809     OPTIONAL,
810     ...
811 }
812
813 RadioLinkSetupResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
814     { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE
815     optional } |
816     { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier
817     PRESENCE optional } |
818     { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier
819     PRESENCE optional } |
820     { ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-
821     InformationResponseList-RL-SetupRspFDD PRESENCE mandatory } |
822     { ID id-UL-SIRTarget          CRITICALITY ignore TYPE UL-SIR                PRESENCE
823     optional } |
824     { ID id-DL-SIRTarget          CRITICALITY ignore TYPE DL-SIRTarget        PRESENCE
825     optional } |
826     { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
827     PRESENCE optional },
828     ...
829 }
830
831 RL-InformationResponseList-RL-SetupRspFDD ::= RL-IE-ContainerList1 { {RL-
832     InformationResponseItemIEs-RL-SetupRspFDD} }
833
834 RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
835     { ID id-RL-InformationResponseItem-RL-SetupRspFDD
836     CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD
837     PRESENCE mandatory },
838     ...
839 }
840
841 RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
842     rL-ID                RL-ID,
843     rL-Set-ID           RL-Set-ID,
844     sAI                 SAI,
845     ul-InterferenceLevel UL-InterferenceLevel,
846     secondary-CCPCH-Info Secondary-CCPCH-Info-RL-SetupRspFDD    OPTIONAL,
847     dl-CodeInformation  DL-CodeInformationList-RL-SetupRspFDD,
848     diversityIndication DiversityIndication-RL-SetupRspFDD,
849     sSDT-SupportIndicator SSDT-SupportIndicator,
850     maxUL-SIR           UL-SIR,
851     minUL-SIR           UL-SIR,
852     maximumAllowedULTxPower MaximumAllowedULTxPower,
853     dSCHInformationResponse DSCH-InformationResponse-RL-SetupRspFDD OPTIONAL,
854     neighbouring-CellInformation Neighbouring-CellInformationList-RL-SetupRsp OPTIONAL,
855     iE-Extensions       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-

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```

856     ...
857 }
858
859 RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
860     ...
861 }
862
863 Secondary-CCPCH-Info-RL-SetupRspFDD ::= SEQUENCE {
864     fdd-s-ccpch-offset          FDD-S-CCPCH-Offset,
865     dl-scramblingCode           DL-ScramblingCode,
866     fdd-dl-channelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
867     dl-tfcs                     TFCS,
868     secondaryCCPCH-SlotFormat    SecondaryCCPCH-SlotFormat,
869     tFCI-Presence                TFCI-Presence OPTIONAL,
870     -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to
871 17
872     multiplexingPosition         MultiplexingPosition,
873     sTTD-Indicator              STTD-Indicator,
874     fach-pch-informationList     FACH-PCH-InformationList-RL-SetupRspFDD,
875     schedulingInformation        SchedulingInformation-RL-SetupRspFDD,
876     iE-Extensions               ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-
877 SetupRspFDD-ExtIEs } } OPTIONAL,
878     ...
879 }
880
881 Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
882     ...
883 }
884
885 FACH-PCH-InformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-
886 InformationItem-RL-SetupRspFDD
887
888 FACH-PCH-InformationItem-RL-SetupRspFDD ::= SEQUENCE {
889     transportFormatSet          TransportFormatSet,
890     iE-Extensions               ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-
891 SetupRspFDD-ExtIEs } } OPTIONAL,
892     ...
893 }
894
895 FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
896     ...
897 }
898
899 SchedulingInformation-RL-SetupRspFDD ::= SEQUENCE {
900     iB-SG-Rep                   IB-SG-REP,
901     segmentInformationList       SegmentInformationList-RL-SetupRspFDD,
902     iE-Extensions               ProtocolExtensionContainer { { SchedulingInformation-RL-
903 SetupRspFDD-ExtIEs } } OPTIONAL,
904     ...
905 }
906
907 SchedulingInformation-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
908     ...
909 }
910
911 SegmentInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-
912 SetupRspFDD
913
914 SegmentInformationItem-RL-SetupRspFDD ::= SEQUENCE {
915     iB-SG-POS                    IB-SG-POS,
916     iE-Extensions                ProtocolExtensionContainer { { SegmentInformationItem-RL-
917 SetupRspFDD-ExtIEs } } OPTIONAL,
918     ...
919 }
920
921 SegmentInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
922     ...
923 }
924
925 DL-CodeInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
926 CodeInformationItem-RL-SetupRspFDD
927
928 DL-CodeInformationItem-RL-SetupRspFDD ::= SEQUENCE {
929     dl-scramblingCode            DL-ScramblingCode,
930     fdd-dl-channelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
931     iE-Extensions                ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
932 SetupRspFDD-ExtIEs } } OPTIONAL,
933     ...

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```

934 }
935
936 DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
937   ...
938 }
939 DiversityIndication-RL-SetupRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupRspFDD
940 }}
941
942 DiversityIndicationIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
943   { ID id-DiversityIndicationItem-RL-SetupRspFDD CRITICALITY ignore TYPE
944   DiversityIndicationItem-RL-SetupRspFDD PRESENCE mandatory },
945   ...
946 }
947
948 DiversityIndicationItem-RL-SetupRspFDD ::= CHOICE {
949   combining Combining-RL-SetupRspFDD,
950   nonCombiningOrIENotPresent NonCombiningOrIENotPresen-RL-SetupRspFDD,
951   ...
952 }
953
954 Combining-RL-SetupRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupRspFDD }}
955
956 CombiningIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
957   { ID id-CombiningItem-RL-SetupRspFDD CRITICALITY ignore TYPE CombiningItem-RL-SetupRspFDD
958   PRESENCE mandatory },
959   ...
960 }
961
962 CombiningItem-RL-SetupRspFDD ::= SEQUENCE {
963   rL-ID RL-ID,
964   iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs }
965 } OPTIONAL,
966   ...
967 }
968
969 CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
970   ...
971 }
972
973 NonCombiningOrIENotPresen-RL-SetupRspFDD ::= ProtocolIE-Container {{ NonCombiningOrIENotPresenIE-RL-
974 SetupRspFDD }}
975
976 NonCombiningOrIENotPresenIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
977   { ID id-NonCombiningOrIENotPresenItem-RL-SetupRspFDD CRITICALITY ignore TYPE
978   NonCombiningOrIENotPresenItem-RL-SetupRspFDD PRESENCE mandatory },
979   ...
980 }
981
982 NonCombiningOrIENotPresenItem-RL-SetupRspFDD ::= SEQUENCE {
983   dCH-InformationResponse-RL-SetupRspFDD DCH-InformationResponseList-RL-SetupRspFDD
984   OPTIONAL,
985   iE-Extensions ProtocolExtensionContainer { {
986   NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
987   ...
988 }
989
990 NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
991   ...
992 }
993
994 DCH-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-
995 InformationResponseItem-RL-SetupRspFDD
996
997 DCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
998   dCH-ID DCH-ID,
999   bindingID BindingID,
1000   transportLayerAddress TransportLayerAddress,
1001   iE-Extensions ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
1002 SetupRspFDD-ExtIEs } } OPTIONAL,
1003   ...
1004 }
1005
1006 DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1007   ...
1008 }
1009
1010 DSCH-InformationResponse-RL-SetupRspFDD ::= ProtocolIE-Container {{ DSCH-InformationResponseIE-RL-
1011 SetupRspFDD }}

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```

1012
1013 DSCH-InformationResponseIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
1014   { ID id-DSCH-InformationResponseItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE   DSCH-
1015 InformationResponseItem-RL-SetupRspFDD PRESENCE mandatory },
1016   ...
1017 }
1018
1019 DSCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
1020   dschInformation      DSCHInformation-RL-SetupRspFDD,
1021   pdSCHCodeMapping    PDSCHCodeMapping,
1022   iE-Extensions       ProtocolExtensionContainer { { DSCH-InformationResponseItem-RL-SetupRspFDD-
1023 ExtIEs} } OPTIONAL,
1024   ...
1025 }
1026
1027 DSCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1028   ...
1029 }
1030
1031 DSCHInformation-RL-SetupRspFDD ::= SEQUENCE {
1032   dsch-ID              DSCH-ID,
1033   priorityIndicator    PriorityIndicator-RL-SetupRspFDD,
1034   bindingID            BindingID,
1035   transportLayerAddress TransportLayerAddress,
1036   iE-Extensions       ProtocolExtensionContainer { {DSCHInformation-RL-SetupRspFDD-ExtIEs} }
1037 OPTIONAL,
1038   ...
1039 }
1040
1041 DSCHInformation-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1042   ...
1043 }
1044
1045 PriorityIndicator-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..16)) OF PriorityIndicatorItem-RL-SetupRspFDD
1046
1047 PriorityIndicatorItem-RL-SetupRspFDD ::= SEQUENCE {
1048   schedulingPriorityIndicator SchedulingPriorityIndicator,
1049   mac-c-sh-SDU-Lengths       MAC-c-sh-SDU-LengthList-RL-SetupRspFDD,
1050   iE-Extensions              ProtocolExtensionContainer { {PriorityIndicatorItem-RL-
1051 SetupRspFDD-ExtIEs} } OPTIONAL,
1052   ...
1053 }
1054
1055 PriorityIndicatorItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1056   ...
1057 }
1058
1059 MAC-c-sh-SDU-LengthList-RL-SetupRspFDD ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-
1060 SDU-Length
1061
1062
1063 Neighbouring-CellInformationList-RL-SetupRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF
1064 ProtocolIE-Container { { Neighbouring-CellInformationItemIE-RL-SetupRsp } }
1065
1066 Neighbouring-CellInformationItemIE-RL-SetupRsp RNSAP-PROTOCOL-IES ::= {
1067   { ID id-Neighbouring-CellInformationItem-RL-SetupRsp   CRITICALITY ignore   TYPE
1068 Neighbouring-CellInformationItem-RL-SetupRsp PRESENCE mandatory },
1069   ...
1070 }
1071
1072 Neighbouring-CellInformationItem-RL-SetupRsp ::= SEQUENCE {
1073   rNC-ID              RNC-ID,
1074   cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
1075   cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
1076   per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
1077   per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
1078   iE-Extensions       ProtocolExtensionContainer { {Neighbouring-
1079 CellInformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
1080   ...
1081 }
1082
1083 Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1084   ...
1085 }
1086
1087 Per-FDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF
1088 Per-FDD-Cell-InformationItem-RL-SetupRsp
1089

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1090 Per-FDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
1091     c-ID                               C-ID,
1092     uARFCNforNu                       UARFCN,
1093     uARFCNforNd                       UARFCN,
1094     frameOffset                       FrameOffset           OPTIONAL,
1095     primaryScramblingCode             PrimaryScramblingCode,
1096     primaryCPICH-Power               PrimaryCPICH-Power   OPTIONAL,
1097     cellIndividualOffset             CellIndividualOffset OPTIONAL,
1098     txDiversityIndicator             TxDiversityIndicator OPTIONAL,
1099     sTTD-SupportIndicator            STTD-SupportIndicator OPTIONAL,
1100     closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
1101     closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
1102     iE-Extensions                    ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-
1103     RL-SetupRsp-ExtIEs } } OPTIONAL,
1104     ...
1105 }
1106
1107 Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1108     ...
1109 }
1110
1111 Per-TDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF
1112 Per-TDD-Cell-InformationItem-RL-SetupRsp
1113
1114 Per-TDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
1115     c-ID                               C-ID,
1116     uARFCNforNt                       UARFCN,
1117     frameOffset                       FrameOffset           OPTIONAL,
1118     cellParameterID                  CellParameterID,
1119     syncCase                          SyncCase,
1120     timeSlot                          TimeSlot             OPTIONAL
1121     -- This IE is present only if Sync Case = Case1 -- ,
1122     sCH-TimeSlot                      SCH-TimeSlot        OPTIONAL
1123     -- This IE is present only if Sync Case = Case2 -- ,
1124     cellIndividualOffset             CellIndividualOffset OPTIONAL,
1125     dPCHConstantValue                DPCHConstantValue   OPTIONAL,
1126     pCCPCH-Power                     PCCPCH-Power        OPTIONAL,
1127     iE-Extensions                    ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
1128     SetupRsp-ExtIEs } } OPTIONAL,
1129     ...
1130 }
1131
1132 Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1133     ...
1134 }
1135
1136 RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1137     ...
1138 }
1139
1140 -- *****
1141 --
1142 -- RADIO LINK SETUP RESPONSE TDD
1143 --
1144 -- *****
1145
1146 RadioLinkSetupResponseTDD ::= SEQUENCE {
1147     protocolIEs                       ProtocolIE-Container   {{RadioLinkSetupResponseTDD-IEs}},
1148     protocolExtensions                ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-
1149     Extensions}}                       OPTIONAL,
1150     ...
1151 }
1152
1153 RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
1154     { ID id-D-RNTI                     CRITICALITY ignore TYPE D-RNTI PRESENCE
1155     optional } |
1156     { ID id-CN-PS-DomainIdentifier     CRITICALITY ignore TYPE CN-PS-DomainIdentifier
1157     PRESENCE optional } |
1158     { ID id-CN-CS-DomainIdentifier     CRITICALITY ignore TYPE CN-CS-DomainIdentifier
1159     PRESENCE optional } |
1160     { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-
1161     RL-SetupRspTDD PRESENCE mandatory } |
1162     { ID id-UL-SIRTarget               CRITICALITY ignore TYPE UL-SIR PRESENCE
1163     mandatory } |
1164     { ID id-DL-SIRTarget               CRITICALITY ignore TYPE DL-SIRTarget PRESENCE
1165     mandatory } |
1166     { ID id-CriticalityDiagnostics     CRITICALITY ignore TYPE CriticalityDiagnostics
1167     PRESENCE optional },

```



```

1168     ...
1169 }
1170
1171 RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
1172     rL-ID                RL-ID,
1173     sAI                  SAI,
1174     ul-InterferencePerTimeslot  UL-InterferenceList-RL-SetupRspTDD,
1175     maxUL-SIR            UL-SIR,
1176     minUL-SIR            UL-SIR,
1177     maximumAllowedULTxPower  MaximumAllowedULTxPower,
1178     ul-CCTrCHInformation  UL-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
1179     dl-CCTrCHInformation  DL-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
1180     dCH-InformationResponse  DCH-InformationResponseList-RL-SetupRspTDD,
1181     dsch-InformationResponse  DSCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
1182     usch-InformationResponse  USCH-InformationResponse-RL-SetupRspTDD OPTIONAL,
1183     neighbouring-CellInformationList  Neighbouring-CellInformationList-RL-SetupRsp
1184 OPTIONAL,
1185     -- note: refer to "Neighbouring-CellInformationList-RL-SetupRsp" in the "RL Seup Response FDD
1186     iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponse-RL-
1187 SetupRspTDD-ExtIEs} } OPTIONAL,
1188     ...
1189 }
1190
1191 RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1192     ...
1193 }
1194
1195 UL-InterferenceList-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-
1196 SetupRspTDD
1197
1198 UL-InterferenceItem-RL-SetupRspTDD ::= SEQUENCE {
1199     timeSlot              TimeSlot,
1200     ul-InterferenceLevel  UL-InterferenceLevel,
1201     iE-Extensions        ProtocolExtensionContainer { { UL-InterferenceItem-RL-
1202 SetupRspTDD-ExtIEs} } OPTIONAL,
1203     ...
1204 }
1205
1206 UL-InterferenceItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1207     ...
1208 }
1209
1210 UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Container {{UL-CCTrCHInformationListIEs-RL-
1211 SetupRspTDD}}
1212
1213 UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1214     { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD  CRITICALITY ignore TYPE UL-
1215 CCTrCHInformationListIE-RL-SetupRspTDD  PRESENCE mandatory },
1216     ...
1217 }
1218
1219 UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-
1220 CCTrCHInformationItem-RL-SetupRspTDD
1221
1222 UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
1223     cCTrCH-ID            CCTrCH-ID,
1224     ul-DPCH-Information  UL-DPCH-InformationList-RL-SetupRspTDD,
1225     iE-Extensions        ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-
1226 SetupRspTDD-ExtIEs} } OPTIONAL,
1227     ...
1228 }
1229
1230 UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1231     ...
1232 }
1233
1234 UL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {UL-DPCH-InformationListIEs-RL-
1235 SetupRspTDD} }
1236
1237 UL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1238     { ID id-UL-DPCH-InformationItem-RL-SetupRspTDD  CRITICALITY ignore TYPE UL-DPCH-
1239 InformationItem-RL-SetupRspTDD  PRESENCE mandatory },
1240     ...
1241 }
1242
1243 UL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
1244     dPCH-ID              DPCH-ID,
1245     tDD-ChannelisationCode  TDD-ChannelisationCode,

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1246     burstType                BurstType,
1247     midambleShift             MidambleShift,
1248     timeSlot                  TimeSlot,
1249     tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
1250     repetitionPeriod          RepetitionPeriod,
1251     repetitionLength          RepetitionLength,
1252     tFCI-Presence            TFCI-Presence,
1253     iE-Extensions            ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-
1254 SetupRspTDD-ExtIEs} } OPTIONAL,
1255     ...
1256 }
1257
1258 UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1259     ...
1260 }
1261
1262 DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-
1263 SetupRspTDD}}
1264
1265 DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1266     { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DL-
1267 CCTrCHInformationListIE-RL-SetupRspTDD PRESENCE mandatory },
1268     ...
1269 }
1270
1271 DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-
1272 CCTrCHInformationItem-RL-SetupRspTDD
1273
1274 DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
1275     cCTrCH-ID                CCTrCH-ID,
1276     dl-DPCH-Information      DL-DPCH-InformationList-RL-SetupRspTDD,
1277     iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-
1278 SetupRspTDD-ExtIEs} } OPTIONAL,
1279     ...
1280 }
1281
1282 DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1283     ...
1284 }
1285
1286 DL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {DL-DPCH-InformationListIEs-RL-
1287 SetupRspTDD} }
1288
1289 DL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1290     { ID id-DL-DPCH-InformationItem-RL-SetupRspTDD CRITICALITY ignore TYPE DL-DPCH-
1291 InformationItem-RL-SetupRspTDD PRESENCE mandatory },
1292     ...
1293 }
1294
1295 DL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
1296     dPCH-ID                  DPCH-ID,
1297     tDD-ChannelisationCode   TDD-ChannelisationCode,
1298     burstType                BurstType,
1299     midambleShift             MidambleShift,
1300     timeSlot                  TimeSlot,
1301     tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
1302     repetitionPeriod          RepetitionPeriod,
1303     repetitionLength          RepetitionLength,
1304     tFCI-Presence            TFCI-Presence,
1305     iE-Extensions            ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-
1306 SetupRspTDD-ExtIEs} } OPTIONAL,
1307     ...
1308 }
1309
1310 DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1311     ...
1312 }
1313
1314 DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Container {{DCH-
1315 InformationResponseListIEs-RL-SetupRspTDD}}
1316
1317 DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1318     { ID id-DCH-InformationResponseListIE-RL-SetupRspTDD CRITICALITY ignore TYPE DCH-
1319 InformationResponseListIE-RL-SetupRspTDD PRESENCE mandatory },
1320     ...
1321 }
1322

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```

1323 DCH-InformationResponseListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
1324 InformationResponseItem-RL-SetupRspTDD
1325
1326 DCH-InformationResponseItem-RL-SetupRspTDD ::= SEQUENCE {
1327     dCH-ID                DCH-ID,
1328     bindingID             BindingID,
1329     transportLayerAddress TransportLayerAddress,
1330     iE-Extensions        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
1331 SetupRspTDD-ExtIEs} } OPTIONAL,
1332     ...
1333 }
1334
1335 DCH-InformationResponseItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1336     ...
1337 }
1338
1339 DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Container {{DSCH-InformationList-RL-
1340 SetupRspTDD}}
1341
1342 DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1343     { ID id-DSCH-InformationListIEs-RL-SetupRspTDD     CRITICALITY ignore   TYPE DSCH-
1344 InformationListIEs-RL-SetupRspTDD PRESENCE mandatory },
1345     ...
1346 }
1347
1348 DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCHInformationItem-
1349 RL-SetupRspTDD
1350
1351 DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
1352     dsch-ID                DSCH-ID,
1353     priorityIndicator      PriorityIndicator-RL-SetupRspTDD,
1354     bindingID             BindingID,
1355     transportLayerAddress TransportLayerAddress,
1356     transportFormatManagement TransportFormatManagement,
1357     iE-Extensions        ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs}
1358 } OPTIONAL,
1359     ...
1360 }
1361
1362 DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1363     ...
1364 }
1365
1366 PriorityIndicator-RL-SetupRspTDD ::= SEQUENCE (SIZE(1..16)) OF PriorityIndicatorItem-RL-SetupRspTDD
1367
1368 PriorityIndicatorItem-RL-SetupRspTDD ::= SEQUENCE {
1369     schedulingPriorityIndicator SchedulingPriorityIndicator,
1370     mac-c-sh-SDU-Lengths      MAC-c-sh-SDU-LengthList-RL-SetupRspTDD,
1371     iE-Extensions            ProtocolExtensionContainer { {PriorityIndicatorItem-RL-
1372 SetupRspTDD-ExtIEs} } OPTIONAL,
1373     ...
1374 }
1375
1376 PriorityIndicatorItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1377     ...
1378 }
1379
1380 MAC-c-sh-SDU-LengthList-RL-SetupRspTDD ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-
1381 SDU-Length
1382
1383 USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Container {{USCH-InformationList-RL-
1384 SetupRspTDD}}
1385
1386 USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
1387     { ID id-USCH-InformationListIEs-RL-SetupRspTDD     CRITICALITY ignore   TYPE USCH-
1388 InformationListIEs-RL-SetupRspTDD PRESENCE mandatory },
1389     ...
1390 }
1391
1392 USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(1..maxNoOfUSCHs)) OF USCHInformationItem-
1393 RL-SetupRspTDD
1394
1395 USCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
1396     usch-ID                USCH-ID,
1397     bindingID             BindingID,
1398     transportLayerAddress TransportLayerAddress,
1399     transportFormatManagement TransportFormatManagement,

```

```

1400     iE-Extensions          ProtocolExtensionContainer { {USCHInformationItem-RL-SetupRspTDD-ExtIEs}
1401 } OPTIONAL,
1402     ...
1403 }
1404
1405 USCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1406     ...
1407 }
1408
1409 RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1410     ...
1411 }
1412
1413 -- *****
1414 --
1415 -- RADIO LINK SETUP FAILURE FDD
1416 --
1417 -- *****
1418
1419 RadioLinkSetupFailureFDD ::= SEQUENCE {
1420     protocolIEs          ProtocolIE-Container      {{RadioLinkSetupFailureFDD-IEs}},
1421     protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-
1422 Extensions}}          OPTIONAL,
1423     ...
1424 }
1425
1426 RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
1427     { ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE
1428 optional } |
1429     { ID id-CN-PS-DomainIdentifier          CRITICALITY ignore TYPE CN-PS-DomainIdentifier
1430 PRESENCE optional } |
1431     { ID id-CN-CS-DomainIdentifier          CRITICALITY ignore TYPE CN-CS-DomainIdentifier
1432 PRESENCE optional } |
1433     { ID id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD          CRITICALITY ignore TYPE
1434 UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD          PRESENCE mandatory } |
1435     { ID id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD          CRITICALITY ignore TYPE
1436 SuccessfulRL-InformationResponseList-RL-SetupFailureFDD          PRESENCE optional } |
1437     { ID id-UL-SIRTarget          CRITICALITY ignore TYPE UL-SIR          PRESENCE
1438 optional } |
1439     { ID id-DL-SIRTarget          CRITICALITY ignore TYPE DL-SIRTarget          PRESENCE
1440 optional } |
1441     { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics
1442 PRESENCE optional },
1443     ...
1444 }
1445
1446 UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList1-1 {
1447 {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }
1448
1449 UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
1450     { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
1451          CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
1452 SetupFailureFDD
1453          PRESENCE mandatory },
1454     ...
1455 }
1456
1457 UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
1458     rL-ID          RL-ID,
1459     cause          Cause,
1460     iE-Extensions          ProtocolExtensionContainer { {UnsuccessfulRL-
1461 InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
1462     ...
1463 }
1464
1465 UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1466     ...
1467 }
1468
1469 SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList0-1 { {SuccessfulRL-
1470 InformationResponse-RL-SetupFailureFDD-IEs} }
1471
1472 SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
1473     { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD
1474          CRITICALITY ignore TYPE SuccessfulRL-InformationResponse-RL-
1475 SetupFailureFDD
1476          PRESENCE mandatory },
1477     ...

```

```

1478 }
1479
1480 SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
1481     rL-ID                               RL-ID,
1482     rL-Set-ID                           RL-Set-ID,
1483     sAI                                  SAI,
1484     ul-InterferenceLevel                UL-InterferenceLevel,
1485     dl-CodeInformation                  DL-CodeInformationList-RL-SetupFailureFDD,
1486     diversityIndication                 DiversityIndication-RL-SetupFailureFDD,
1487     sSDT-SupportIndicator               SSDT-SupportIndicator,
1488     maxUL-SIR                           UL-SIR,
1489     minUL-SIR                           UL-SIR,
1490     maximumAllowedULTxPower             MaximumAllowedULTxPower,
1491     dSCH-InformationResponse-RL-SetupFailureFDD  DSCH-InformationResponseList-RL-SetupFailureFDD
1492     OPTIONAL,
1493     neighbouring-CellInformationList     Neighbouring-CellInformationList-RL-SetupFailureFDD
1494 OPTIONAL,
1495     iE-Extensions                       ProtocolExtensionContainer { {SuccessfulRL-
1496 InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
1497     ...
1498 }
1499
1500 SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1501     ...
1502 }
1503
1504
1505 DL-CodeInformationList-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-
1506 SetupFailureFDD }}
1507
1508 DL-CodeInformationListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1509     { ID id-DL-CodeInformationListIE-RL-SetupFailureFDD  CRITICALITY ignore  TYPE DL-
1510 CodeInformationListIE-RL-SetupFailureFDD  PRESENCE mandatory },
1511     ...
1512 }
1513
1514 DL-CodeInformationListIE-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
1515 CodeInformationItem-RL-SetupFailureFDD
1516
1517 DL-CodeInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
1518     dl-ScramblingCode                   DL-ScramblingCode,
1519     fDD-DL-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
1520     iE-Extensions                       ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
1521 SetupFailureFDD-ExtIEs} } OPTIONAL,
1522     ...
1523 }
1524
1525 DL-CodeInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1526     ...
1527 }
1528
1529 DiversityIndication-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
1530 SetupFailureFDD }}
1531
1532 DiversityIndicationIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1533     { ID id-DiversityIndicationItem-RL-SetupFailureFDD  CRITICALITY ignore  TYPE
1534 DiversityIndicationItem-RL-SetupFailureFDD  PRESENCE mandatory },
1535     ...
1536 }
1537
1538 DiversityIndicationItem-RL-SetupFailureFDD ::= CHOICE {
1539     combining                            Combining-RL-SetupFailureFDD,
1540     nonCombiningOrIENotPresent          NonCombiningOrIENotPresen-RL-SetupFailureFDD,
1541     ...
1542 }
1543
1544 Combining-RL-SetupFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupFailureFDD }}
1545
1546 CombiningIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1547     { ID id-CombiningItem-RL-SetupFailureFDD  CRITICALITY ignore  TYPE CombiningItem-RL-
1548 SetupFailureFDD  PRESENCE mandatory },
1549     ...
1550 }
1551
1552 CombiningItem-RL-SetupFailureFDD ::= SEQUENCE {
1553     rL-ID                               RL-ID,
1554     iE-Extensions                       ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-
1555 ExtIEs} } OPTIONAL,

```

```

1556     ...
1557 }
1558
1559 CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1560     ...
1561 }
1562
1563 NonCombiningOrIENotPresen-RL-SetupFailureFDD ::= ProtocolIE-Container {{
1564 NonCombiningOrIENotPresenIE-RL-SetupFailureFDD }}
1565
1566 NonCombiningOrIENotPresenIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1567     { ID id-NonCombiningOrIENotPresenItem-RL-SetupFailureFDD    CRITICALITY ignore    TYPE
1568       NonCombiningOrIENotPresenItem-RL-SetupFailureFDD    PRESENCE mandatory },
1569     ...
1570 }
1571
1572 NonCombiningOrIENotPresenItem-RL-SetupFailureFDD ::= SEQUENCE {
1573     dCH-InformationResponse-RL-SetupFailureFDD    DCH-InformationResponseList-RL-SetupFailureFDD
1574     OPTIONAL,
1575     iE-Extensions                                ProtocolExtensionContainer { {
1576 NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
1577     ...
1578 }
1579
1580 NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1581     ...
1582 }
1583
1584 DCH-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-
1585 InformationResponseItem-RL-SetupFailureFDD
1586
1587 DCH-InformationResponseItem-RL-SetupFailureFDD ::= SEQUENCE {
1588     dCH-ID                                DCH-ID,
1589     bindingID                            BindingID,
1590     transportLayerAddress                TransportLayerAddress,
1591     iE-Extensions                        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
1592 SetupFailureFDD-ExtIEs} } OPTIONAL,
1593     ...
1594 }
1595
1596 DCH-InformationResponseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1597     ...
1598 }
1599
1600 DSCH-InformationResponseList-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DSCH-
1601 InformationResponseListIEs-RL-SetupFailureFDD }}
1602
1603 DSCH-InformationResponseListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1604     { ID id-DSCH-InformationResponseListIE-RL-SetupFailureFDD    CRITICALITY ignore    TYPE DSCH-
1605 InformationResponseListIE-RL-SetupFailureFDD    PRESENCE mandatory },
1606     ...
1607 }
1608
1609 DSCH-InformationResponseListIE-RL-SetupFailureFDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF
1610 DSCHInformationItem-RL-SetupFailureFDD
1611
1612 DSCHInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
1613     dsch-ID                                DSCH-ID,
1614     bindingID                            BindingID,
1615     transportLayerAddress                TransportLayerAddress,
1616     iE-Extensions                        ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupFailureFDD-
1617 ExtIEs} } OPTIONAL,
1618     ...
1619 }
1620
1621 DSCHInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1622     ...
1623 }
1624
1625 Neighbouring-CellInformationList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs))
1626 OF ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-SetupFailureFDD }}
1627
1628 Neighbouring-CellInformationItemIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
1629     { ID id-Neighbouring-CellInformationItem-RL-SetupFailureFDD    CRITICALITY ignore    TYPE
1630 Neighbouring-CellInformationItem-RL-SetupFailureFDD    PRESENCE mandatory },
1631     ...
1632 }
1633

```

```

1634 Neighbouring-CellInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
1635     rNC-ID                               RNC-ID,
1636     cN-PS-DomainIdentifier               CN-PS-DomainIdentifier   OPTIONAL,
1637     cN-CS-DomainIdentifier               CN-CS-DomainIdentifier   OPTIONAL,
1638     per-FDD-Cell-InformationList         Per-FDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
1639     per-TDD-Cell-InformationList         Per-TDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
1640     iE-Extensions                         ProtocolExtensionContainer { {Neighbouring-
1641 CellInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
1642     ...
1643 }
1644
1645 Neighbouring-CellInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1646     ...
1647 }
1648
1649 Per-FDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC))
1650 OF Per-FDD-Cell-InformationItem-RL-SetupFailureFDD
1651
1652 Per-FDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
1653     c-ID                                   C-ID,
1654     uARFCNforNu                           UARFCN,
1655     uARFCNforNd                           UARFCN,
1656     frameOffset                            FrameOffset             OPTIONAL,
1657     primaryScramblingCode                 PrimaryScramblingCode,
1658     primaryCPICH-Power                    PrimaryCPICH-Power     OPTIONAL,
1659     cellIndividualOffset                  CellIndividualOffset   OPTIONAL,
1660     txDiversityIndicator                  TxDiversityIndicator   OPTIONAL,
1661     sTTD-SupportIndicator                 STTD-SupportIndicator  OPTIONAL,
1662     closedLoopModel1-SupportIndicator      ClosedLoopModel1-SupportIndicator OPTIONAL,
1663     closedLoopMode2-SupportIndicator      ClosedLoopMode2-SupportIndicator OPTIONAL,
1664     iE-Extensions                         ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-
1665 RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
1666     ...
1667 }
1668
1669 Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1670     ...
1671 }
1672
1673 Per-TDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC))
1674 OF Per-TDD-Cell-InformationItem-RL-SetupFailureFDD
1675
1676 Per-TDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
1677     c-ID                                   C-ID,
1678     uARFCNforNt                           UARFCN,
1679     frameOffset                            FrameOffset             OPTIONAL,
1680     cellParameterID                       CellParameterID,
1681     syncCase                              SyncCase,
1682     timeSlot                              TimeSlot               OPTIONAL
1683     -- This IE is present only if Sync Case = Case1 -- ,
1684     sCH-TimeSlot                          SCH-TimeSlot           OPTIONAL
1685     -- This IE is present only if Sync Case = Case2 -- ,
1686     cellIndividualOffset                  CellIndividualOffset   OPTIONAL,
1687     dPCHConstantValue                    DPCHConstantValue     OPTIONAL,
1688     pCCPCH-Power                          PCCPCH-Power,
1689     iE-Extensions                         ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
1690 SetupFailureFDD-ExtIEs} } OPTIONAL,
1691     ...
1692 }
1693
1694 Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1695     ...
1696 }
1697
1698 RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1699     ...
1700 }
1701
1702 -- *****
1703 --
1704 -- RADIO LINK SETUP FAILURE TDD
1705 --
1706 -- *****
1707
1708 RadioLinkSetupFailureTDD ::= SEQUENCE {
1709     protocolIEs                           ProtocolIE-Container    {{RadioLinkSetupFailureTDD-IEs}},
1710     protocolExtensions                    ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-
1711 Extensions}}
1712     OPTIONAL,

```

```

1712     ...
1713 }
1714
1715 RadioLinkSetupFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
1716   { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD
1717     CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-
1718   SetupFailureTDD
1719     PRESENCE mandatory } |
1720   { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics
1721     PRESENCE optional },
1722   ...
1723 }
1724
1725 UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
1726   rL-ID          RL-ID,
1727   cause          Cause,
1728   iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-
1729   InformationResponse-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
1730   ...
1731 }
1732
1733 UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1734   ...
1735 }
1736
1737 RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1738   ...
1739 }
1740
1741 -- *****
1742 --
1743 -- RADIO LINK ADDITION REQUEST FDD
1744 --
1745 -- *****
1746
1747 RadioLinkAdditionRequestFDD ::= SEQUENCE {
1748   protocolIEs          ProtocolIE-Container      {{RadioLinkAdditionRequestFDD-IEs}},
1749   protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-
1750   Extensions}}
1751   OPTIONAL,
1752   ...
1753 }
1754
1755 RadioLinkAdditionRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
1756   { ID id-UL-SIRTarget          CRITICALITY reject TYPE UL-SIR          PRESENCE
1757   mandatory } |
1758   { ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-InformationList-RL-
1759   AdditionRqstFDD PRESENCE mandatory },
1760   ...
1761 }
1762
1763 RL-InformationList-RL-AdditionRqstFDD ::= RL-IE-ContainerList1-1 { {RL-Information-RL-
1764   AdditionRqstFDD-IEs} }
1765
1766 RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= {
1767   { ID id-RL-Information-RL-AdditionRqstFDD CRITICALITY notify TYPE RL-Information-RL-
1768   AdditionRqstFDD PRESENCE mandatory },
1769   ...
1770 }
1771
1772 RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
1773   rL-ID          RL-ID,
1774   c-ID          C-ID,
1775   frameOffset   FrameOffset,
1776   chipOffset    ChipOffset,
1777   diversityControlField DiversityControlField,
1778   primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL,
1779   sSDT-CellID   SSDT-CellID OPTIONAL,
1780   transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
1781   -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
1782   iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-
1783   ExtIEs} } OPTIONAL,
1784   ...
1785 }
1786
1787 RL-Information-RL-AdditionRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1788   ...
1789 }

```



```

1790 RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1791   ...
1792 }
1793
1794 -- *****
1795 --
1796 -- RADIO LINK ADDITION REQUEST TDD
1797 --
1798 -- *****
1799
1800 RadioLinkAdditionRequestTDD ::= SEQUENCE {
1801   protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionRequestTDD-IEs}},
1802   protocolExtensions         ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-
1803 Extensions}}                OPTIONAL,
1804   ...
1805 }
1806
1807 RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
1808   { ID id-RL-Information-RL-AdditionRqstTDD    CRITICALITY reject  TYPE RL-Information-RL-
1809 AdditionRqstTDD      PRESENCE mandatory },
1810   ...
1811 }
1812
1813 RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
1814   rL-ID                RL-ID,
1815   c-ID                 C-ID,
1816   frameOffset          FrameOffset,
1817   diversityControlField DiversityControlField,
1818   primaryCCPCH-RSCP    PrimaryCCPCH-RSCP    OPTIONAL,
1819   iE-Extensions        ProtocolExtensionContainer {{RL-Information-RL-AdditionRqstTDD-
1820 ExtIEs}} OPTIONAL,
1821   ...
1822 }
1823
1824 RL-Information-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1825   ...
1826 }
1827
1828 RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
1829   ...
1830 }
1831
1832 -- *****
1833 --
1834 -- RADIO LINK ADDITION RESPONSE FDD
1835 --
1836 -- *****
1837
1838 RadioLinkAdditionResponseFDD ::= SEQUENCE {
1839   protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
1840   protocolExtensions         ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-
1841 Extensions}}                OPTIONAL,
1842   ...
1843 }
1844
1845 RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
1846   { ID id-RL-InformationResponseList-RL-AdditionRspFDD    CRITICALITY ignore  TYPE RL-
1847 InformationResponseList-RL-AdditionRspFDD      PRESENCE mandatory } |
1848   { ID id-CriticalityDiagnostics                    CRITICALITY ignore  TYPE CriticalityDiagnostics
1849 PRESENCE optional },
1850   ...
1851 }
1852
1853 RL-InformationResponseList-RL-AdditionRspFDD ::= RL-IE-ContainerList1-1 { {RL-
1854 InformationResponseItemIEs-RL-AdditionRspFDD} }
1855
1856 RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
1857   { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
1858 CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-AdditionRspFDD
1859 PRESENCE mandatory },
1860   ...
1861 }
1862
1863 RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
1864   rL-ID                RL-ID,
1865   rL-Set-ID            RL-Set-ID,
1866   sAI                  SAI,
1867   ul-InterferenceLevel UL-InterferenceLevel,

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1868     secondary-CCPCH-Info           Secondary-CCPCH-Info-RL-AdditionRspFDD     OPTIONAL,
1869     dl-CodeInformation              DL-CodeInformationList-RL-AdditionRspFDD,
1870     diversityIndication             DiversityIndication-RL-AdditionRspFDD,
1871     sSDT-SupportIndicator           SSdT-SupportIndicator,
1872     minUL-SIR                       UL-SIR,
1873     maxUL-SIR                       UL-SIR,
1874     maximumAllowedULTxPower         MaximumAllowedULTxPower,
1875     neighbouring-CellInformation     Neighbouring-CellInformationList-RL-SetupRsp     OPTIONAL,
1876     iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-
1877 AdditionRspFDD-ExtIEs} } OPTIONAL,
1878     ...
1879 }
1880
1881 RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1882     ...
1883 }
1884
1885 Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
1886     fDD-S-CCPCH-Offset              FDD-S-CCPCH-Offset,
1887     dl-ScramblingCode               DL-ScramblingCode,
1888     fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
1889     dl-TFCS                          TFCS,
1890     secondaryCCPCH-SlotFormat        SecondaryCCPCH-SlotFormat,
1891     tFCI-Presence                   TFCI-Presence     OPTIONAL,
1892     -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to
1893 17
1894     multiplexingPosition             MultiplexingPosition,
1895     sTTD-Indicator                  STTD-Indicator,
1896     fACH-PCH-InformationList         FACH-PCH-InformationList-RL-AdditionRspFDD,
1897     schedulingInformation            SchedulingInformation-RL-AdditionRspFDD,
1898     iE-Extensions                   ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-
1899 AdditionRspFDD-ExtIEs} } OPTIONAL,
1900     ...
1901 }
1902
1903 Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1904     ...
1905 }
1906
1907 FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-
1908 InformationItem-RL-AdditionRspFDD
1909
1910 FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
1911     transportFormatSet              TransportFormatSet,
1912     iE-Extensions                   ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-
1913 AdditionRspFDD-ExtIEs} } OPTIONAL,
1914     ...
1915 }
1916
1917 FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1918     ...
1919 }
1920
1921 SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
1922     iB-SG-Rep                        IB-SG-REP,
1923     segmentInformationList           SegmentInformationList-RL-AdditionRspFDD,
1924     iE-Extensions                   ProtocolExtensionContainer { { SchedulingInformation-RL-
1925 AdditionRspFDD-ExtIEs } } OPTIONAL,
1926     ...
1927 }
1928
1929 SchedulingInformation-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1930     ...
1931 }
1932
1933 SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-
1934 RL-AdditionRspFDD
1935
1936 SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
1937     iB-SG-POS                        IB-SG-POS,
1938     iE-Extensions                   ProtocolExtensionContainer { { SegmentInformationItem-RL-
1939 AdditionRspFDD-ExtIEs } } OPTIONAL,
1940     ...
1941 }
1942
1943 SegmentInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1944     ...
1945 }

```

```

1946
1947 DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-
1948 AdditionRspFDD }}
1949
1950 DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
1951 { ID id-DL-CodeInformationListIE-RL-AdditionRspFDD CRITICALITY ignore TYPE DL-
1952 CodeInformationListIE-RL-AdditionRspFDD PRESENCE mandatory },
1953 ...
1954 }
1955
1956 DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
1957 CodeInformationItem-RL-AdditionRspFDD
1958
1959 DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
1960 dl-ScramblingCode DL-ScramblingCode,
1961 fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
1962 iE-Extensions ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
1963 AdditionRspFDD-ExtIEs} } OPTIONAL,
1964 ...
1965 }
1966
1967 DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1968 ...
1969 }
1970
1971 DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
1972 AdditionRspFDD }}
1973
1974 DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
1975 { ID id-DiversityIndicationItem-RL-AdditionRspFDD CRITICALITY ignore TYPE
1976 DiversityIndicationItem-RL-AdditionRspFDD PRESENCE mandatory },
1977 ...
1978 }
1979
1980 DiversityIndicationItem-RL-AdditionRspFDD ::= CHOICE {
1981 combining Combining-RL-AdditionRspFDD,
1982 nonCombining NonCombining-RL-AdditionRspFDD,
1983 ...
1984 }
1985
1986 Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}
1987
1988 CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
1989 { ID id-CombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE CombiningItem-RL-
1990 AdditionRspFDD PRESENCE mandatory },
1991 ...
1992 }
1993
1994 CombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
1995 rL-ID RL-ID,
1996 iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-
1997 ExtIEs} } OPTIONAL,
1998 ...
1999 }
2000
2001 CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2002 ...
2003 }
2004
2005 NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}
2006
2007 NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
2008 { ID id-NonCombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE NonCombiningItem-RL-
2009 AdditionRspFDD PRESENCE mandatory },
2010 ...
2011 }
2012
2013 NonCombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
2014 dCH-InformationResponse-RL-AdditionRspFDD DCH-InformationResponseList-RL-AdditionRspFDD,
2015 iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-
2016 AdditionRspFDD-ExtIEs} } OPTIONAL,
2017 ...
2018 }
2019
2020 NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2021 ...
2022 }
2023

```

```

2024 DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
2025 InformationResponseItem-RL-AdditionRspFDD
2026
2027 DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
2028     dCH-ID                DCH-ID,
2029     bindingID             BindingID,
2030     transportLayerAddress TransportLayerAddress,
2031     iE-Extensions        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
2032 AdditionRspFDD-ExtIEs} } OPTIONAL,
2033     ...
2034 }
2035
2036 DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2037     ...
2038 }
2039
2040 Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF
2041 Neighbouring-CellInformationItem-RL-AdditionRsp
2042
2043 Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
2044     rNC-ID                RNC-ID,
2045     cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
2046     cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
2047     per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
2048     per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
2049     iE-Extensions        ProtocolExtensionContainer { {Neighbouring-
2050 CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
2051     ...
2052 }
2053
2054 Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2055     ...
2056 }
2057
2058 Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF
2059 Per-FDD-Cell-InformationItem-RL-AdditionRsp
2060
2061 Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
2062     c-ID                  C-ID,
2063     uARFCNforNu          UARFCN,
2064     uARFCNforNd          UARFCN,
2065     frameOffset          FrameOffset OPTIONAL,
2066     primaryScramblingCode PrimaryScramblingCode,
2067     primaryCPICH-Power   PrimaryCPICH-Power OPTIONAL,
2068     cellIndividualOffset CellIndividualOffset OPTIONAL,
2069     txDiversityIndicator TxDiversityIndicator OPTIONAL,
2070     sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
2071     closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
2072     closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
2073     iE-Extensions        ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-
2074 RL-AdditionRsp-ExtIEs} } OPTIONAL,
2075     ...
2076 }
2077
2078 Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2079     ...
2080 }
2081
2082 Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF
2083 Per-TDD-Cell-InformationItem-RL-AdditionRsp
2084
2085 Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
2086     c-ID                  C-ID,
2087     uARFCNforNt          UARFCN,
2088     frameOffset          FrameOffset OPTIONAL,
2089     cellParameterID      CellParameterID,
2090     syncCase             SyncCase,
2091     timeSlot             TimeSlot OPTIONAL
2092     -- This IE is present only if Sync Case = Case1 -- ,
2093     sCH-TimeSlot         SCH-TimeSlot OPTIONAL
2094     -- This IE is present only if Sync Case = Case2 -- ,
2095     cellIndividualOffset CellIndividualOffset OPTIONAL,
2096     dPCHConstantValue   DPCHConstantValue OPTIONAL,
2097     pCCPCH-Power        PCCPCH-Power,
2098     iE-Extensions        ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
2099 AdditionRsp-ExtIEs} } OPTIONAL,
2100     ...
2101 }

```

```

2102
2103 Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2104   ...
2105 }
2106
2107 RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2108   ...
2109 }
2110
2111 -- *****
2112 --
2113 -- RADIO LINK ADDITION RESPONSE TDD
2114 --
2115 -- *****
2116
2117 RadioLinkAdditionResponseTDD ::= SEQUENCE {
2118   protocolIEs                ProtocolIE-Container        {{RadioLinkAdditionResponseTDD-IEs}},
2119   protocolExtensions         ProtocolExtensionContainer  {{RadioLinkAdditionResponseTDD-
2120 Extensions}}
2121   OPTIONAL,
2122   ...
2123 }
2124
2125 RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
2126   { ID id-RL-InformationResponse-RL-AdditionRspTDD
2127     PRESENCE mandatory } |
2128   { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics
2129     PRESENCE optional },
2130   ...
2131 }
2132
2133 RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
2134   rL-ID                RL-ID,
2135   sAI                  SAI,
2136   ul-InterferencePerTimeslot  UL-InterferenceList-RL-AdditionRspTDD,
2137   ul-CCTrCHInformation  UL-CCTrCHInformationList-RL-AdditionRspTDD OPTIONAL,
2138   dl-CCTrCHInformation  DL-CCTrCHInformationList-RL-AdditionRspTDD OPTIONAL,
2139   diversityIndication   DiversityIndication-RL-AdditionRspTDD,
2140   minUL-SIR             UL-SIR,
2141   maxUL-SIR             UL-SIR,
2142   maximumAllowedULTxPower  MaximumAllowedULTxPower,
2143   dSCH-InformationResponse  DSCH-InformationResponse-RL-AdditionRspTDD OPTIONAL,
2144   uSCH-InformationResponse  USCH-InformationResponse-RL-AdditionRspTDD OPTIONAL,
2145   neighbouring-CellInformationList  Neighbouring-CellInformationList-RL-AdditionRspTDD
2146   OPTIONAL,
2147   iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponse-RL-
2148 AdditionRspTDD-ExtIEs} } OPTIONAL,
2149   ...
2150 }
2151
2152 RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2153   ...
2154 }
2155
2156 UL-InterferenceList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-
2157 RL-AdditionRspTDD
2158
2159 UL-InterferenceItem-RL-AdditionRspTDD ::= SEQUENCE {
2160   timeSlot              TimeSlot,
2161   ul-InterferenceLevel  UL-InterferenceLevel,
2162   iE-Extensions        ProtocolExtensionContainer { { UL-InterferenceItem-RL-
2163 AdditionRspTDD-ExtIEs} } OPTIONAL,
2164   ...
2165 }
2166
2167 UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2168   ...
2169 }
2170
2171 UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Container {{UL-CCTrCHInformationListIEs-
2172 RL-AdditionRspTDD}}
2173
2174 UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2175   { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore TYPE UL-
2176 CCTrCHInformationListIE-RL-AdditionRspTDD  PRESENCE mandatory },
2177   ...
2178 }
2179

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2180 UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-
2181 CCTrCHInformationItem-RL-AdditionRspTDD
2182
2183 UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2184     cCTrCH-ID          CCTrCH-ID,
2185     ul-DPCH-Information      UL-DPCH-InformationList-RL-AdditionRspTDD,
2186     iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-
2187 AdditionRspTDD-ExtIEs} } OPTIONAL,
2188     ...
2189 }
2190
2191 UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2192     ...
2193 }
2194
2195 UL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {UL-DPCH-InformationListIEs-
2196 RL-AdditionRspTDD} }
2197
2198 UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2199     { ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD      CRITICALITY ignore  TYPE UL-DPCH-
2200 InformationItem-RL-AdditionRspTDD  PRESENCE mandatory  },
2201     ...
2202 }
2203
2204 UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2205     dPCH-ID          DPCH-ID,
2206     tDD-ChannelisationCode      TDD-ChannelisationCode,
2207     burstType          BurstType,
2208     midambleShift      MidambleShift,
2209     timeSlot          TimeSlot,
2210     tDD-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
2211     repetitionPeriod      RepetitionPeriod,
2212     repetitionLength      RepetitionLength,
2213     tFCI-Presence          TFCI-Presence,
2214     iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-
2215 AdditionRspTDD-ExtIEs} } OPTIONAL,
2216     ...
2217 }
2218
2219 UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2220     ...
2221 }
2222
2223 DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-
2224 RL-AdditionRspTDD}}
2225
2226 DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2227     { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE DL-
2228 CCTrCHInformationListIE-RL-AdditionRspTDD  PRESENCE mandatory  },
2229     ...
2230 }
2231
2232 DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-
2233 CCTrCHInformationItem-RL-AdditionRspTDD
2234
2235 DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2236     cCTrCH-ID          CCTrCH-ID,
2237     dl-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRspTDD,
2238     iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-
2239 AdditionRspTDD-ExtIEs} } OPTIONAL,
2240     ...
2241 }
2242
2243 DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2244     ...
2245 }
2246
2247 DL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {DL-DPCH-InformationListIEs-
2248 RL-AdditionRspTDD} }
2249
2250 DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2251     { ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD      CRITICALITY ignore  TYPE DL-DPCH-
2252 InformationItem-RL-AdditionRspTDD  PRESENCE mandatory  },
2253     ...
2254 }
2255
2256 DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2257     dPCH-ID          DPCH-ID,

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```

2258     tDD-ChannelisationCode      TDD-ChannelisationCode,
2259     burstType                    BurstType,
2260     midambleShift                MidambleShift,
2261     timeSlot                     TimeSlot,
2262     tDD-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
2263     repetitionPeriod             RepetitionPeriod,
2264     repetitionLength             RepetitionLength,
2265     tFCI-Presence                TFCI-Presence,
2266     iE-Extensions                ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-
2267 AdditionRspTDD-ExtIEs} } OPTIONAL,
2268     ...
2269 }
2270
2271 DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2272     ...
2273 }
2274
2275 DiversityIndication-RL-AdditionRspTDD ::= ProtocolIE-Container {{DiversityIndicationIE-RL-
2276 AdditionRspTDD}}
2277
2278 DiversityIndicationIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2279     { ID id-DiversityIndicationItem-RL-AdditionRspTDD CRITICALITY ignore TYPE
2280 DiversityIndicationItem-RL-AdditionRspTDD PRESENCE mandatory },
2281     ...
2282 }
2283
2284 DiversityIndicationItem-RL-AdditionRspTDD ::= CHOICE {
2285     combining      Combining-RL-AdditionRspTDD,
2286     nonCombining  NonCombining-RL-AdditionRspTDD,
2287     ...
2288 }
2289
2290 Combining-RL-AdditionRspTDD ::= ProtocolIE-Container {{CombiningIE-RL-AdditionRspTDD}}
2291
2292 CombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2293     { ID id-CombiningItem-RL-AdditionRspTDD CRITICALITY ignore TYPE CombiningItem-RL-
2294 AdditionRspTDD PRESENCE mandatory },
2295     ...
2296 }
2297
2298 CombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
2299     rL-ID          RL-ID,
2300     iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-
2301 ExtIEs} } OPTIONAL,
2302     ...
2303 }
2304
2305 CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2306     ...
2307 }
2308
2309 NonCombining-RL-AdditionRspTDD ::= ProtocolIE-Container {{NonCombiningIE-RL-AdditionRspTDD}}
2310
2311 NonCombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2312     { ID id-NonCombiningItem-RL-AdditionRspTDD CRITICALITY ignore TYPE NonCombiningItem-RL-
2313 AdditionRspTDD PRESENCE mandatory },
2314     ...
2315 }
2316
2317 NonCombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
2318     dCH-InformationResponse-RL-AdditionRspFDD DCH-InformationResponseList-RL-AdditionRspFDD,
2319     iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-
2320 AdditionRspTDD-ExtIEs} } OPTIONAL,
2321     ...
2322 }
2323
2324 NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2325     ...
2326 }
2327
2328 DCH-InformationResponseList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
2329 InformationResponseItem-RL-AdditionRspTDD
2330
2331 DCH-InformationResponseItem-RL-AdditionRspTDD ::= SEQUENCE {
2332     dCH-ID          DCH-ID,
2333     bindingID       BindingID,
2334     transportLayerAddress TransportLayerAddress,
2335     iE-Extensions  ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
2336 AdditionRspTDD-ExtIEs} } OPTIONAL,

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```

2336     ...
2337 }
2338
2339 DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2340     ...
2341 }
2342
2343 DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Container {{DSCH-InformationListIEs-RL-
2344 AdditionRspTDD}}
2345
2346 DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2347     { ID id-DSCH-InformationListIE-RL-AdditionRspTDD     CRITICALITY ignore     TYPE DSCH-
2348 InformationListIE-RL-AdditionRspTDD     PRESENCE mandatory },
2349     ...
2350 }
2351
2352 DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF
2353 DSCHInformationItem-RL-AdditionRspTDD
2354
2355
2356 DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2357     dsch-ID                DSCH-ID,
2358     priorityIndicator      PriorityIndicator-RL-AdditionRspTDD,
2359     -- diversityIndication present, if CHOICE = nonCombining
2360     diversityIndication    DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
2361     iE-Extensions         ProtocolExtensionContainer { {DSCHInformationItem-RL-AdditionRspTDD-
2362 ExtIEs} } OPTIONAL,
2363     ...
2364 }
2365
2366 DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2367     ...
2368 }
2369
2370 PriorityIndicator-RL-AdditionRspTDD ::= SEQUENCE (SIZE(1..16)) OF PriorityIndicatorItem-RL-
2371 AdditionRspTDD
2372
2373 PriorityIndicatorItem-RL-AdditionRspTDD ::= SEQUENCE {
2374     schedulingPriorityIndicator    SchedulingPriorityIndicator,
2375     mac-c-sh-SDU-Lengths         MAC-c-sh-SDU-LengthList-RL-AdditionRspTDD,
2376     iE-Extensions               ProtocolExtensionContainer { {PriorityIndicatorItem-RL-
2377 AdditionRspTDD-ExtIEs} } OPTIONAL,
2378     ...
2379 }
2380
2381 PriorityIndicatorItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2382     ...
2383 }
2384
2385 MAC-c-sh-SDU-LengthList-RL-AdditionRspTDD ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-
2386 sh-SDU-Length
2387
2388 DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
2389     bindingID                BindingID,
2390     transportLayerAddress    TransportLayerAddress,
2391     iE-Extensions           ProtocolExtensionContainer { {DiversityIndication-RL-AdditionRspTDD2-
2392 ExtIEs} } OPTIONAL,
2393     ...
2394 }
2395 DiversityIndication-RL-AdditionRspTDD2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2396     ...
2397 }
2398
2399 USCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Container {{USCH-InformationListIEs-RL-
2400 AdditionRspTDD}}
2401
2402 USCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
2403     { ID id-USCH-InformationListIE-RL-AdditionRspTDD     CRITICALITY ignore     TYPE USCH-
2404 InformationListIE-RL-AdditionRspTDD     PRESENCE mandatory },
2405     ...
2406 }
2407
2408 USCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(1..maxNoOfUSCHs)) OF
2409 USCHInformationItem-RL-AdditionRspTDD
2410
2411 USCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2412     uSCH-ID                USCH-ID,
2413     -- diversityIndication present, if CHOICE = nonCombining

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```

2414     diversityIndication      DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
2415     iE-Extensions            ProtocolExtensionContainer { {USCHInformationItem-RL-AdditionRspTDD-
2416 ExtIEs} } OPTIONAL,
2417     ...
2418 }
2419
2420 USCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2421     ...
2422 }
2423
2424 Neighbouring-CellInformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs))
2425 OF Neighbouring-CellInformationItem-RL-AdditionRspTDD
2426
2427 Neighbouring-CellInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2428     rNC-ID                    RNC-ID,
2429     cN-PS-DomainIdentifier    CN-PS-DomainIdentifier    OPTIONAL,
2430     cN-CS-DomainIdentifier    CN-CS-DomainIdentifier    OPTIONAL,
2431     per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRspTDD
2432     OPTIONAL,
2433     per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRspTDD
2434     OPTIONAL,
2435     iE-Extensions            ProtocolExtensionContainer { {Neighbouring-
2436 CellInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
2437     ...
2438 }
2439
2440 Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2441     ...
2442 }
2443
2444 Per-FDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC))
2445 OF Per-FDD-Cell-InformationItem-RL-AdditionRspTDD
2446
2447 Per-FDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2448     c-ID                      C-ID,
2449     uARFCNforNu              UARFCN,
2450     uARFCNforNd              UARFCN,
2451     frameOffset              FrameOffset    OPTIONAL,
2452     primaryScramblingCode    PrimaryScramblingCode,
2453     primaryCPICH-Power       PrimaryCPICH-Power    OPTIONAL,
2454     cellIndividualOffset     CellIndividualOffset  OPTIONAL,
2455     txDiversityIndicator     TxDiversityIndicator  OPTIONAL,
2456     sTTD-SupportIndicator    STTD-SupportIndicator  OPTIONAL,
2457     closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator  OPTIONAL,
2458     closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator  OPTIONAL,
2459     iE-Extensions            ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-
2460 RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
2461     ...
2462 }
2463
2464 Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2465     ...
2466 }
2467
2468 Per-TDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC))
2469 OF Per-TDD-Cell-InformationItem-RL-AdditionRspTDD
2470
2471 Per-TDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
2472     c-ID                      C-ID,
2473     uARFCNforNt              UARFCN,
2474     frameOffset              FrameOffset    OPTIONAL,
2475     cellParameterID          CellParameterID,
2476     syncCase                  SyncCase,
2477     timeSlot                  TimeSlot    OPTIONAL
2478     -- This IE is present only if Sync Case = Case1 -- ,
2479     sCH-TimeSlot              SCH-TimeSlot  OPTIONAL
2480     -- This IE is present only if Sync Case = Case2 -- ,
2481     cellIndividualOffset     CellIndividualOffset  OPTIONAL,
2482     dPCHConstantValue        DPCHConstantValue  OPTIONAL,
2483     pCCPCH-Power             PCCPCH-Power,
2484     iE-Extensions            ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
2485 AdditionRspTDD-ExtIEs} } OPTIONAL,
2486     ...
2487 }
2488
2489 Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2490     ...
2491 }

```

```

2492
2493 RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2494   ...
2495 }
2496
2497 -- *****
2498 --
2499 -- RADIO LINK ADDITION FAILURE FDD
2500 --
2501 -- *****
2502
2503 RadioLinkAdditionFailureFDD ::= SEQUENCE {
2504   protocolIEs                ProtocolIE-Container        {{RadioLinkAdditionFailureFDD-IEs}},
2505   protocolExtensions         ProtocolExtensionContainer  {{RadioLinkAdditionFailureFDD-
2506 Extensions}}
2507   ...
2508 }
2509
2510 RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
2511   { ID id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD  CRITICALITY ignore  TYPE
2512 UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD          PRESENCE mandatory } |
2513   { ID id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE
2514 SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD            PRESENCE optional } |
2515   { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics
2516 PRESENCE optional },
2517   ...
2518 }
2519
2520 UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList1-1 {
2521 {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }
2522
2523 UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
2524   { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD  CRITICALITY ignore  TYPE
2525 UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD          PRESENCE mandatory },
2526   ...
2527 }
2528
2529 UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
2530   rL-ID                RL-ID,
2531   cause                Cause,
2532   iE-Extensions        ProtocolExtensionContainer { {UnsuccessfulRL-
2533 InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
2534   ...
2535 }
2536
2537 UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2538   ...
2539 }
2540
2541 SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList0-2 {
2542 {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }
2543
2544 SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
2545   { ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD  CRITICALITY ignore  TYPE
2546 SuccessfulRL-InformationResponse-RL-AdditionFailureFDD          PRESENCE mandatory },
2547   ...
2548 }
2549
2550 SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
2551   rL-ID                RL-ID,
2552   rL-Set-ID            RL-Set-ID,
2553   sAI                  SAI,
2554   ul-InterferenceLevel UL-InterferenceLevel,
2555   dl-CodeInformation   DL-CodeInformationList-RL-AdditionFailureFDD,
2556   diversityIndication  DiversityIndication-RL-AdditionFailureFDD,
2557   sSDT-SupportIndicator SSDT-SupportIndicator,
2558   minUL-SIR            UL-SIR,
2559   maxUL-SIR            UL-SIR,
2560   maximumAllowedULTxPower MaximumAllowedULTxPower,
2561   neighbouring-CellInformationList Neighbouring-CellInformationList-RL-AdditionFailureFDD
2562 OPTIONAL,
2563   iE-Extensions        ProtocolExtensionContainer { {SuccessfulRL-
2564 InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
2565   ...
2566 }
2567
2568 SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2569   ...

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```

2570 }
2571
2572 DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-
2573 RL-AdditionFailureFDD }}
2574
2575 DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
2576   { ID id-DL-CodeInformationListIE-RL-AdditionFailureFDD   CRITICALITY ignore TYPE DL-
2577 CodeInformationListIE-RL-AdditionFailureFDD   PRESENCE mandatory },
2578   ...
2579 }
2580
2581 DL-CodeInformationListIE-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
2582 CodeInformationItem-RL-AdditionFailureFDD
2583
2584 DL-CodeInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
2585   dl-ScramblingCode                DL-ScramblingCode,
2586   fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
2587   iE-Extensions                    ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
2588 AdditionFailureFDD-ExtIEs} } OPTIONAL,
2589   ...
2590 }
2591
2592 DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2593   ...
2594 }
2595
2596 DiversityIndication-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
2597 AdditionFailureFDD }}
2598
2599 DiversityIndicationIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
2600   { ID id-DiversityIndicationItem-RL-AdditionFailureFDD   CRITICALITY ignore TYPE
2601 DiversityIndicationItem-RL-AdditionFailureFDD   PRESENCE mandatory },
2602   ...
2603 }
2604
2605 DiversityIndicationItem-RL-AdditionFailureFDD ::= CHOICE {
2606   combining                Combining-RL-AdditionFailureFDD,
2607   nonCombining            NonCombining-RL-AdditionFailureFDD,
2608   ...
2609 }
2610
2611 Combining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionFailureFDD }}
2612
2613 CombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
2614   { ID id-CombiningItem-RL-AdditionFailureFDD   CRITICALITY ignore   TYPE CombiningItem-RL-
2615 AdditionFailureFDD   PRESENCE mandatory },
2616   ...
2617 }
2618
2619 CombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
2620   rL-ID                RL-ID,
2621   iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-
2622 ExtIEs} } OPTIONAL,
2623   ...
2624 }
2625
2626 CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2627   ...
2628 }
2629
2630 NonCombining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionFailureFDD
2631 }}
2632
2633 NonCombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
2634   { ID id-NonCombiningItem-RL-AdditionFailureFDD   CRITICALITY ignore TYPE NonCombiningItem-RL-
2635 AdditionFailureFDD   PRESENCE mandatory },
2636   ...
2637 }
2638
2639 NonCombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
2640   dCH-InformationResponse-RL-AdditionFailureFDD      DCH-InformationResponseList-RL-
2641 AdditionFailureFDD,
2642   iE-Extensions                                     ProtocolExtensionContainer { { NonCombiningItem-RL-
2643 AdditionFailureFDD-ExtIEs} } OPTIONAL,
2644   ...
2645 }
2646
2647 NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

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2648     ...
2649 }
2650
2651 DCH-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
2652 InformationResponseItem-RL-AdditionFailureFDD
2653
2654 DCH-InformationResponseItem-RL-AdditionFailureFDD ::= SEQUENCE {
2655     dCH-ID                DCH-ID,
2656     bindingID             BindingID,
2657     transportLayerAddress TransportLayerAddress,
2658     iE-Extensions        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
2659 AdditionFailureFDD-ExtIEs} } OPTIONAL,
2660     ...
2661 }
2662
2663 DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2664     ...
2665 }
2666
2667 Neighbouring-CellInformationList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE
2668 (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionFailureFDD
2669
2670 Neighbouring-CellInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
2671     rNC-ID                RNC-ID,
2672     cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
2673     cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
2674     per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionFailureFDD
2675     OPTIONAL,
2676     per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionFailureFDD
2677     OPTIONAL,
2678     iE-Extensions        ProtocolExtensionContainer { {Neighbouring-
2679 CellInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
2680     ...
2681 }
2682
2683 Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2684     ...
2685 }
2686
2687 Per-FDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE
2688 (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD
2689
2690 Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
2691     c-ID                C-ID,
2692     uARFCNforNu        UARFCN,
2693     uARFCNforNd        UARFCN,
2694     frameOffset        FrameOffset OPTIONAL,
2695     primaryScramblingCode PrimaryScramblingCode,
2696     primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
2697     cellIndividualOffset CellIndividualOffset OPTIONAL,
2698     txDiversityIndicator TxDiversityIndicator OPTIONAL,
2699     sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
2700     closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
2701     closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
2702     iE-Extensions        ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-
2703 RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
2704     ...
2705 }
2706
2707 Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2708     ...
2709 }
2710
2711 Per-TDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE
2712 (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD
2713
2714 Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
2715     c-ID                C-ID,
2716     uARFCNforNt        UARFCN,
2717     frameOffset        FrameOffset OPTIONAL,
2718     cellParameterID    CellParameterID,
2719     syncCase            SyncCase,
2720     timeSlot            TimeSlot OPTIONAL
2721     -- This IE is present only if Sync Case = Case1 -- ,
2722     sCH-TimeSlot        SCH-TimeSlot OPTIONAL
2723     -- This IE is present only if Sync Case = Case2 -- ,
2724     cellIndividualOffset CellIndividualOffset OPTIONAL,
2725     dPCHConstantValue  DPCHConstantValue OPTIONAL,

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2726     pCCPCH-Power                PCCPCH-Power,
2727     iE-Extensions                ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
2728 AdditionFailureFDD-ExtIEs} } OPTIONAL,
2729     ...
2730 }
2731
2732 Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2733     ...
2734 }
2735
2736 RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2737     ...
2738 }
2739
2740 -- *****
2741 --
2742 -- RADIO LINK ADDITION FAILURE TDD
2743 --
2744 -- *****
2745
2746 RadioLinkAdditionFailureTDD ::= SEQUENCE {
2747     protocolIEs                ProtocolIE-Container      {{RadioLinkAdditionFailureTDD-IEs}},
2748     protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-
2749 Extensions}}                OPTIONAL,
2750     ...
2751 }
2752
2753 RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
2754     { ID id-UnsuccessfulRL-InformationResponse CRITICALITY ignore TYPE UnsuccessfulRL-
2755 InformationResponse PRESENCE mandatory } |
2756     { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
2757 PRESENCE optional },
2758     ...
2759 }
2760
2761 UnsuccessfulRL-InformationResponse ::= SEQUENCE {
2762     rL-ID                      RL-ID,
2763     cause                      Cause,
2764     iE-Extensions              ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-
2765 ExtIEs} } OPTIONAL,
2766     ...
2767 }
2768
2769 UnsuccessfulRL-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2770     ...
2771 }
2772
2773 RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2774     ...
2775 }
2776
2777 -- *****
2778 --
2779 -- RADIO LINK DELETION REQUEST
2780 --
2781 -- *****
2782
2783 RadioLinkDeletionRequest ::= SEQUENCE {
2784     protocolIEs                ProtocolIE-Container      {{RadioLinkDeletionRequest-IEs}},
2785     protocolExtensions          ProtocolExtensionContainer {{RadioLinkDeletionRequest-
2786 Extensions}}                OPTIONAL,
2787     ...
2788 }
2789
2790 RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= {
2791     { ID id-RL-InformationList-RL-DeletionRqst CRITICALITY notify TYPE RL-InformationList-RL-
2792 DeletionRqst PRESENCE mandatory },
2793     ...
2794 }
2795
2796 RL-InformationList-RL-DeletionRqst ::= RL-IE-ContainerList1 { {RL-Information-RL-
2797 DeletionRqst-IEs} }
2798
2799 RL-Information-RL-DeletionRqst-IEs RNSAP-PROTOCOL-IES ::= {
2800     { ID id-RL-Information-RL-DeletionRqst CRITICALITY notify TYPE RL-Information-RL-
2801 DeletionRqst PRESENCE mandatory },
2802     ...
2803 }

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2804
2805 RL-Information-RL-DeletionRqst ::= SEQUENCE {
2806     rL-ID                RL-ID,
2807     iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs}
2808 } OPTIONAL,
2809     ...
2810 }
2811
2812 RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2813     ...
2814 }
2815
2816 RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2817     ...
2818 }
2819
2820 -- *****
2821 --
2822 -- RADIO LINK DELETION RESPONSE
2823 --
2824 -- *****
2825
2826 RadioLinkDeletionResponse ::= SEQUENCE {
2827     protocolIEs                ProtocolIE-Container        {{RadioLinkDeletionResponse-IEs}},
2828     protocolExtensions        ProtocolExtensionContainer {{RadioLinkDeletionResponse-
2829 Extensions}}
2830     OPTIONAL,
2831     ...
2832 }
2833
2834 RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
2835     { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics
2836     PRESENCE optional },
2837     ...
2838 }
2839
2840 RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
2841     ...
2842 }
2843
2844 -- *****
2845 -- RADIO LINK RECONFIGURATION PREPARE FDD
2846 --
2847 -- *****
2848
2849 RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
2850     protocolIEs                ProtocolIE-Container        {{RadioLinkReconfigurationPrepareFDD-
2851 IEs}},
2852     protocolExtensions        ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-
2853 Extensions}}
2854     OPTIONAL,
2855     ...
2856 }
2857
2858 RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
2859     { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime
2860     PRESENCE optional } |
2861     { ID id-UL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE UL-DPCH-
2862 Information-RL-ReconfPrepFDD          PRESENCE optional } |
2863     { ID id-DL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DL-DPCH-
2864 Information-RL-ReconfPrepFDD          PRESENCE optional } |
2865     { ID id-DCH-ModifyList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DCH-ModifyList-RL-
2866 ReconfPrepFDD          PRESENCE optional } |
2867     { ID id-DCH-AddList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DCH-AddList-RL-
2868 ReconfPrepFDD          PRESENCE optional } |
2869     { ID id-DCH-DeleteList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DCH-DeleteList-RL-
2870 ReconfPrepFDD          PRESENCE optional } |
2871     { ID id-DSCH-Modify-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Modify-RL-
2872 ReconfPrepFDD          PRESENCE optional } |
2873     { ID id-DSCH-Add-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Add-RL-ReconfPrepFDD
2874     PRESENCE optional } |
2875     { ID id-DSCH-Delete-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Delete-RL-
2876 ReconfPrepFDD          PRESENCE optional } |
2877     { ID id-RL-InformationList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE RL-InformationList-RL-
2878 ReconfPrepFDD          PRESENCE optional },
2879     ...
2880 }
2881
2882 UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {

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2882     ul-ScramblingCode                UL-ScramblingCode                OPTIONAL,
2883     ul-SIRTarget                      UL-SIR                          OPTIONAL,
2884     minUL-ChannelisationCodeLength    MinUL-ChannelisationCodeLength  OPTIONAL,
2885     maxNrOfUL-DPDCHs                  MaxNrOfUL-DPDCHs                OPTIONAL
2886     -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 --,
2887     ul-PunctureLimit                  PunctureLimit                    OPTIONAL,
2888     tFCS                               TFCS                             OPTIONAL,
2889     ul-DPCCH-SlotFormat                UL-DPCCH-SlotFormat             OPTIONAL,
2890     sSDT-CellIDLength                  SSdT-CellID-Length              OPTIONAL,
2891     s-FieldLength                      S-FieldLength                    OPTIONAL,
2892     iE-Extensions                      ProtocolExtensionContainer { {UL-DPCH-Information-RL-
2893 ReconfPrepFDD-ExtIEs} } OPTIONAL,
2894     ...
2895 }
2896
2897 UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2898     ...
2899 }
2900
2901 DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
2902     tFCS                               TFCS                             OPTIONAL,
2903     dl-DPCH-SlotFormat                  DL-DPCH-SlotFormat              OPTIONAL,
2904     tFCI-SignallingMode                 TFCI-SignallingMode             OPTIONAL,
2905     tFCI-Presence                       TFCI-Presence                    OPTIONAL
2906     -- This IE is present if Slot Format is from 12 to 16 --,
2907     multiplexingPosition                 MultiplexingPosition             OPTIONAL,
2908     iE-Extensions                      ProtocolExtensionContainer { {DL-DPCH-Information-RL-
2909 ReconfPrepFDD-ExtIEs} } OPTIONAL,
2910     ...
2911 }
2912
2913 DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2914     ...
2915 }
2916
2917 DCH-ModifyList-RL-ReconfPrepFDD          ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-
2918 RL-ReconfPrepFDD
2919
2920 DCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
2921     dCH-ID                             DCH-ID,
2922     ul-TransportformatSet                TransportFormatSet                OPTIONAL,
2923     dl-TransportformatSet                TransportFormatSet                OPTIONAL,
2924     allocationRetentionPriority           AllocationRetentionPriority        OPTIONAL,
2925     frameHandlingPriority                 FrameHandlingPriority              OPTIONAL,
2926     ul-FP-Mode                           UL-FP-Mode                        OPTIONAL,
2927     toAWS                                ToAWS                             OPTIONAL,
2928     toAWE                                ToAWE                             OPTIONAL,
2929     dRACControl                          DRACControl                       OPTIONAL,
2930     iE-Extensions                      ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepFDD-
2931 ExtIEs} } OPTIONAL,
2932     ...
2933 }
2934
2935 DCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2936     ...
2937 }
2938
2939 DCH-AddList-RL-ReconfPrepFDD          ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-
2940 ReconfPrepFDD
2941
2942 DCH-AddItem-RL-ReconfPrepFDD ::= SEQUENCE {
2943     dCH-ID                             DCH-ID,
2944     dCH-CombinationInd                   DCH-CombinationInd               OPTIONAL,
2945     limitedPowerIncrease                  LimitedPowerIncrease,
2946     trCH-SrcStatisticsDescr              TrCH-SrcStatisticsDescr,
2947     ul-TransportformatSet                TransportFormatSet,
2948     dl-TransportformatSet                TransportFormatSet,
2949     ul-BLER                              BLER,
2950     dl-BLER                              BLER,
2951     allocationRetentionPriority           AllocationRetentionPriority,
2952     frameHandlingPriority                 FrameHandlingPriority,
2953     payloadCRC-PresenceIndicator          PayloadCRC-PresenceIndicator,
2954     ul-FP-Mode                           UL-FP-Mode,
2955     qE-Selector                          QE-Selector,
2956     toAWS                                ToAWS,
2957     toAWE                                ToAWE,
2958     dRACControl                          DRACControl,

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2959         iE-Extensions                ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepFDD-
2960 ExtIEs} } OPTIONAL,
2961         ...
2962     }
2963
2964 DCH-AddItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2965     ...
2966 }
2967
2968 DCH-DeleteList-RL-ReconfPrepFDD                ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-
2969 RL-ReconfPrepFDD
2970
2971 DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
2972     dCH-ID                DCH-ID,
2973     iE-Extensions        ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-
2974 ExtIEs} } OPTIONAL,
2975     ...
2976 }
2977
2978 DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2979     ...
2980 }
2981
2982 DSCH-Modify-RL-ReconfPrepFDD ::= SEQUENCE {
2983     dSCH-Information        DSCH-Info-RL-ReconfPrepFDD OPTIONAL,
2984     pdSCH-RL-ID            RL-ID                OPTIONAL,
2985     tFCS                   TFCS                OPTIONAL,
2986     iE-Extensions        ProtocolExtensionContainer { {DSCH-Modify-RL-ReconfPrepFDD-
2987 ExtIEs} } OPTIONAL,
2988     ...
2989 }
2990
2991 DSCH-Modify-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
2992     ...
2993 }
2994
2995 DSCH-Info-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-InformationItem-RL-
2996 ReconfPrepFDD
2997
2998 DSCH-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
2999     dSCH-ID                DSCH-ID,
3000     trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr OPTIONAL,
3001     transportFormatSet     TransportFormatSet     OPTIONAL,
3002     allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
3003     schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
3004     bLER                   BLER                   OPTIONAL,
3005     iE-Extensions        ProtocolExtensionContainer { {DSCH-InformationItem-RL-
3006 ReconfPrepFDD-ExtIEs} } OPTIONAL,
3007     ...
3008 }
3009
3010 DSCH-InformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3011     ...
3012 }
3013
3014 DSCH-Add-RL-ReconfPrepFDD ::= SEQUENCE {
3015     dSCH-Information        DSCH-Info-RL-ReconfPrepFDD,
3016     pdSCH-RL-ID            RL-ID,
3017     tFCS                   TFCS,
3018     iE-Extensions        ProtocolExtensionContainer { {DSCH-Add-RL-ReconfPrepFDD-
3019 ExtIEs} } OPTIONAL,
3020     ...
3021 }
3022
3023 DSCH-Add-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3024     ...
3025 }
3026
3027 DSCH-Delete-RL-ReconfPrepFDD ::= SEQUENCE {
3028     dSCH-Information        DSCH-Info-Delete-RL-ReconfPrepFDD,
3029     iE-Extensions        ProtocolExtensionContainer { {DSCH-Delete-RL-ReconfPrepFDD-
3030 ExtIEs} } OPTIONAL,
3031     ...
3032 }
3033
3034 DSCH-Delete-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3035     ...
3036 }

```



```

3037
3038 DSCH-Info-Delete-RL-ReconfPrepFDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-
3039 DeleteInformationItem-RL-ReconfPrepFDD
3040
3041 DSCH-DeleteInformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
3042     dSCH-ID                DSCH-ID,
3043     IE-Extensions          ProtocolExtensionContainer { {DSCH-DeleteInformationItem-RL-
3044 ReconfPrepFDD-ExtIEs} } OPTIONAL,
3045     ...
3046 }
3047
3048 DSCH-DeleteInformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3049     ...
3050 }
3051
3052 RL-InformationList-RL-ReconfPrepFDD          ::= RL-IE-ContainerList0 { {RL-Information-RL-
3053 ReconfPrepFDD-IEs} }
3054
3055 RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IES ::= {
3056     { ID id-RL-Information-RL-ReconfPrepFDD      CRITICALITY reject  TYPE RL-Information-RL-
3057 ReconfPrepFDD      PRESENCE mandatory },
3058     ...
3059 }
3060
3061 RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
3062     rL-ID                RL-ID,
3063     sSDT-Indication      SSDT-Indication      OPTIONAL,
3064     sSDT-CellIdentity    SSDT-CellID         OPTIONAL
3065     -- The IE may be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
3066     IE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-
3067 ExtIEs} } OPTIONAL,
3068     ...
3069 }
3070
3071 RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3072     ...
3073 }
3074
3075 RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
3076     ...
3077 }
3078
3079 -- *****
3080 --
3081 -- RADIO LINK RECONFIGURATION PREPARE TDD
3082 --
3083 -- *****
3084
3085 RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
3086     protocolIEs          ProtocolIE-Container      {{RadioLinkReconfigurationPrepareTDD-
3087 IEs}},
3088     protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-
3089 Extensions}}
3090     ...
3091 }
3092
3093 RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
3094     { ID id-AllowedQueuingTime      CRITICALITY reject  TYPE AllowedQueuingTime
3095 PRESENCE optional } |
3096     { ID id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-
3097 InformationList-RL-ReconfPrepTDD PRESENCE optional } |
3098     { ID id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-
3099 InformationList-RL-ReconfPrepTDD PRESENCE optional } |
3100     { ID id-DCH-ModifyList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DCH-ModifyList-RL-
3101 ReconfPrepTDD PRESENCE optional } |
3102     { ID id-DCH-AddList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DCH-AddList-RL-
3103 ReconfPrepTDD PRESENCE optional } |
3104     { ID id-DCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DCH-DeleteList-RL-
3105 ReconfPrepTDD PRESENCE optional } |
3106     { ID id-DSCH-ModifyList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DSCH-ModifyList-RL-
3107 ReconfPrepTDD PRESENCE optional } |
3108     { ID id-DSCH-AddList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DSCH-AddList-RL-
3109 ReconfPrepTDD PRESENCE optional } |
3110     { ID id-DSCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject  TYPE DSCH-DeleteList-RL-
3111 ReconfPrepTDD PRESENCE optional } |
3112     { ID id-USCH-ModifyList-RL-ReconfPrepTDD CRITICALITY reject  TYPE USCH-ModifyList-RL-
3113 ReconfPrepTDD PRESENCE optional } |

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3114     { ID id-USCH-AddList-RL-ReconfPrepTDD      CRITICALITY reject  TYPE USCH-AddList-RL-
3115 ReconfPrepTDD          PRESENCE optional } |
3116     { ID id-USCH-DeleteList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE USCH-DeleteList-RL-
3117 ReconfPrepTDD          PRESENCE optional },
3118     ...
3119 }
3120
3121 UL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-
3122 Information-RL-ReconfPrepTDD-IEs} }
3123
3124 UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
3125 { ID id-UL-CCTrCH-Information-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-Information-
3126 RL-ReconfPrepTDD          PRESENCE mandatory },
3127 ...
3128 }
3129
3130 UL-CCTrCH-Information-RL-ReconfPrepTDD ::= SEQUENCE {
3131   cCTrCH-ID          CCTrCH-ID,
3132   tFCS              TFCS          OPTIONAL,
3133   tFCI-Coding       TFCI-Coding   OPTIONAL,
3134   punctureLimit     PunctureLimit OPTIONAL,
3135   iE-Extensions     ProtocolExtensionContainer { {UL-CCTrCH-Information-RL-
3136 ReconfPrepTDD-ExtIEs} } OPTIONAL,
3137   ...
3138 }
3139
3140 UL-CCTrCH-Information-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3141   ...
3142 }
3143
3144 DL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-
3145 Information-RL-ReconfPrepTDD-IEs} }
3146
3147 DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
3148 { ID id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-
3149 InformationItem-RL-ReconfPrepTDD          PRESENCE mandatory },
3150 ...
3151 }
3152
3153 DL-CCTrCH-InformationItem-RL-ReconfPrepTDD ::= SEQUENCE {
3154   cCTrCH-ID          CCTrCH-ID,
3155   tFCS              TFCS          OPTIONAL,
3156   tFCI-Coding       TFCI-Coding   OPTIONAL,
3157   punctureLimit     PunctureLimit OPTIONAL,
3158   iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-
3159 ReconfPrepTDD-ExtIEs} } OPTIONAL,
3160   ...
3161 }
3162
3163 DL-CCTrCH-InformationItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3164   ...
3165 }
3166
3167 DCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-
3168 RL-ReconfPrepTDD
3169
3170 DCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
3171   dCH-ID          DCH-ID,
3172   ul-CCTrCH-ID   CCTrCH-ID      OPTIONAL,
3173   dl-CCTrCH-ID   CCTrCH-ID      OPTIONAL,
3174   ul-TransportformatSet TransportFormatSet OPTIONAL,
3175   dl-TransportformatSet TransportFormatSet OPTIONAL,
3176   allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
3177   frameHandlingPriority FrameHandlingPriority OPTIONAL,
3178   ul-FP-Mode     UL-FP-Mode     OPTIONAL,
3179   toAWS          ToAWS          OPTIONAL,
3180   toAWE          ToAWE          OPTIONAL,
3181   iE-Extensions ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepTDD-
3182 ExtIEs} } OPTIONAL,
3183   ...
3184 }
3185
3186 DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3187   ...
3188 }
3189
3190 DCH-AddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-
3191 ReconfPrepTDD

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```

3192
3193 DCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
3194     dCH-ID                DCH-ID,
3195     ul-CCTrCH-ID         CCTrCH-ID,
3196     dl-CCTrCH-ID         CCTrCH-ID,
3197     dCH-CombinationInd   DCH-CombinationInd OPTIONAL,
3198     limitedPowerIncrease LimitedPowerIncrease,
3199     trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
3200     ul-TransportFormatSet TransportFormatSet,
3201     dl-TransportFormatSet TransportFormatSet,
3202     ul-BLER               BLER,
3203     dl-BLER               BLER,
3204     allocationRetentionPriority AllocationRetentionPriority,
3205     frameHandlingPriority FrameHandlingPriority,
3206     payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
3207     ul-FP-Mode            UL-FP-Mode,
3208     toAWS                 ToAWS,
3209     toAWE                 ToAWE,
3210     iE-Extensions        ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepTDD-
3211 ExtIEs} } OPTIONAL,
3212     ...
3213 }
3214
3215 DCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3216     ...
3217 }
3218
3219 DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-
3220 RL-ReconfPrepTDD
3221
3222 DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
3223     dCH-ID                DCH-ID,
3224     iE-Extensions        ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-
3225 ExtIEs} } OPTIONAL,
3226     ...
3227 }
3228
3229 DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3230     ...
3231 }
3232
3233 DSCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-
3234 ReconfPrepTDD
3235
3236 DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
3237     dSCH-ID                DSCH-ID,
3238     dl-ccTrCHID            CCTrCH-ID
3239     trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr OPTIONAL,
3240     transportFormatSet      TransportFormatSet OPTIONAL,
3241     allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
3242     schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
3243     bLER                   BLER OPTIONAL,
3244     iE-Extensions        ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-
3245 ExtIEs} } OPTIONAL,
3246     ...
3247 }
3248
3249 DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3250     ...
3251 }
3252
3253 DSCH-AddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-AddItem-RL-ReconfPrepTDD
3254
3255 DSCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
3256     dSCH-ID                DSCH-ID,
3257     dl-ccTrCHID            CCTrCH-ID,
3258     trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
3259     transportFormatSet      TransportFormatSet,
3260     allocationRetentionPriority AllocationRetentionPriority,
3261     schedulingPriorityIndicator SchedulingPriorityIndicator,
3262     bLER                   BLER,
3263     iE-Extensions        ProtocolExtensionContainer { {DSCH-AddItem-RL-ReconfPrepTDD-
3264 ExtIEs} } OPTIONAL,
3265     ...
3266 }
3267
3268 DSCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3269     ...

```

```

3270 }
3271
3272 DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-
3273 ReconfPrepTDD
3274
3275 DSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
3276     dSCH-ID                DSCH-ID,
3277     iE-Extensions          ProtocolExtensionContainer { {DSCH-DeleteItem-RL-ReconfPrepTDD-
3278 ExtIEs} } OPTIONAL,
3279     ...
3280 }
3281
3282 DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3283     ...
3284 }
3285
3286 USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(1..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-
3287 ReconfPrepTDD
3288
3289 USCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
3290     uSCH-ID                USCH-ID                                OPTIONAL,
3291     ul-ccTrCHID           CTrCH-ID                                OPTIONAL,
3292     TrCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr    OPTIONAL,
3293     transportFormatSet    TransportFormatSet                OPTIONAL,
3294     allocationRetentionPriority AllocationRetentionPriority    OPTIONAL,
3295     schedulingPriorityIndicator SchedulingPriorityIndicator    OPTIONAL,
3296     bLER                  BLER                                OPTIONAL,
3297     rb-Info              RB-Info,
3298     iE-Extensions          ProtocolExtensionContainer { {USCH-ModifyItem-RL-ReconfPrepTDD-
3299 ExtIEs} } OPTIONAL,
3300     ...
3301 }
3302
3303 USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3304     ...
3305 }
3306
3307 USCH-AddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(1..maxNoOfUSCHs)) OF USCH-AddItem-RL-ReconfPrepTDD
3308
3309 USCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
3310     uSCH-ID                USCH-ID,
3311     ul-ccTrCHID           CTrCH-ID,
3312     TrCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
3313     transportFormatSet    TransportFormatSet,
3314     allocationRetentionPriority AllocationRetentionPriority,
3315     schedulingPriorityIndicator SchedulingPriorityIndicator,
3316     bLER                  BLER,
3317     rb-Info              RB-Info,
3318     iE-Extensions          ProtocolExtensionContainer { {USCH-AddItem-RL-ReconfPrepTDD-
3319 ExtIEs} } OPTIONAL,
3320     ...
3321 }
3322
3323 USCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3324     ...
3325 }
3326
3327 USCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(1..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-
3328 ReconfPrepTDD
3329
3330 USCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
3331     uSCH-ID                USCH-ID,
3332     iE-Extensions          ProtocolExtensionContainer { {USCH-DeleteItem-RL-ReconfPrepTDD-
3333 ExtIEs} } OPTIONAL,
3334     ...
3335 }
3336
3337 USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3338     ...
3339 }
3340
3341 RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
3342     ...
3343 }
3344
3345 -- *****
3346 --
3347 -- RADIO LINK RECONFIGURATION READY FDD

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```

3348 --
3349 -- *****
3350
3351 RadioLinkReconfigurationReadyFDD ::= SEQUENCE {
3352     protocolIEs                ProtocolIE-Container        {{RadioLinkReconfigurationReadyFDD-
3353     IEs}},
3354     protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationReadyFDD-
3355     Extensions}}
3356     OPTIONAL,
3357     ...
3358 }
3359 RadioLinkReconfigurationReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
3360     { ID id-RL-InformationResponseList-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-
3361     InformationResponseList-RL-ReconfReadyFDD              PRESENCE optional  } |
3362     { ID id-CriticalityDiagnostics                          CRITICALITY ignore  TYPE CriticalityDiagnostics
3363     PRESENCE optional  },
3364     ...
3365 }
3366
3367 RL-InformationResponseList-RL-ReconfReadyFDD ::= RL-IE-ContainerList0 { {RL-
3368 InformationResponse-RL-ReconfReadyFDD-IEs} }
3369
3370 RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
3371     { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-
3372     InformationResponseItem-RL-ReconfReadyFDD              PRESENCE mandatory  },
3373     ...
3374 }
3375
3376 RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE {
3377     rL-ID                RL-ID,
3378     max-UL-SIR           UL-SIR                OPTIONAL,
3379     min-UL-SIR           UL-SIR                OPTIONAL,
3380     secondary-CCPCH-Info Secondary-CCPCH-Info-RL-ReconfReadyFDD  OPTIONAL,
3381     dl-CodeInformationList DL-CodeInformationList-RL-ReconfReadyFDD  OPTIONAL,
3382     dCHsToBeAdded        DCH-AddList-RL-ReconfReadyFDD          OPTIONAL,
3383     dCHsToBeModified     DCH-ModifyList-RL-ReconfReadyFDD      OPTIONAL,
3384     dSCHToBeAddedOrModified DSCHToBeAddedOrModified-RL-ReconfReadyFDD  OPTIONAL,
3385     iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponseItem-RL-
3386     ReconfReadyFDD-ExtIEs} } OPTIONAL,
3387     ...
3388 }
3389
3390 RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3391     ...
3392 }
3393
3394 Secondary-CCPCH-Info-RL-ReconfReadyFDD ::= SEQUENCE {
3395     fDD-S-CCPCH-Offset    FDD-S-CCPCH-Offset,
3396     dl-ScramblingCode     DL-ScramblingCode,
3397     fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
3398     dl-TFCS               TFCS,
3399     secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
3400     tFCI-Presence         TFCI-Presence  OPTIONAL,
3401     -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to
3402     17
3403     multiplexingPosition  MultiplexingPosition,
3404     sTTD-Indicator        STTD-Indicator,
3405     fACH-PCH-InformationList FACH-PCH-InformationList-RL-ReconfReadyFDD,
3406     schedulingInformation SchedulingInformation-RL-ReconfReadyFDD,
3407     iE-Extensions        ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-
3408     ReconfReadyFDD-ExtIEs} } OPTIONAL,
3409     ...
3410 }
3411
3412 Secondary-CCPCH-Info-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3413     ...
3414 }
3415
3416 FACH-PCH-InformationList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-
3417 InformationItem-RL-ReconfReadyFDD
3418
3419 FACH-PCH-InformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
3420     transportFormatSet    TransportFormatSet,
3421     iE-Extensions        ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-
3422     ReconfReadyFDD-ExtIEs} } OPTIONAL,
3423     ...
3424 }
3425

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```

3426 FACH-PCH-InformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3427   ...
3428 }
3429
3430 SchedulingInformation-RL-ReconfReadyFDD ::= SEQUENCE {
3431   iB-SG-Rep                IB-SG-REP,
3432   segmentInformationList    SegmentInformationList-RL-ReconfReadyFDD,
3433   iE-Extensions            ProtocolExtensionContainer { { SchedulingInformation-RL-
3434 ReconfReadyFDD-ExtIEs } } OPTIONAL,
3435   ...
3436 }
3437
3438 SchedulingInformation-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3439   ...
3440 }
3441
3442 SegmentInformationList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-
3443 RL-ReconfReadyFDD
3444
3445 SegmentInformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
3446   iB-SG-POS                IB-SG-POS,
3447   iE-Extensions            ProtocolExtensionContainer { { SegmentInformationItem-RL-
3448 ReconfReadyFDD-ExtIEs } } OPTIONAL,
3449   ...
3450 }
3451
3452 SegmentInformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3453   ...
3454 }
3455
3456 DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Container { { DL-CodeInformationListIEs-RL-
3457 ReconfReadyFDD } }
3458
3459 DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
3460   { ID id-DL-CodeInformationListIE-RL-ReconfReadyFDD    CRITICALITY ignore TYPE DL-
3461 CodeInformationListIE-RL-ReconfReadyFDD    PRESENCE mandatory },
3462   ...
3463 }
3464
3465 DL-CodeInformationListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDL-Codes)) OF DL-
3466 CodeInformationItem-RL-ReconfReadyFDD
3467
3468 DL-CodeInformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
3469   dl-ScramblingCode        DL-ScramblingCode,
3470   fdd-DL-ChannelisationCodeNumber    FDD-DL-ChannelisationCodeNumber,
3471   iE-Extensions            ProtocolExtensionContainer { { DL-CodeInformationItem-RL-
3472 ReconfReadyFDD-ExtIEs } } OPTIONAL,
3473   ...
3474 }
3475
3476 DL-CodeInformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3477   ...
3478 }
3479
3480 DCH-AddList-RL-ReconfReadyFDD ::= ProtocolIE-Container { {DCH-AddListIEs-RL-
3481 ReconfReadyFDD} }
3482
3483 DCH-AddListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
3484   { ID id-DCH-AddListIE-RL-ReconfReadyFDD    CRITICALITY ignore TYPE DCH-AddListIE-RL-
3485 ReconfReadyFDD    PRESENCE mandatory },
3486   ...
3487 }
3488
3489 DCH-AddListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-
3490 ReconfReadyFDD
3491
3492 DCH-AddItem-RL-ReconfReadyFDD ::= SEQUENCE {
3493   dCH-ID                    DCH-ID,
3494   bindingID                 BindingID,
3495   transportLayerAddress     TransportLayerAddress,
3496   iE-Extensions            ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfReadyFDD-
3497 ExtIEs} } OPTIONAL,
3498   ...
3499 }
3500
3501 DCH-AddItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3502   ...
3503 }

```

```

3504
3505 DCH-ModifyList-RL-ReconfReadyFDD ::= ProtocolIE-Container { {DCH-ModifyListIEs-RL-
3506 ReconfReadyFDD} }
3507
3508 DCH-ModifyListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
3509 { ID id-DCH-ModifyListIE-RL-ReconfReadyFDD CRITICALITY ignore TYPE DCH-ModifyListIE-RL-
3510 ReconfReadyFDD PRESENCE mandatory },
3511 ...
3512 }
3513
3514 DCH-ModifyListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-
3515 ReconfReadyFDD
3516
3517 DCH-ModifyItem-RL-ReconfReadyFDD ::= SEQUENCE {
3518 dCH-ID DCH-ID,
3519 bindingID BindingID,
3520 transportLayerAddress TransportLayerAddress,
3521 iE-Extensions ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfReadyFDD-
3522 ExtIEs} } OPTIONAL,
3523 ...
3524 }
3525
3526 DCH-ModifyItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3527 ...
3528 }
3529
3530 DSCHToBeAddedOrModified-RL-ReconfReadyFDD ::= ProtocolIE-Container { {DSCHToBeAddedOrModifiedIEs-RL-
3531 ReconfReadyFDD} }
3532
3533 DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
3534 { ID id-DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD CRITICALITY ignore TYPE
3535 DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD PRESENCE mandatory },
3536 ...
3537 }
3538
3539 DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD ::= SEQUENCE {
3540 dschInformation DSCHInformation-RL-ReconfReadyFDD,
3541 pdSCHCodeMapping PDSCHCodeMapping,
3542 iE-Extensions ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD-
3543 ExtIEs} } OPTIONAL,
3544 ...
3545 }
3546
3547 DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3548 ...
3549 }
3550
3551 DSCHInformation-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCHInformationItem-RL-
3552 ReconfReadyFDD
3553
3554 DSCHInformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
3555 dsch-ID DSCH-ID,
3556 priorityIndicator PriorityIndicator-RL-ReconfReadyFDD,
3557 bindingID BindingID,
3558 transportLayerAddress TransportLayerAddress,
3559 iE-Extensions ProtocolExtensionContainer { {DSCHInformation-RL-ReconfReadyFDD-ExtIEs}
3560 } OPTIONAL,
3561 ...
3562 }
3563
3564 DSCHInformation-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3565 ...
3566 }
3567
3568 PriorityIndicator-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..16)) OF PriorityIndicatorItem-RL-
3569 ReconfReadyFDD
3570
3571 PriorityIndicatorItem-RL-ReconfReadyFDD ::= SEQUENCE {
3572 schedulingPriorityIndicator SchedulingPriorityIndicator,
3573 mac-c-sh-SDU-Lengths MAC-c-sh-SDU-LengthList-RL-ReconfReadyFDD,
3574 iE-Extensions ProtocolExtensionContainer { {PriorityIndicatorItem-RL-
3575 ReconfReadyFDD-ExtIEs} } OPTIONAL,
3576 ...
3577 }
3578
3579 PriorityIndicatorItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3580 ...
3581 }

```

```

3582
3583 MAC-c-sh-SDU-LengthList-RL-ReconfReadyFDD ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-
3584 sh-SDU-Length
3585
3586
3587 RadioLinkReconfigurationReadyFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
3588   ...
3589 }
3590
3591 -- *****
3592 --
3593 -- RADIO LINK RECONFIGURATION READY TDD
3594 --
3595 -- *****
3596
3597 RadioLinkReconfigurationReadyTDD ::= SEQUENCE {
3598   protocolIEs                ProtocolIE-Container        {{RadioLinkReconfigurationReadyTDD-
3599   IEs}},
3600   protocolExtensions          ProtocolExtensionContainer {{RadioLinkReconfigurationReadyTDD-
3601   Extensions}}
3602   OPTIONAL,
3603   ...
3604 }
3605
3606 RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= {
3607   { ID id-RL-InformationResponse-RL-ReconfReadyTDD
3608     PRESENCE optional } |
3609   { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics
3610     PRESENCE optional },
3611   ...
3612 }
3613
3614 RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE {
3615   rL-ID                RL-ID,
3616   max-UL-SIR           UL-SIR          OPTIONAL,
3617   min-UL-SIR           UL-SIR          OPTIONAL,
3618   ul-CCTrCH-Information UL-CCTrCH-InformationList-RL-ReconfReadyTDD OPTIONAL,
3619   dl-CCTrCH-Information DL-CCTrCH-InformationList-RL-ReconfReadyTDD OPTIONAL,
3620   dCHsToBeAdded        DCH-AddList-RL-ReconfReadyTDD          OPTIONAL,
3621   dCHsToBeModified     DCH-ModifyList-RL-ReconfReadyTDD       OPTIONAL,
3622   dSCHsToBeAddedOrModified DSCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL,
3623   uSCHsToBeAddedOrModified USCHToBeAddedOrModified-RL-ReconfReadyTDD OPTIONAL,
3624   iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponse-RL-
3625   ReconfReadyTDD-ExtIEs} } OPTIONAL,
3626   ...
3627 }
3628
3629 RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3630   ...
3631 }
3632
3633 UL-CCTrCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Container {{UL-
3634 CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
3635
3636 UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3637   { ID id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-
3638   CCTrCHInformationListIE-RL-ReconfReadyTDD PRESENCE mandatory },
3639   ...
3640 }
3641
3642 UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-
3643 InformationItem-RL-ReconfReadyTDD
3644
3645 UL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
3646   cCTrCH-ID            CCTrCH-ID,
3647   ul-DPCH-Information UL-DPCH-InformationList-RL-ReconfReadyTDD,
3648   iE-Extensions        ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-
3649   ReconfReadyTDD-ExtIEs} } OPTIONAL,
3650   ...
3651 }
3652
3653 UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3654   ...
3655 }
3656
3657 UL-DPCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Container {{UL-DPCH-InformationListIEs-RL-
3658 ReconfReadyTDD}}
3659

```



```

3660 UL-DPCH-InformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3661   { ID id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD   CRITICALITY ignore   TYPE UL-DPCH-
3662   InformationListIE-RL-ReconfReadyTDD   PRESENCE mandatory },
3663   ...
3664 }
3665
3666 UL-DPCH-InformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-
3667 InformationItem-RL-ReconfReadyTDD
3668
3669 UL-DPCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
3670   dPCH-ID                DPCH-ID,
3671   tDD-ChannelisationCode  TDD-ChannelisationCode          OPTIONAL,
3672   burstType              BurstType          OPTIONAL,
3673   midambleShift          MidambleShift      OPTIONAL,
3674   timeSlot               TimeSlot          OPTIONAL,
3675   tDD-PhysicalChannelOffset  TDD-PhysicalChannelOffset  OPTIONAL,
3676   repetitionPeriod       RepetitionPeriod  OPTIONAL,
3677   repetitionLength       RepetitionLength  OPTIONAL,
3678   tFCI-Presence          TFCI-Presence     OPTIONAL,
3679   iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-InformationList-RL-
3680   ReconfReadyTDD-ExtIEs} } OPTIONAL,
3681   ...
3682 }
3683
3684 UL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3685   ...
3686 }
3687
3688 DL-CCTrCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Container {{DL-
3689 CCTrCHInformationListIEs-RL-ReconfReadyTDD}}
3690
3691 DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3692   { ID id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD   CRITICALITY ignore   TYPE DL-
3693   CCTrCHInformationListIE-RL-ReconfReadyTDD   PRESENCE mandatory },
3694   ...
3695 }
3696
3697 DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-
3698 InformationItem-RL-ReconfReadyTDD
3699
3700 DL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
3701   cCTrCH-ID                CCTrCH-ID,
3702   dl-DPCH-Information       DL-DPCH-InformationList-RL-ReconfReadyTDD,
3703   iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-
3704   ReconfReadyTDD-ExtIEs} } OPTIONAL,
3705   ...
3706 }
3707
3708 DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3709   ...
3710 }
3711
3712 DL-DPCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Container {{DL-DPCH-InformationListIEs-RL-
3713 ReconfReadyTDD}}
3714
3715 DL-DPCH-InformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3716   { ID id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD   CRITICALITY ignore   TYPE DL-DPCH-
3717   InformationListIE-RL-ReconfReadyTDD   PRESENCE mandatory },
3718   ...
3719 }
3720
3721 DL-DPCH-InformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-
3722 InformationItem-RL-ReconfReadyTDD
3723
3724 DL-DPCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
3725   dPCH-ID                DPCH-ID,
3726   tDD-ChannelisationCode  TDD-ChannelisationCode          OPTIONAL,
3727   burstType              BurstType          OPTIONAL,
3728   midambleShift          MidambleShift      OPTIONAL,
3729   timeSlot               TimeSlot          OPTIONAL,
3730   tDD-PhysicalChannelOffset  TDD-PhysicalChannelOffset  OPTIONAL,
3731   repetitionPeriod       RepetitionPeriod  OPTIONAL,
3732   repetitionLength       RepetitionLength  OPTIONAL,
3733   tFCI-Presence          TFCI-Presence     OPTIONAL,
3734   iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationList-RL-
3735   ReconfReadyTDD-ExtIEs} } OPTIONAL,
3736   ...
3737 }

```

```

3738
3739 DL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3740   ...
3741 }
3742
3743 DCH-AddList-RL-ReconfReadyTDD ::= ProtocolIE-Container { {DCH-AddListIEs-RL-
3744 ReconfReadyTDD} }
3745
3746 DCH-AddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3747   { ID id-DCH-AddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DCH-AddListIE-RL-
3748 ReconfReadyTDD PRESENCE mandatory },
3749   ...
3750 }
3751
3752 DCH-AddListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-
3753 ReconfReadyTDD
3754
3755 DCH-AddItem-RL-ReconfReadyTDD ::= SEQUENCE {
3756   dCH-ID DCH-ID,
3757   bindingID BindingID,
3758   transportLayerAddress TransportLayerAddress,
3759   iE-Extensions ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfReadyTDD-
3760 ExtIEs} } OPTIONAL,
3761   ...
3762 }
3763
3764 DCH-AddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3765   ...
3766 }
3767
3768 DCH-ModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Container { {DCH-ModifyListIEs-RL-
3769 ReconfReadyTDD} }
3770
3771 DCH-ModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3772   { ID id-DCH-ModifyListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DCH-
3773 ModifyListIE-RL-ReconfReadyTDD PRESENCE mandatory },
3774   ...
3775 }
3776
3777 DCH-ModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-
3778 ReconfReadyTDD
3779
3780 DCH-ModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
3781   dCH-ID DCH-ID,
3782   bindingID BindingID,
3783   transportLayerAddress TransportLayerAddress,
3784   iE-Extensions ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfReadyTDD-
3785 ExtIEs} } OPTIONAL,
3786   ...
3787 }
3788
3789 DCH-ModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3790   ...
3791 }
3792
3793 DSCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Container {
3794 {DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }
3795
3796 DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3797   { ID id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE
3798 DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory },
3799   ...
3800 }
3801
3802 DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF
3803 DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD
3804
3805 DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
3806   dsch-ID DSCH-ID,
3807   priorityIndicator PriorityIndicator-RL-ReconfReadyTDD,
3808   bindingID BindingID,
3809   transportLayerAddress TransportLayerAddress,
3810   iE-Extensions ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-
3811 ReconfReadyTDD-ExtIEs} } OPTIONAL,
3812   ...
3813 }
3814
3815 DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

3816     ...
3817 }
3818
3819 PriorityIndicator-RL-ReconfReadyTDD ::= SEQUENCE (SIZE(1..16)) OF PriorityIndicatorItem-RL-
3820 ReconfReadyTDD
3821
3822 PriorityIndicatorItem-RL-ReconfReadyTDD ::= SEQUENCE {
3823     schedulingPriorityIndicator      SchedulingPriorityIndicator,
3824     mAC-c-sh-SDU-Lengths            MAC-c-sh-SDU-LengthList-RL-ReconfReadyTDD,
3825     iE-Extensions                   ProtocolExtensionContainer { {PriorityIndicatorItem-RL-
3826 ReconfReadyTDD-ExtIEs} } OPTIONAL,
3827     ...
3828 }
3829
3830 PriorityIndicatorItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3831     ...
3832 }
3833
3834 MAC-c-sh-SDU-LengthList-RL-ReconfReadyTDD ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-
3835 sh-SDU-Length
3836
3837
3838 USCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Container {
3839 {USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }
3840
3841 USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
3842     { ID id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE
3843 USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory },
3844     ...
3845 }
3846
3847 USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNoOfUSCHs)) OF
3848 USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD
3849
3850 USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
3851     uSCH-ID                USCH-ID,
3852     bindingID              BindingID,
3853     transportLayerAddress  TransportLayerAddress,
3854     iE-Extensions         ProtocolExtensionContainer { {USCHToBeAddedOrModifiedItem-RL-
3855 ReconfReadyTDD-ExtIEs} } OPTIONAL,
3856     ...
3857 }
3858
3859 USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
3860     ...
3861 }
3862
3863 RadioLinkReconfigurationReadyTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
3864     ...
3865 }
3866
3867 -- *****
3868 --
3869 -- RADIO LINK RECONFIGURATION COMMIT
3870 --
3871 -- *****
3872
3873
3874 < Some text omitted here >
3875

```

```

1
2
3 -- *****
4 --
5 -- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
6 --
7 -- *****
8
9 CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
10     protocolIEs                ProtocolIE-Container
11     {{CommonTransportChannelResourcesResponseFDD-IEs}},
12     protocolExtensions          ProtocolExtensionContainer
13     {{CommonTransportChannelResourcesResponseFDD-Extensions}}          OPTIONAL,
14     ...
15 }
16
17 CommonTransportChannelResourcesResponseFDD-IES RNSAP-PROTOCOL-IES ::= {
18     { ID id-S-RNTI                CRITICALITY ignore TYPE S-RNTI                PRESENCE
19     mandatory } |
20     { ID id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE
21     FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD PRESENCE mandatory } |
22     { ID id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-
23     InfoForOptionalS-CCPCH-CTCH-ResourceRspFDD PRESENCE optional } |
24     { ID id-TransportLayerAddress CRITICALITY ignore TYPE TransportLayerAddress
25     PRESENCE optional } |
26     { ID id-BindingID                CRITICALITY ignore TYPE BindingID                PRESENCE
27     optional } |
28     { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
29     PRESENCE optional },
30     ...
31 }
32
33 FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
34     priorityIndicatorAndInitialWindowSizes PriorityIndicatorAndInitialWindowSizeList-CTCH-
35     ResourceRspFDD,
36     iE-Extensions                ProtocolExtensionContainer { {FACH-InfoForS-CCPCH-
37     CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
38     ...
39 }
40
41 FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
42     ...
43 }
44
45 PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{
46     PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD }}
47
48 PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
49     { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE
50     PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD PRESENCE mandatory },
51     ...
52 }
53
54 PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF
55 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD
56
57 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD ::= SEQUENCE {
58     fACH-PriorityIndicator                SchedulingPriorityIndicator,
59     mAC-c-sh-SDU-Lengths                MAC-c-sh-SDU-LengthList-CTCH-ResourceRspFDD,
60     fACH-InitialWindowSize                FACH-InitialWindowSize,
61     iE-Extensions                ProtocolExtensionContainer {
62     {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
63     ...
64 }
65
66 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
67     ...
68 }
69
70 MAC-c-sh-SDU-LengthList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-sh-SDU-LengthListIEs-
71     CTCH-ResourceRspFDD }}
72
73 MAC-c-sh-SDU-LengthListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
74     { ID id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE MAC-c-sh-
75     SDU-LengthListIE-CTCH-ResourceRspFDD PRESENCE mandatory },
76     ...
77 }
78

```

```

79 MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcshSDU-Length)) OF
80 MAC-c-sh-SDU-LengthItem-CTCH-ResourceRspFDD
81
82 MAC-c-sh-SDU-LengthItem-CTCH-ResourceRspFDD ::= SEQUENCE {
83   MAC-c-sh-SDU-Length          MAC-c-sh-SDU-Length,
84   IE-Extensions                ProtocolExtensionContainer { {MAC-c-sh-SDU-LengthItem-CTCH-
85 ResourceRspFDD-ExtIEs} } OPTIONAL,
86   ...
87 }
88
89 MAC-c-sh-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
90   ...
91 }
92
93 FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
94   fDD-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
95   dl-ScramblingCode           DL-ScramblingCode,
96   fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
97   dl-TFCS                      TFCS,
98   secondaryCCPCH-SlotFormat    SecondaryCCPCH-SlotFormat,
99   multiplexingPosition         MultiplexingPosition,
100  sTTD-Indicator               STTD-Indicator,
101  priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-option-
102 CTCH-ResourceRspFDD,
103  IE-Extensions                ProtocolExtensionContainer { {FACH-InfoForOptionals-CCPCH-CTCH-
104 ResourceRspFDD-ExtIEs} } OPTIONAL,
105  ...
106 }
107
108 FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
109   ...
110 }
111
112 PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{
113 PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspFDD }}
114
115 PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
116   { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD CRITICALITY
117 ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD PRESENCE
118 mandatory },
119   ...
120 }
121
122 PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16))
123 OF PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD
124
125 PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
126   fACH-PriorityIndicator       SchedulingPriorityIndicator,
127   MAC-c-sh-SDU-Lengths        MAC-c-sh-SDU-LengthList-option-CTCH-ResourceRspFDD,
128   fACH-InitialWindowSize      FACH-InitialWindowSize,
129   IE-Extensions                ProtocolExtensionContainer {
130 {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
131   ...
132 }
133
134 PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION
135 ::= {
136   ...
137 }
138
139 MAC-c-sh-SDU-LengthList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-sh-SDU-
140 LengthListIEs-option-CTCH-ResourceRspFDD }}
141
142 MAC-c-sh-SDU-LengthListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
143   { ID id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspFDD CRITICALITY ignore TYPE MAC-
144 c-sh-SDU-LengthListIE-option-CTCH-ResourceRspFDD PRESENCE mandatory },
145   ...
146 }
147
148 MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcshSDU-
149 Length)) OF MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspFDD
150
151 MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
152   MAC-c-sh-SDU-Length          MAC-c-sh-SDU-Length,
153   IE-Extensions                ProtocolExtensionContainer { {MAC-c-sh-SDU-LengthItem-option-
154 CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
155   ...
156 }

```

```

157
158 MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
159   ...
160 }
161
162 CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
163   ...
164 }
165
166 -- *****
167 --
168 -- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
169 --
170 -- *****
171
172 CommonTransportChannelResourcesResponseTDD ::= SEQUENCE {
173   protocolIEs                ProtocolIE-Container
174   {{CommonTransportChannelResourcesResponseTDD-IEs}},
175   protocolExtensions         ProtocolExtensionContainer
176   {{CommonTransportChannelResourcesResponseTDD-Extensions}}    OPTIONAL,
177   ...
178 }
179
180 CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
181   { ID id-S-RNTI                CRITICALITY ignore TYPE S-RNTI                PRESENCE
182   mandatory } |
183   { ID id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-
184   InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD PRESENCE mandatory } |
185   { ID id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-
186   InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD PRESENCE optional } |
187   { ID id-TransportLayerAddress CRITICALITY ignore TYPE TransportLayerAddress
188   PRESENCE optional } |
189   { ID id-BindingID            CRITICALITY ignore TYPE BindingID            PRESENCE
190   optional } |
191   { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
192   PRESENCE optional },
193   ...
194 }
195
196 FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD ::= SEQUENCE {
197   priorityIndicatorAndInitialWindowSize          PriorityIndicatorAndInitialWindowSizeList-CTCH-
198   ResourceRspTDD,
199   iE-Extensions                                ProtocolExtensionContainer { {FACH-InfoForS-CCPCH-
200   CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
201   ...
202 }
203
204 FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
205   ...
206 }
207
208 PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{
209   PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD }}
210
211 PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
212   { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE
213   PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
214   ...
215 }
216
217 PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF
218 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD
219
220 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD ::= SEQUENCE {
221   fACH-PriorityIndicator          SchedulingPriorityIndicator,
222   MAC-c-sh-SDU-Lengths           MAC-c-sh-SDU-LengthList-CTCH-ResourceRspTDD,
223   fACH-InitialWindowSize         FACH-InitialWindowSize,
224   iE-Extensions                  ProtocolExtensionContainer {
225   {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
226   ...
227 }
228
229 PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
230   ...
231 }
232
233 MAC-c-sh-SDU-LengthList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-sh-SDU-LengthListIEs-
234   CTCH-ResourceRspTDD }}

```

```

235
236 MAC-c-sh-SDU-LengthListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
237   { ID id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE MAC-c-sh-
238   SDU-LengthListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
239   ...
240 }
241
242 MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcshSDU-Length)) OF
243 MAC-c-sh-SDU-LengthItem-CTCH-ResourceRspTDD
244
245 MAC-c-sh-SDU-LengthItem-CTCH-ResourceRspTDD ::= SEQUENCE {
246   MAC-c-sh-SDU-Length MAC-c-sh-SDU-Length,
247   iE-Extensions ProtocolExtensionContainer { {MAC-c-sh-SDU-LengthList-CTCH-
248   ResourceRspTDD-ExtIEs} } OPTIONAL,
249   ...
250 }
251
252 MAC-c-sh-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
253   ...
254 }
255
256 FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
257   dl-TFCS TFCS,
258   secondaryCCPCHs SecondaryCCPCHList-CTCH-ResourceRspTDD,
259   iE-Extensions ProtocolExtensionContainer { {FACH-InfoForOptionals-CCPCH-CTCH-
260   ResourceRspTDD-ExtIEs} } OPTIONAL,
261   ...
262 }
263
264 FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
265   ...
266 }
267
268 SecondaryCCPCHList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ SecondaryCCPCHListIEs-CTCH-
269   ResourceRspTDD }}
270
271 SecondaryCCPCHListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
272   { ID id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE
273   SecondaryCCPCHListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
274   ...
275 }
276
277 SecondaryCCPCHListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF
278 SecondaryCCPCHItem-CTCH-ResourceRspTDD
279
280 SecondaryCCPCHItem-CTCH-ResourceRspTDD ::= SEQUENCE {
281   tDD-ChannelisationCode TDD-ChannelisationCode,
282   timeSlot TimeSlot,
283   burstType BurstType,
284   midambleShift MidambleShift,
285   tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
286   repetitionPeriod RepetitionPeriod,
287   repetitionLength RepetitionLength,
288   priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-CTCH-
289   ResourceRspTDD,
290   iE-Extensions ProtocolExtensionContainer { {SecondaryCCPCHItem-CTCH-
291   ResourceRspTDD-ExtIEs} } OPTIONAL,
292   ...
293 }
294
295 SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
296   ...
297 }
298
299 PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{
300   PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD }}
301
302 PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
303   { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD CRITICALITY
304   ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD PRESENCE
305   mandatory },
306   ...
307 }
308
309 PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16))
310 OF PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD
311
312 PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {

```

```
313     fACH-PriorityIndicator          SchedulingPriorityIndicator,
314     mAC-c-sh-SDU-Lengths           MAC-c-sh-SDU-LengthList-option-CTCH-ResourceRspTDD,
315     fACH-InitialWindowSize         FACH-InitialWindowSize,
316     iE-Extensions                  ProtocolExtensionContainer {
317 {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
318     ...
319 }
320
321 PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION
322 ::= {
323     ...
324 }
325
326 MAC-c-sh-SDU-LengthList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-sh-SDU-
327 LengthListIEs-option-CTCH-ResourceRspTDD }}
328
329 MAC-c-sh-SDU-LengthListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
330     { ID id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspTDD     CRITICALITY ignore     TYPE     MAC-
331 c-sh-SDU-LengthListIE-option-CTCH-ResourceRspTDD     PRESENCE mandatory },
332     ...
333 }
334
335 MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcshSDU-
336 Length)) OF MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspTDD
337
338 MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
339     mAC-c-sh-SDU-Length           MAC-c-sh-SDU-Length,
340     iE-Extensions                 ProtocolExtensionContainer { {MAC-c-sh-SDU-LengthItem-option-
341 CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
342     ...
343 }
344
345 MAC-c-sh-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
346     ...
347 }
348
349 CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
350     ...
351 }
352
353 -- *****
354 --
355 -- COMMON TRANSPORT CHANNEL RESOURCES FAILURE
356 --
357 -- *****
358
359
360 < Some text omitted here >
361
362
363
```


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9.3.4 Information Element Definitions

```

-- *****
--
-- Information Element Definitions
--
-- *****

RNSAP-IEs -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxCodeNumComp-1,
    maxNoTFCIGroups,
    maxNoCodeGroups,
    maxNrOfErrors,
    maxRateMatching,
    maxNrOfTFCS,
    maxNrOfTFs,
    maxCTFC,
    maxTFCI1Combs,
    maxTFCI2Combs,
    maxTFCI2Combs-1,
    maxTTI-Count
FROM RNSAP-Constants

    Criticality,
    ProcedureCode,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

AllocationRetentionPriority ::= FrameHandlingPriority

AllowedQueuingTime ::= INTEGER (0..60)
-- seconds

-- B

BetaCD ::= INTEGER (0..15)

BindingID ::= OCTET STRING (SIZE (1..4,...))

BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BurstType ::= ENUMERATED {
    type1 (1),
    type2 (2)
}

-- 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,

```

```
77     ...
78 }
79
80 CauseProtocol ::= ENUMERATED {
81     transaction-not-allowed,
82     transfer-syntax-error,
83     abstract-syntax-error-reject,
84     abstract-syntax-error-ignore-and-notify,
85     message-not-compatible-with-receiver-state,
86     semantic-error,
87     unspecified,
88     ...
89 }
90
91 CauseRadioNetwork ::= ENUMERATED {
92     unknown-C-ID,
93     cell-not-available,
94     power-level-not-supported,
95     ul-scrambling-code-already-in-use,
96     dl-radio-resources-not-available,
97     ul-radio-resources-not-available,
98     measurement-not-supported-for-the-object,
99     macrodiversity-combining-not-possible,
100    reconfiguration-not-allowed,
101    requested-configuration-not-supported,
102    synchronisation-failure,
103    unspecified,
104    ...
105 }
106
107 CauseTransport ::= ENUMERATED {
108     transmission-link-failure,
109     transmission-port-not-available,
110     unspecified,
111     ...
112 }
113
114 C-ID ::= INTEGER (0..65535)
115
116 CCTrCH-ID ::= INTEGER (0..15)
117
118 CellIndividualOffset ::= INTEGER (-20..20)
119
120 CellParameterID ::= INTEGER (0..127)
121
122 CFN ::= INTEGER (0..255)
123
124 CFNOffset ::= INTEGER (0..255)
125
126 ChannelCodingType ::= ENUMERATED {
127     no-coding,
128     convolutional-coding,
129     turbo-coding
130 }
131
132 ChipOffset ::= INTEGER (0..38399)
133
134 ClosedLoopModel-SupportIndicator ::= ENUMERATED {
135     closedLoop-Model-Supported,
136     closedLoop-Model-not-Supported
137 }
138
139 ClosedLoopMode2-SupportIndicator ::= ENUMERATED {
140     closedLoop-Mode2-Supported,
141     closedLoop-Mode2-not-Supported
142 }
143
144 CodeNumber ::= INTEGER (0..maxCodeNumComp-1)
145
146 CodingRate ::= ENUMERATED {
147     half,
148     third
149 }
150
151 CompressedModeMethod ::= ENUMERATED {
152     none,
153     puncturing,
154     half-SF,
```

```

155     higher-Layer-Scheduling
156 }
157
158 CRC-Size ::= ENUMERATED {
159     v0,
160     v8,
161     v12,
162     v16,
163     v24
164 }
165
166 CriticalityDiagnostics ::= SEQUENCE {
167     procedureCode      ProcedureCode      OPTIONAL,
168     triggeringMessage  TriggeringMessage  OPTIONAL,
169     criticalityResponse Criticality      OPTIONAL,
170     transactionID     TransactionID     OPTIONAL,
171     iEsCriticalityResponses CriticalityDiagnostics-IE-List,
172     iE-Extensions     ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
173 OPTIONAL,
174     ...
175 }
176
177 CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
178     ...
179 }
180
181 CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
182     SEQUENCE {
183         criticalityResponse Criticality,
184         iE-ID              ProtocolIE-ID,
185         repetitionNumber  RepetitionNumber      OPTIONAL,
186         iE-Extensions     ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }
187     } OPTIONAL,
188     ...
189 }
190
191 CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
192     ...
193 }
194
195 CTFC ::= INTEGER (0..maxCTFC)
196
197 CN-CS-DomainIdentifier ::= SEQUENCE {
198     pLMN-ID      PLMN-ID,
199     lAC          LAC,
200     iE-Extensions ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
201 }
202
203 CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
204     ...
205 }
206
207 CN-PS-DomainIdentifier ::= SEQUENCE {
208     pLMN-ID      PLMN-ID,
209     lAC          LAC,
210     rAC          RAC,
211     iE-Extensions ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
212 }
213
214 CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
215     ...
216 }
217
218 C-RNTI ::= INTEGER (0..65535)
219
220 -- D
221
222 DCH-CombinationInd ::= INTEGER (0..255)
223
224 DCH-ID ::= INTEGER (0..255)
225
226 DedicatedMeasurementObjectType ::= ENUMERATED {
227     rl,
228     rls,
229     all-rl,
230     all-rls,
231     ...
232 }

```

```

233
234 DedicatedMeasurementType ::= ENUMERATED {
235     sir,
236     sir-error,
237     transmitted-code-power,
238     rSCP,
239     ...
240 }
241
242 DedicatedMeasurementValue ::= CHOICE {
243     sIR-Value          SIR-Value,
244     sIR-ErrorValue    SIR-Error-Value,
245     transmittedCodePowerValue  Transmitted-Code-Power-Value,
246     rSCP              RSCP-Value, -- TDD only
247     ...
248 }
249
250 DiversityControlField      ::= ENUMERATED {
251     may,
252     must,
253     must-not
254 }
255
256 DiversityMode              ::= ENUMERATED {
257     none,
258     sTTD,
259     closedLoopModel1,
260     closedLoopMode2
261 }
262
263 DL-DPCH-SlotFormat        ::= INTEGER (0..16)
264
265 DL-SIRTarget              ::= UL-SIR
266
267 DL-Power                  ::= INTEGER (-350..150)
268 -- Value = DL-Power / 10
269 -- Unit dB, Range -35dB .. +15dB, Step +0.1dB
270
271 D-RNTI                    ::= INTEGER (0..1048575)
272
273 D-RNTI-ReleaseIndication ::= ENUMERATED {
274     release-D-RNTI,
275     not-release-D-RNTI
276 }
277
278 DL-ScramblingCode        ::= INTEGER (0..15)
279
280 DL-FrameType ::= ENUMERATED {
281     typeA,
282     typeB,
283     ...
284 }
285
286 DPCH-ID                  ::= INTEGER (0..239)
287
288 DPCHConstantValue ::= INTEGER (-32..31)
289 -- Unit dBm, Step 1dBm
290
291 DRACControl              ::= ENUMERATED {
292     requested,
293     not-requested
294 }
295
296 DRXCycleLengthCoefficient ::= INTEGER (2..12)
297
298 D-FieldLength            ::= ENUMERATED {
299     v1,
300     v2
301 }
302
303 DSCH-ID                  ::= INTEGER (0..255)
304
305 -- E
306
307 EventA ::= SEQUENCE {
308     measurementTreshold      MeasurementThreshold,
309     measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
310     iE-Extensions           ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,

```

```

311     ...
312 }
313
314 EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
315     ...
316 }
317
318 EventB ::= SEQUENCE {
319     measurementTreshold      MeasurementThreshold,
320     measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
321     iE-Extensions            ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
322     ...
323 }
324
325 EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
326     ...
327 }
328
329
330 EventC ::= SEQUENCE {
331     measurementIncreaseDecreaseThreshold MeasurementIncreaseDecreaseThreshold,
332     measurementChangeTime      MeasurementChangeTime,
333     iE-Extensions              ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
334     ...
335 }
336
337 EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
338     ...
339 }
340
341 EventD ::= SEQUENCE {
342     measurementIncreaseDecreaseThreshold MeasurementIncreaseDecreaseThreshold,
343     measurementChangeTime      MeasurementChangeTime,
344     iE-Extensions              ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
345     ...
346 }
347
348 EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
349     ...
350 }
351
352 EventE ::= SEQUENCE {
353     measurementThreshold1      MeasurementThreshold,
354     measurementThreshold2      MeasurementThreshold OPTIONAL,
355     measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
356     reportPeriodicity          ReportPeriodicity OPTIONAL,
357     iE-Extensions              ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
358     ...
359 }
360
361 EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
362     ...
363 }
364
365 EventF ::= SEQUENCE {
366     measurementThreshold1      MeasurementThreshold,
367     measurementThreshold2      MeasurementThreshold OPTIONAL,
368     measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
369     reportPeriodicity          ReportPeriodicity OPTIONAL,
370     iE-Extensions              ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
371     ...
372 }
373
374 EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
375     ...
376 }
377
378 -- F
379
380 FACH-InitialWindowSize ::= INTEGER { unlimited(255) } (0..255)
381 -- Number of frames MAC-c-sh SDUs.
382 -- 255 = Unlimited number of FACH data frames
383
384 FDD-DL-ChannelisationCodeNumber ::= INTEGER (0..255)
385
386 FDD-S-CCPCH-Offset ::= INTEGER (0..149)
387
388 FDD-TPC-DownlinkStepSize ::= ENUMERATED {

```

```

389     step-size0-5,
390     step-size1,
391     ...
392 }
393
394 SchedulingPriorityIndicator ::= INTEGER { lowest(0), highest(15) } (0..15)
395
396 FrameHandlingPriority ::= INTEGER { lowest(0), highest(15) } (0..15)
397
398 FrameOffset ::= INTEGER (0..255)
399 -- Frames
400
401 -- G
402
403 GapPositionMode ::= ENUMERATED {
404     fixed,
405     flexible
406 }
407
408 GapPeriod ::= INTEGER (0..255)
409
410 -- H
411
412 -- I
413
414 IB-SG-POS ::= INTEGER (0..4095)
415
416 IB-SG-REP ::= INTEGER (16| 32| 64| 128| 256| 512| 1024| 2480)
417
418 IMSI ::= OCTET STRING (SIZE(3..8))
419
420
421 -- J
422 -- K
423 -- L
424
425 LAC ::= OCTET STRING (SIZE (2)) --(EXCEPT ('0000'H|'FFFF'H))
426
427 L3-Information ::= BIT STRING
428
429 -- M
430
431 MaxNrOfUL-DPCHs ::= INTEGER (1..6)
432
433 MAC-c-sh-SDU-Length ::= INTEGER (1..5000)
434
435 MaximumAllowedULTxPower ::= INTEGER (-50..33)
436
437 MaxTFCIvalue ::= INTEGER (1..1023)
438
439 MeasurementFilterCoefficient ::= INTEGER (1..256)
440 -- Measurement Filter Coefficient to be used for measurement
441
442 MeasurementID ::= INTEGER (0..1048575)
443
444 Multi-code-info ::= INTEGER (1..16)
445
446 MultipleURAsIndicator ::= ENUMERATED {
447     multiple-URAs-exist,
448     single-URA-exists
449 }
450
451 ScaledMaxAdjustmentPeriod ::= INTEGER(1..50)
452 -- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod
453
454 ScaledMaxAdjustmentStep ::= INTEGER(1..10)
455 -- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10
456
457 MeasurementChangeTime ::= INTEGER (1..6000)
458 -- The MeasurementChangeTime gives the MeasurementChangeTime
459 -- in number of 10 ms periods.
460 -- E.g. Value 6000 means 60000ms(1min)
461 -- Unis is ms, Step is 10 ms
462
463 MeasurementHysteresisTime ::= INTEGER (1..6000)
464 -- The MeasurementHysteresisTime gives the
465 -- MeasurementHysteresisTime in number of 10 ms periods.
466 -- E.g. Value 6000 means 60000ms(1min)

```

```

467 -- Unit is ms, Step is 10ms
468
469 MeasurementIncreaseDecreaseThreshold ::= CHOICE {
470     sir                               SIR-Value-IncrDecrThres,
471     sir-error                         SIR-Error-Value-IncrDecrThres,
472     transmitted-code-power           Transmitted-Code-Power-Value-IncrDecrThres,
473     rscp                              RSCP-Value-IncrDecrThres,
474     ...
475 }
476
477 MeasurementThreshold ::= CHOICE {
478     sir                               SIR-Value,
479     sir-error                         SIR-Error-Value,
480     transmitted-code-power           Transmitted-Code-Power-Value,
481     rscp                              RSCP-Value,
482     ...
483 }
484
485 MidambleShift ::= INTEGER (0..15)
486
487 MinUL-ChannelisationCodeLength ::= ENUMERATED {
488     v4,
489     v8,
490     v16,
491     v32,
492     v64,
493     v128,
494     v256
495 }
496
497 MultiplexingPosition ::= ENUMERATED {
498     fixed,
499     flexible
500 }
501
502 -- N
503
504 NrOfTransportBlocks ::= INTEGER (0..4095)
505
506 -- 0
507
508 -- P
509
510 PD ::= INTEGER (0..2047, ...)
511
512 PayloadCRC-PresenceIndicator ::= ENUMERATED {
513     crc-included,
514     crc-not-included
515 }
516
517 PCCPCH-Power ::= INTEGER (-150..400)
518 -- PCCPCH-power = power * 10
519 -- If power <= -15 PCCPCH shall be set to -150
520 -- If power >= 40 PCCPCH shall be set to 400
521 -- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dBm
522
523 SCH-TimeSlot ::= INTEGER (0..6)
524
525 PDSCHCodeMapping ::= SEQUENCE {
526     dL-ScramblingCode           DL-ScramblingCode,
527     signallingMethod           PDSCHCodeMapping-SignallingMethod,
528     iE-Extensions              ProtocolExtensionContainer { { PDSCHCodeMapping-ExtIEs } } OPTIONAL,
529     ...
530 }
531
532 PDSCHCodeMapping-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
533     ...
534 }
535
536 PDSCHCodeMapping-SignallingMethod ::= CHOICE {
537     pDSCHCodeMapping-SignallingMethod-CodeRange           PDSCHCodeMapping-SignallingMethod-CodeRange,
538     pDSCHCodeMapping-SignallingMethod-TFCIRange           PDSCHCodeMapping-SignallingMethod-TFCIRange,
539     pDSCHCodeMapping-SignallingMethod-Explicit           PDSCHCodeMapping-SignallingMethod-Explicit
540 }
541
542 PDSCHCodeMapping-SignallingMethod-CodeRange ::= SEQUENCE (SIZE (1..maxNoCodeGroups)) OF
543     SEQUENCE {
544         spreadingFactor           SpreadingFactor,

```

```

545         multi-code-info           Multi-code-info,
546         start-CodeNumber         CodeNumber,
547         stop-CodeNumber          CodeNumber,
548         ...
549     }
550
551 PDSCHCodeMapping-SignallingMethod-TFCIRange ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
552 SEQUENCE {
553     maxTFCIvalue           MaxTFCIvalue,
554     spreadingFactor        SpreadingFactor,
555     multi-code-info        Multi-code-info,
556     codeNumber             CodeNumber,
557     ...
558 }
559
560 PDSCHCodeMapping-SignallingMethod-Explicit ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
561 SEQUENCE {
562     spreadingFactor        SpreadingFactor,
563     multi-code-info        Multi-code-info,
564     codeNumber             CodeNumber,
565     ...
566 }
567
568
569
570
571 Periodic ::= SEQUENCE {
572     reportPeriodicity      ReportPeriodicity,
573     iE-Extensions          ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
574     ...
575 }
576
577 Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
578     ...
579 }
580
581 PLMN-ID ::= OCTET STRING (SIZE(3))
582
583 PowerAdjustmentType ::= ENUMERATED {
584     none,
585     common,
586     individual
587 }
588
589 PowerControlMode ::= ENUMERATED {
590     v0,
591     v1,
592     ...
593 }
594
595 PowerOffset ::= INTEGER (0..24)
596
597 PowerResumeMode ::= ENUMERATED {
598     v0,
599     v1,
600     ...
601 }
602
603 PrimaryCPICH-Power ::= INTEGER (-100..500)
604 -- step 0.1 (Range -10.0..50.0) Unit is dBm
605
606 PrimaryCPICH-EcNo ::= INTEGER (-30..30)
607
608 PrimaryCCPCH-RSCP ::= INTEGER (0..91)
609 -- According to mapping in 25.225
610
611 PrimaryScramblingCode ::= INTEGER (0..511)
612
613 PropagationDelay ::= INTEGER (0..255)
614
615 SyncCase ::= ENUMERATED {
616     case1,
617     case2
618 }
619
620 PunctureLimit ::= INTEGER (0..15)
621 -- 0: 40%; 1: 44%; ... 14: 96%; 15: 100
622

```



```

623 -- Q
624
625 QE-Selector ::= ENUMERATED {
626     selected-DCH,
627     non-selected-DCH
628 }
629
630 -- R
631
632 RAC ::= OCTET STRING (SIZE(1))
633
634 RANAP-RelocationInformation ::= BIT STRING
635
636 RateMatchingAttribute ::= INTEGER (1..maxRateMatching)
637
638 RB-Identity ::= INTEGER (0..15)
639
640 RefTFCNumber ::= INTEGER (0..15)
641
642 RepetitionLength ::= INTEGER (1..63)
643
644 RepetitionPeriod ::= ENUMERATED {
645     v1,
646     v2,
647     v4,
648     v8,
649     v16,
650     v32,
651     v64
652 }
653
654 RepetitionNumber ::= INTEGER (0..255)
655
656 ReportCharacteristics ::= CHOICE {
657     onDemand          NULL,
658     periodic          Periodic,
659     eventA            EventA,
660     eventB            EventB,
661     eventC            EventC,
662     eventD            EventD,
663     eventE            EventE,
664     eventF            EventF,
665     ...
666 }
667
668 ReportPeriodicity ::= CHOICE {
669     ten-msec          INTEGER (1..6000),
670     -- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
671     -- E.g. value 6000 means 60000ms (i.e. 1min)
672     -- Unit ms, Step 10ms
673     min              INTEGER (1..60)
674     -- Unit min, Step 1min
675 }
676
677 LimitedPowerIncrease ::= ENUMERATED {
678     used,
679     not-used
680 }
681
682 RL-ID ::= INTEGER (0..31)
683
684 RL-Set-ID ::= INTEGER (0..31)
685
686 RNC-ID ::= INTEGER (0..4095)
687
688 RSCP-Value ::= INTEGER (0..81)
689 -- According to mapping in 25.225
690
691 RSCP-Value-IncrDecrThres ::= INTEGER (0..80)
692
693 -- S
694
695 SAC ::= OCTET STRING (SIZE (2))
696
697 SAI ::= SEQUENCE {
698     pLMN-ID          PLMN-ID,
699     lAC              LAC,
700     sAC              SAC,

```

```

701     iE-Extensions      ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
702 }
703
704 SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
705     ...
706 }
707
708 ScramblingCodeChange ::= ENUMERATED {
709     code-change,
710     no-code-change
711 }
712
713 SIR-Error-Value      ::= INTEGER (0..125)
714
715 SIR-Error-Value-IncrDecrThres      ::= INTEGER (0..124)
716
717 SIR-Value            ::= INTEGER (0..63)
718 -- According to mapping in 25.215/25.225
719
720 SIR-Value-IncrDecrThres ::= INTEGER (0..62)
721
722 SecondaryCCPCH-SlotFormat      ::= INTEGER (0..17)
723 -- refer to 25.211
724
725 SN                          ::= TimeSlot
726
727 S-FieldLength               ::= ENUMERATED {
728     v1,
729     v2
730 }
731
732 SpreadingFactor             ::= INTEGER (4| 8| 16| 32| 64| 128| 256)
733
734 S-RNTI                      ::= INTEGER (0..1048575)
735 -- From 0 to 2^20-1
736
737 SSDT-CellID ::= ENUMERATED {
738     a,
739     b,
740     c,
741     d,
742     e,
743     f,
744     g,
745     h
746 }
747
748 SSDT-CellID-Length ::= ENUMERATED {
749     short,
750     medium,
751     long
752 }
753
754 SSDT-Indication ::= ENUMERATED {
755     sSDT-active-in-the-UE,
756     sSDT-not-active-in-the-UE
757 }
758
759 SSDT-SupportIndicator ::= ENUMERATED {
760     sSDT-supported,
761     sSDT-not-supported
762 }
763
764 STTD-Indicator ::= ENUMERATED {
765     active,
766     inactive
767 }
768
769 STTD-SupportIndicator ::= ENUMERATED {
770     sTTD-Supported,
771     sTTD-not-Supported
772 }
773
774 -- T
775
776 TDD-ChannelisationCode      ::= ENUMERATED {
777     chCode1div1,
778     chCode2div1,

```

```
779     chCode2div2,
780     chCode4div1,
781     chCode4div2,
782     chCode4div3,
783     chCode4div4,
784     chCode8div1,
785     chCode8div2,
786     chCode8div3,
787     chCode8div4,
788     chCode8div5,
789     chCode8div6,
790     chCode8div7,
791     chCode8div8,
792     chCode16div1,
793     chCode16div2,
794     chCode16div3,
795     chCode16div4,
796     chCode16div5,
797     chCode16div6,
798     chCode16div7,
799     chCode16div8,
800     chCode16div9,
801     chCode16div10,
802     chCode16div11,
803     chCode16div12,
804     chCode16div13,
805     chCode16div14,
806     chCode16div15,
807     chCode16div16,
808     ...
809 }
810
811 TDD-PhysicalChannelOffset ::= INTEGER (0..63)
812
813 TDD-TPC-DownlinkStepSize ::= ENUMERATED {
814     step-size1,
815     step-size2,
816     step-size3,
817     ...
818 }
819
820 TFCI-Coding ::= ENUMERATED {
821     v4,
822     v8,
823     v16,
824     v32
825 }
826
827 TFCI-Presence ::= ENUMERATED {
828     present,
829     not-present
830 }
831
832 TFCI-SignallingMode ::= ENUMERATED {
833     normal,
834     split
835 }
836
837 TimeSlot ::= INTEGER (0..14)
838
839 ToAWE ::= INTEGER (0..2559)
840
841 ToAWS ::= INTEGER (0..1279)
842
843 TGD ::= INTEGER (0..3839)
844
845 TGL ::= INTEGER (3| 4| 7| 10| 14)
846
847 TransmissionTimeInterval ::= ENUMERATED {
848     msec-10,
849     msec-20,
850     msec-40,
851     msec-80
852 }
853
854 TransmitDiversityIndicator ::= ENUMERATED {
855     active,
856     inactive
```

```

857 }
858
859 TransportBearerID ::= INTEGER (0..4095)
860
861 TransportBearerRequestIndicator ::= ENUMERATED {
862     bearer-requested,
863     bearer-not-requested
864 }
865
866 TransportBlockSize ::= INTEGER (1..5000)
867 -- Unit is bits
868
869 TransportFormatCombination-Beta ::= CHOICE {
870     signalledGainFactors SEQUENCE {
871         betaC BetaCD,
872         betaD BetaCD,
873         refTFCNumber RefTFCNumber OPTIONAL
874     },
875     refTFCNumber RefTFCNumber
876 }
877
878 TFCS ::= SEQUENCE {
879     tFCSvalues CHOICE {
880         no-Split-in-TFCI TFCS-TFCSList,
881         split-in-TFCI SEQUENCE {
882             transportFormatCombination-DCH TFCS-DCHList,
883             signallingMethod CHOICE {
884                 tFCI-Range TFCS-MappingOnDSCHList,
885                 explicit TFCS-DSCHList
886             }
887         }
888     },
889     iE-Extensions ProtocolExtensionContainer { { TFCS-ExtIEs} } OPTIONAL,
890     ...
891 }
892
893 TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
894     ...
895 }
896
897 TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCS)) OF
898 SEQUENCE {
899     cTFC TFCS-CTFC,
900     tFC-Beta TransportFormatCombination-Beta OPTIONAL,
901     iE-Extensions ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} } OPTIONAL,
902     ...
903 }
904
905 TFCS-TFCSList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
906     ...
907 }
908
909 TFCS-CTFC ::= INTEGER (0..maxCTFC)
910
911 TFCS-DCHList ::= SEQUENCE (SIZE (1..maxTFCICombs)) OF
912 SEQUENCE {
913     cTFC TFCS-CTFC,
914     iE-Extensions ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} } OPTIONAL,
915     ...
916 }
917
918 TFCS-DCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
919     ...
920 }
921
922
923
924 TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
925 SEQUENCE {
926     maxTFCI-field2-Value TFCS-MaxTFCI-field2-Value,
927     cTFC-DSCH TFCS-CTFC,
928     iE-Extensions ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs} }
929     OPTIONAL,
930     ...
931 }
932
933 TFCS-MappingOnDSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
934     ...

```

```

935 }
936
937 TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxTFCI2Combs-1)
938
939
940 TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
941     SEQUENCE {
942         cTFC-DSCH          TFCs-CTFC,
943         iE-Extensions      ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs } }
944     OPTIONAL,
945     ...
946 }
947
948 TFCS-DSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
949     ...
950 }
951
952
953
954 TransportFormatSet ::= SEQUENCE {
955     dynamicParts          TransportFormatSet-DynamicPartList,
956     semi-staticPart      TransportFormatSet-Semi-staticPart,
957     iE-Extensions        ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
958     ...
959 }
960
961 TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
962     ...
963 }
964
965 TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
966     SEQUENCE {
967         nrOfTransportBlocks      NrOfTransportBlocks,
968         transportBlockSize      TransportBlockSize OPTIONAL
969         -- This IE is only present if nrOfTransportBlocks is greater than 0 --,
970         mode                     TransportFormatSet-ModeDP,
971         iE-Extensions            ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-
972 ExtIEs} } OPTIONAL,
973         ...
974     }
975
976 TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
977     ...
978 }
979
980 TransportFormatSet-ModeDP ::= CHOICE {
981     tdd          TransmissionTimeIntervallList,
982     -- This IE is mandatory if not defined as semistatic parameter, otherwise it is absent --
983     ...
984 }
985
986 TransmissionTimeIntervallList ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
987     SEQUENCE {
988         transmissionTimeInterval      TransmissionTimeInterval,
989         iE-Extensions                ProtocolExtensionContainer { {TransmissionTimeIntervallList-ExtIEs} }
990 OPTIONAL,
991         ...
992     }
993
994 TransmissionTimeIntervallList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
995     ...
996 }
997
998 Transmitted-Code-Power-Value ::= INTEGER (0..127)
999 -- According to mapping in 25.215/25.225
1000
1001 Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)
1002
1003 TransportFormatManagement ::= ENUMERATED {
1004     cell-based,
1005     ue-based,
1006     ...
1007 }
1008 TransportFormatSet-Semi-staticPart ::= SEQUENCE {
1009     transmissionTime      TransmissionTimeInterval,
1010     channelCoding          ChannelCodingType,
1011     codingRate             CodingRate OPTIONAL
1012     -- This IE is only present if channelCoding is 'convolutional' or 'turbo' --,

```

```

1013     rateMatchingAttribute      RateMatchingAttribute,
1014     cRC-Size                   CRC-Size,
1015     mode                        TransportFormatSet-ModeSSP,
1016     iE-Extensions              ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs}
1017 } OPTIONAL,
1018     ...
1019 }
1020
1021 TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1022     ...
1023 }
1024
1025 TransportFormatSet-ModeSSP ::= CHOICE {
1026     tdd                        SecondInterleavingMode,
1027     ...
1028 }
1029
1030 SecondInterleavingMode ::= ENUMERATED {
1031     frame-related,
1032     timeslot-related,
1033     ...
1034 }
1035
1036 TransportLayerAddress          ::= BIT STRING (SIZE(1..160, ...))
1037
1038 TrCH-SrcStatisticsDescr       ::= ENUMERATED {
1039     speech,
1040     rRC,
1041     unknown,
1042     ...
1043 }
1044
1045 TxDiversityIndicator         ::= ENUMERATED {
1046     true,
1047     false
1048 }
1049
1050 -- U
1051
1052 UARFCN                        ::= INTEGER (0..16383,...)
1053 -- Corresponds to: 0.0Hz..3276.6Mhz. See 25.101, 25.105
1054
1055 UL-DL-CompressedModeSelection ::= ENUMERATED {
1056     ul-only,
1057     dl-only,
1058     both-ul-and-dl
1059 }
1060
1061 UL-DeltaSIR                   ::= INTEGER (-60..100)
1062 -- The UL-Delta-SIR gives the UL-Delta-SIR in number of 0.1 dB steps.
1063 -- E.g. Value 100 means 10 dB
1064 -- Unit dB. Step 0.1 dB.
1065
1066 UL-DeltaSIRAfter              ::= INTEGER (-60..100)
1067 -- The UL-Delat-SIR-After gives the UL-Delta-SIR-After in number of 0.1 dB steps.
1068 -- E.g. Value 100 means 10 dB
1069 -- Unit dB. Step 0.1 dB.
1070
1071 UL-SIR                        ::= INTEGER (-82..173)
1072 -- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
1073 -- E.g. Value 173 means 17.3 dB
1074 -- Unit dB. Step 0.1 dB.
1075
1076 UC-ID ::= SEQUENCE {
1077     rNC-ID                    RNC-ID,
1078     c-ID                      C-ID,
1079     iE-Extensions            ProtocolExtensionContainer { {UC-ID-ExtIEs} } OPTIONAL,
1080     ...
1081 }
1082
1083 UC-ID-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1084     ...
1085 }
1086
1087 UL-DPCCH-SlotFormat           ::= INTEGER (0..5)
1088
1089 UL-FP-Mode ::= ENUMERATED {
1090     normal,

```

```

1091     silent
1092 }
1093
1094 UL-InterferenceLevel ::= INTEGER (-1280..-600)
1095 -- The UL-InterferenceLevel gives the UL-InterferenceLevel in number
1096 -- of 0.1 dBm steps.
1097 -- E.g. Value -600 means -60 dBm
1098 -- Unit dBm. Step 0.1 dBm.
1099
1100 UL-ScramblingCode ::= SEQUENCE {
1101     ul-ScramblingCodeNumber    UL-ScramblingCodeNumber,
1102     ul-ScramblingCodeLength    UL-ScramblingCodeLength,
1103     iE-Extensions              ProtocolExtensionContainer { {UL-ScramblingCode-ExtIEs} } OPTIONAL
1104 }
1105
1106 UL-ScramblingCode-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
1107     ...
1108 }
1109
1110 UL-ScramblingCodeLength ::= ENUMERATED {
1111     short,
1112     long
1113 }
1114
1115 UL-ScramblingCodeNumber ::= INTEGER (0..16777215)
1116
1117 URA-ID ::= INTEGER (0..65535)
1118
1119 USCH-ID ::= INTEGER (0..255)
1120
1121 -- V
1122 -- W
1123 -- X
1124 -- Y
1125 -- Z
1126
1127 END
1128

```

1129 9.3.5 Common Definitions

```

1130 -- *****
1131 --
1132 -- Common definitions
1133 --
1134 -- *****
1135
1136 RNSAP-CommonDataTypes -- { object identifier to be allocated }--
1137 DEFINITIONS AUTOMATIC TAGS ::=
1138
1139 BEGIN
1140
1141 Criticality ::= ENUMERATED { reject, ignore, notify }
1142
1143 Presence ::= ENUMERATED { optional, conditional, mandatory }
1144
1145 PrivateIE-ID ::= CHOICE {
1146     local          INTEGER (0..65535),
1147     global         OBJECT IDENTIFIER
1148 }
1149
1150 ProcedureCode ::= INTEGER (0..255)
1151
1152 ProcedureID ::= SEQUENCE {
1153     procedureCode    ProcedureCode,
1154     ddMode           ENUMERATED { tdd, fdd, common }
1155 }
1156
1157 ProtocolExtensionID ::= INTEGER (0..65535)
1158
1159 ProtocolIE-ID ::= INTEGER (0..65535)
1160
1161 TransactionID ::= INTEGER (0..65535)
1162
1163 TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome,
1164 outcome }
1165
1166 END

```

1167

1168 9.3.6 Constant Definitions

```

1169 -- *****
1170 --
1171 -- Constant definitions
1172 --
1173 -- *****
1174
1175 RNSAP-Constants -- { object identifier to be allocated }--
1176 DEFINITIONS AUTOMATIC TAGS ::=
1177
1178 BEGIN
1179
1180 -- *****
1181 --
1182 -- Elementary Procedures
1183 --
1184 -- *****
1185
1186 id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
1187 id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
1188 id-commonTransportChannelResourcesRelease                INTEGER ::= 2
1189 id-compressedModeCancellationFDD                        INTEGER ::= 3
1190 id-compressedModeCommitFDD                              INTEGER ::= 4
1191 id-compressedModePrepareFDD                              INTEGER ::= 5
1192 id-downlinkPowerControl                                  INTEGER ::= 6
1193 id-downlinkSignallingTransfer                            INTEGER ::= 7
1194 id-errorIndication                                       INTEGER ::= 8
1195 id-measurementFailure                                    INTEGER ::= 9
1196 id-measurementInitiation                                 INTEGER ::= 10
1197 id-measurementReporting                                  INTEGER ::= 11
1198 id-measurementTermination                                INTEGER ::= 12
1199 id-pagingRequest                                         INTEGER ::= 13
1200 id-physicalChannelReconfiguration                        INTEGER ::= 14
1201 id-privateMessage                                        INTEGER ::= 15
1202 id-radioLinkAddition                                     INTEGER ::= 16
1203 id-radioLinkDeletion                                     INTEGER ::= 17
1204 id-radioLinkFailure                                     INTEGER ::= 18
1205 id-radioLinkRestoration                                 INTEGER ::= 19
1206 id-radioLinkSetup                                        INTEGER ::= 20
1207 id-srnsRelocationCommit                                  INTEGER ::= 21
1208 id-synchronisedRadioLinkReconfigurationCancellation      INTEGER ::= 22
1209 id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
1210 id-synchronisedRadioLinkReconfigurationPrepare          INTEGER ::= 24
1211 id-unSynchronisedRadioLinkReconfiguration              INTEGER ::= 25
1212 id-uplinkSignallingTransfer                              INTEGER ::= 26
1213
1214 -- *****
1215 --
1216 -- Extension constants
1217 --
1218 -- *****
1219
1220 maxPrivateIEs                                           INTEGER ::= 65535
1221 maxProtocolExtensions                                    INTEGER ::= 65535
1222 maxProtocolIEs                                          INTEGER ::= 65535
1223
1224 -- *****
1225 --
1226 -- Lists
1227 --
1228 -- *****
1229
1230 maxCodeNumComp-1                                         INTEGER ::= 255
1231 maxRateMatching                                          INTEGER ::= 256
1232 maxNoCodeGroups                                          INTEGER ::= 256
1233 maxNoOfDSCHs                                            INTEGER ::= 10
1234 maxNoOfRB                                               INTEGER ::= 32
1235 maxNoOfUSCHs                                            INTEGER ::= 10
1236 maxNoTFCIGroups                                         INTEGER ::= 256
1237 maxNrOfTFCs                                             INTEGER ::= 1024
1238 maxNrOfTFs                                              INTEGER ::= 32
1239 maxNrOfCCTrCHs                                         INTEGER ::= 10
1240 maxNrOfDCHs                                             INTEGER ::= 10
1241 maxNrOfDL-Codes                                         INTEGER ::= 10
1242 maxNrOfDPCHs                                            INTEGER ::= 10

```


1243	maxNrOfErrors	INTEGER ::= 10	
1244	maxNrOfMACCshSDU-Length	INTEGER ::= 16	
1245	maxNrOfRLs	INTEGER ::= 10	
1246	maxNrOfRLSets	INTEGER ::= 10	
1247	maxNrOfRLs-1	INTEGER ::= 10	
1248	maxNrOfRLs-2	INTEGER ::= 10	
1249	maxNrOfSCCPCHs	INTEGER ::= 10	
1250	maxNrOfULTs	INTEGER ::= 15	
1251	maxNrOfCmpatterns	INTEGER ::= 8	
1252	maxRNCinURA	INTEGER ::= 10	
1253	maxTTL-Count	INTEGER ::= 4	
1254	maxCTFC	INTEGER ::= 16777215	
1255	maxNrOfNeighbouringRNCs	INTEGER ::= 10	
1256	maxNrOfFDDNeighboursPerRNC	INTEGER ::= 10	
1257	maxNrOfTDDNeighboursPerRNC	INTEGER ::= 10	
1258	maxFACHCountPlus1	INTEGER ::= 10	
1259	maxIBSEG	INTEGER ::= 16	
1260	maxTFCI1Combs	INTEGER ::= 512	
1261	maxTFCI2Combs	INTEGER ::= 1024	
1262	maxTFCI2Combs-1	INTEGER ::= 1023	
1263			
1264	-- *****		
1265			
1266	--		
1267	-- IEs		
1268	--		
1269	-- *****		
1270			
1271	id-AllRLItem-DM-Rprt	INTEGER ::= 0	
1272	id-AllRLItem-DM-Rsp	INTEGER ::= 1	
1273	id-AllRL-SetItem-DM-Rprt	INTEGER ::= 2	
1274	id-AllRL-SetItem-DM-Rsp	INTEGER ::= 3	
1275	id-AllowedQueuingTime	INTEGER ::= 4	
1276	id-BindingID	INTEGER ::= 5	
1277	id-C-ID	INTEGER ::= 6	
1278	id-C-RNTI	INTEGER ::= 7	
1279	id-CFN	INTEGER ::= 8	
1280	id-CN-CS-DomainIdentifier	INTEGER ::= 9	
1281	id-CN-PS-DomainIdentifier	INTEGER ::= 10	
1282	id-Cause	INTEGER ::= 11	
1283	id-CellItem-PagingRqst	INTEGER ::= 12	
1284	id-CM-PatternInformationItem-CompressedModePrep	INTEGER ::= 13	
1285	id-CM-PatternInformationList-CompressedModePrep	INTEGER ::= 14	
1286	id-CombiningItem-RL-AdditionFailureFDD	INTEGER ::= 15	
1287	id-CombiningItem-RL-AdditionRspFDD	INTEGER ::= 16	
1288	id-CombiningItem-RL-AdditionRspTDD	INTEGER ::= 17	
1289	id-CombiningItem-RL-SetupFailureFDD	INTEGER ::= 18	
1290	id-CombiningItem-RL-SetupRspFDD	INTEGER ::= 19	
1291	id-CriticalityDiagnostics	INTEGER ::= 20	
1292	id-D-RNTI	INTEGER ::= 21	
1293	id-D-RNTI-ReleaseIndication	INTEGER ::= 22	
1294	id-DCH-AddListIE-RL-ReconfReadyFDD	INTEGER ::= 23	
1295	id-DCH-AddListIE-RL-ReconfReadyTDD	INTEGER ::= 24	
1296	id-DCH-AddListIE-RL-ReconfRsp	INTEGER ::= 25	
1297	id-DCH-AddList-RL-ReconfPrepFDD	INTEGER ::= 26	
1298	id-DCH-AddList-RL-ReconfPrepTDD	INTEGER ::= 27	
1299	id-DCH-AddList-RL-ReconfRqstFDD	INTEGER ::= 28	
1300	id-DCH-AddList-RL-ReconfRqstTDD	INTEGER ::= 29	
1301	id-DCH-DeleteList-RL-ReconfPrepFDD	INTEGER ::= 30	
1302	id-DCH-DeleteList-RL-ReconfPrepTDD	INTEGER ::= 31	
1303	id-DCH-DeleteList-RL-ReconfRqstFDD	INTEGER ::= 32	
1304	id-DCH-DeleteList-RL-ReconfRqstTDD	INTEGER ::= 33	
1305	id-DCH-Information-RL-SetupRqstFDD	INTEGER ::= 34	
1306	id-DCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 35	
1307	id-DCH-ModifyListIE-RL-ReconfReadyFDD	INTEGER ::= 36	
1308	id-DCH-ModifyListIE-RL-ReconfReadyTDD	INTEGER ::= 37	
1309	id-DCH-ModifyListIE-RL-ReconfRsp	INTEGER ::= 38	
1310	id-DCH-ModifyList-RL-ReconfPrepFDD	INTEGER ::= 39	
1311	id-DCH-ModifyList-RL-ReconfPrepTDD	INTEGER ::= 40	
1312	id-DCH-ModifyList-RL-ReconfRqstFDD	INTEGER ::= 41	
1313	id-DCH-ModifyList-RL-ReconfRqstTDD	INTEGER ::= 42	
1314	id-DCH-InformationResponseListIE-RL-SetupRspTDD	INTEGER ::= 43	
1315	id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD	INTEGER ::= 44	
1316	id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 45	
1317	id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 46	
1318	id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 47	
1319	id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 48	
1320	id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 49	

1321	id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 50
1322	id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 51
1323	id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 52
1324	id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 53
1325	id-DL-CodeInformationListIE-PhyChReconfRqstFDD	INTEGER ::= 54
1326	id-DL-CodeInformationListIE-RL-AdditionFailureFDD	INTEGER ::= 55
1327	id-DL-CodeInformationListIE-RL-AdditionRspFDD	INTEGER ::= 56
1328	id-DL-CodeInformationListIE-RL-ReconfReadyFDD	INTEGER ::= 57
1329	id-DL-CodeInformationListIE-RL-SetupFailureFDD	INTEGER ::= 58
1330	id-DL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 59
1331	id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
1332	id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
1333	id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
1334	id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
1335	id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
1336	id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
1337	id-DL-SIRTarget	INTEGER ::= 66
1338	id-DLReferencePower	INTEGER ::= 67
1339	id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
1340	id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
1341	id-DRXCycleLengthCoefficient	INTEGER ::= 70
1342	id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
1343	id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
1344	id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
1345	id-DedicatedMeasurementType	INTEGER ::= 74
1346	id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
1347	id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
1348	id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
1349	id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
1350	id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
1351	id-DSCH-AddList-RL-ReconfPrepTDD	INTEGER ::= nnn
1352	id-DSCH-Add-RL-ReconfPrepFDD	INTEGER ::= nnn
1353	id-DSCH-DeleteList-RL-ReconfPrepTDD	INTEGER ::= nnn
1354	id-DSCH-Delete-RL-ReconfPrepFDD	INTEGER ::= nnn
1355	id-DSCH-InformationItem-RL-SetupRqstFDD	INTEGER ::= nnn
1356	id-DSCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= nnn
1357	id-DSCH-InformationListIEs-RL-SetupRspTDD	INTEGER ::= nnn
1358	id-DSCH-InformationList-RL-SetupRqstTDD	INTEGER ::= nnn
1359	id-DSCH-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= nnn
1360	id-DSCH-InformationResponseListIE-RL-AdditionFailureFDD	INTEGER ::= nnn
1361	id-DSCH-InformationResponseListIE-RL-SetupFailureFDD	INTEGER ::= nnn
1362	id-DSCH-Information-RL-SetupRqstFDD	INTEGER ::= nnn
1363	id-DSCH-ModifyList-RL-ReconfPrepTDD	INTEGER ::= nnn
1364	id-DSCH-Modify-RL-ReconfPrepFDD	INTEGER ::= nnn
1365	id-DSCHToBeAddedOrModifiedIE-RL-ReconfReadyFDD	INTEGER ::= nnn
1366	id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	INTEGER ::= nnn
1367	id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
1368	id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
1369	id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
1370	id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
1371	id-IMSI	INTEGER ::= 84
1372	id-L3-Information	INTEGER ::= 85
1373	id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
1374	id-MAC-c-sh-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
1375	id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
1376	id-MAC-c-sh-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
1377	id-MaxAdjustmentPeriod	INTEGER ::= 90
1378	id-MaxAdjustmentStep	INTEGER ::= 91
1379	id-MeasurementFilterCoefficient	INTEGER ::= 92
1380	id-MeasurementID	INTEGER ::= 93
1381	id-MultipleURAsIndicator	INTEGER ::= 94
1382	id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
1383	id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
1384	id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
1385	id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
1386	id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
1387	id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
1388	id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
1389	id-PagingArea-PagingRqst	INTEGER ::= 102
1390	id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
1391	id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
1392	id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105
1393	id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
1394	id-PowerAdjustmentType	INTEGER ::= 107
1395	id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
1396	id-RANAP-RelocationInformation	INTEGER ::= 109
1397	id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
1398	id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111

1399	id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112
1400	id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
1401	id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
1402	id-RL-Information-RL-FailureInd	INTEGER ::= 115
1403	id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
1404	id-RL-Information-RL-RestoreInd	INTEGER ::= 117
1405	id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
1406	id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
1407	id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
1408	id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
1409	id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
1410	id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
1411	id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
1412	id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
1413	id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
1414	id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127
1415	id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
1416	id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
1417	id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
1418	id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
1419	id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
1420	id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
1421	id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
1422	id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135
1423	id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
1424	id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
1425	id-RLItem-DM-Rprt	INTEGER ::= 138
1426	id-RLItem-DM-Rqst	INTEGER ::= 139
1427	id-RLItem-DM-Rsp	INTEGER ::= 140
1428	id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
1429	id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
1430	id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143
1431	id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
1432	id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
1433	id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
1434	id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
1435	id-RL-SetItem-DM-Rprt	INTEGER ::= 148
1436	id-RL-SetItem-DM-Rqst	INTEGER ::= 149
1437	id-RL-SetItem-DM-Rsp	INTEGER ::= 150
1438	id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
1439	id-ReportCharacteristics	INTEGER ::= 152
1440	id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
1441	id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
1442	id-S-RNTI	INTEGER ::= 155
1443	id-SAI	INTEGER ::= 156
1444	id-SRNC-ID	INTEGER ::= 157
1445	id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
1446	id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
1447	id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
1448	id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
1449	id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
1450	id-TransportBearerID	INTEGER ::= 163
1451	id-TransportBearerRequestIndicator	INTEGER ::= 164
1452	id-TransportLayerAddress	INTEGER ::= 165
1453	id-UC-ID	INTEGER ::= 166
1454	id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
1455	id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
1456	id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
1457	id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
1458	id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
1459	id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
1460	id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
1461	id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
1462	id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
1463	id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
1464	id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
1465	id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178
1466	id-UL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 179
1467	id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 180
1468	id-UL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 181
1469	id-UL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 182
1470	id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 183
1471	id-UL-SIRTarget	INTEGER ::= 184
1472	id-URA-ID	INTEGER ::= 185
1473	id-URAIItem-PagingRqst	INTEGER ::= 186
1474	id-UnsuccessfulRL-InformationResponse	INTEGER ::= 187
1475	id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 188
1476	id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 189

```
1477 id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD INTEGER ::= 190
1478 id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD INTEGER ::= 191
1479 id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD INTEGER ::= 192
1480 id-USCH-AddList-RL-ReconfPrepTDD INTEGER ::= nnn
1481 id-USCH-DeleteList-RL-ReconfPrepTDD INTEGER ::= nnn
1482 id-USCH-InformationListIE-RL-AdditionRspTDD INTEGER ::= nnn
1483 id-USCH-InformationListIEs-RL-SetupRspTDD INTEGER ::= nnn
1484 id-USCH-InformationList-RL-SetupRqstTDD INTEGER ::= nnn
1485 id-USCH-ModifyList-RL-ReconfPrepTDD INTEGER ::= nnn
1486 id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD INTEGER ::= nnn
1487
1488 END
1489
```

1490

1491

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 084r3

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8** for approval
 list expected approval meeting # here ↑ for information

strategic
 non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
 (at least one should be marked with an X)

Source: R-WG3 **Date:** May 22 2000

Subject: Notification of number of DL channelisation codes for DL DPCH over lur IF

Work item:

Category: <i>(only one category shall be marked with an X)</i>	F Correction	<input checked="" type="checkbox"/>	Release:	Phase 2	<input type="checkbox"/>
	A Corresponds to a correction in an earlier release	<input type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>		Release 99	<input checked="" type="checkbox"/>
			Release 00	<input type="checkbox"/>	

Reason for change: Current RNSAP specification has no capability to notify the DRNC of how many DPCHs(i.e. DL channelisation codes) are required for a certain RL, although such requirement has been understood among members.

Clauses affected: 8.3.4, 9.1.3, 9.1.11, 9.2.2.X

Other specs affected:	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

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 all Radio Links 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

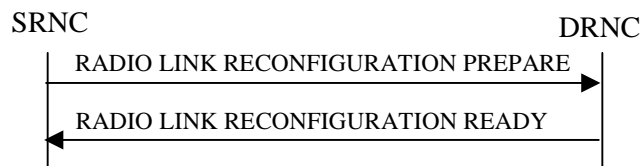


Figure 1: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO

LINK RECONFIGURATION READY message the *Secondary CCPCH Info IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator IE* for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator IE* in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector IE* set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector IE* set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector IE* set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode IE* for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS IE* for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE IE* for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control IE* is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the 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 the *Uplink Scrambling Code IE*, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code IEs*, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes [Number of DL Channelisation Code IE](#), [one or more Spreading Factor of Channelisation Code \(DL\) IE](#), for each [Spreading Factor of Channelisation Code \(DL\) IE](#) the DRNS shall allocate [given number of one new](#) 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 as a *FDD DL Channelisation Code* ~~*Number Channelisation Code (DL)*~~ IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

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 [TDD – the CCTrCH of] the new configuration.

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 [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS 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 exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.4.3 Unsuccessful Operation

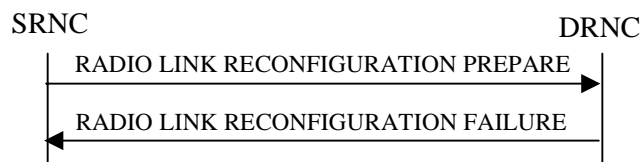


Figure 2: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

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 regard the Synchronised Radio Link Reconfiguration procedure as having failed.

- If the requested Synchronised Radio Link Reconfiguration 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.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected DCH" the DRNS shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

In which cases to include only the *Cause IE* on message level and in which cases the *Cause IE* also shall be included for a specific RL is FFS.

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.

Protocol Causes:

- Transaction not Allowed.

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 regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		1			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>Number of DL channelisation codes	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C- SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset	Power offset for the TFCI bits.	–	
>>PO2	M		Power Offset	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC control	M				–	
RL Information		1...<maxn oofRLs>			EACH	notify
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Propagation Delay	O				–	
>Diversity Control Field	C – NotFirstRL				–	
>Initial DL TX Power	O		DL Power		–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell ID	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the RL Information .
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

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

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		0..1			YES	reject
>UL Scrambling code	O				–	
>UL SIR Target	O		Uplink SIR		–	
>Min UL Channelisation Code Length	O				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	O			For the UL.	–	
>TFCS	O			TFCS for the UL.	–	
>UL DPCCH Slot Format	O				–	
>SSDT Cell Identity Length	O				–	
>S-Field Length	O				–	
DL DPCH Information		0..1			YES	reject
>TFCS	O			TFCS for the DL.	–	
>DL DPCH Slot Format	O				–	
>Number of DL channelisation codes	O				–	
>TFCI Signalling Mode	O				–	
>TFCI Presence	C- SlotFormat				–	
>MultiplexingPosition	O				–	
DCHs to Modify		0..<maxnoof DCHs>			GLOBAL	reject
>DCH ID	M				–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
>DRAC Control	O				–	
DCHs to Add		0..<maxnoof DCHs>			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Indicator	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	
>ToAWS	M				–	
>ToAWE	M				–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>DRAC Control	M				–	
DCHs to Delete		<i>0..<maxnoof DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
RL Information		<i>0..<maxnoof RLs></i>			EACH	reject
>RL ID	M				–	
>SSDT Indication	O				–	
>SSDT Cell Identity	C - SSDTIndON				–	

Condition	Explanation
SSDTIndON	The IE may be present if the SSDT Indication is set to 'SSDT Active in the UE'.
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.

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

9.2.2.X Number of DL channelisation codes

This parameter notifies DRNS of the number of DL channelisation codes required in Radio Links.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>Number of DL channelisation codes</u>			<u>INTEGER (1..8)</u>	

9.3.3 PDU Definitions

--- PARTLY OMITTED ---

```

IMPORTS
AllocationRetentionPriority,
AllowedQueuingTime,
BLER,
BindingID,
BurstType,
C-ID,
C-RNTI,
CCTrCH-ID,
CellIndividualOffset,
CFN,
CFNOffset,
ClosedLoopModel1-SupportIndicator,
ClosedLoopMode2-SupportIndicator,
CN-CS-DomainIdentifier,
CN-PS-DomainIdentifier,
Cause,
CellParameterID,
ChipOffset,
CompressedModeMethod,
CriticalityDiagnostics,
D-FieldLength,
D-RNTI,
D-RNTI-ReleaseIndication,
DCH-CombinationInd,
DCH-ID,
DL-DPCH-SlotFormat,
DL-SIRTarget,
DL-FrameType,
DL-Power,
DL-ScramblingCode,
DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
NrOfDLchannelisationcodes,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,

```

PrimaryCPICH-Power,
 PrimaryScramblingCode,
 PropagationDelay,
 PunctureLimit,
 QE-Selector,
 RANAP-RelocationInformation,
 RL-ID,
 RL-Set-ID,
 RNC-ID,
 RepetitionLength,
 RepetitionPeriod,
 ReportCharacteristics,
 S-FieldLength,
 S-RNTI,
 SCH-TimeSlot,
 SAI,
 SN,
 SSDD-CellID,
 SSDD-CellID-Length,
 SSDD-Indication,
 SSDD-SupportIndicator,
 STTD-Indicator,
 STTD-SupportIndicator,
 ScaledMaxAdjustmentPeriod,
 ScaledMaxAdjustmentStep,
 ScramblingCodeChange,
 SecondaryCCPCH-SlotFormat,
 SyncCase,
 TDD-ChannelisationCode,
 TDD-PhysicalChannelOffset,
 TDD-TPC-DownlinkStepSize,
 TFCI-Coding,
 TFCI-Presence,
 TFCI-SignallingMode,
 TGD,
 TGL,
 TimeSlot,
 ToAWE,
 ToAWS,
 TransmitDiversityIndicator,
 TransportBearerID,
 TransportBearerRequestIndicator,
 TFCS,
 TransportFormatSet,
 TransportLayerAddress,
 TrCH-SrcStatisticsDescr,
 TxDiversityIndicator,
 UARFCN,
 UC-ID,
 UL-DeltaSIR,
 UL-DeltaSIRAfter,
 UL-DL-CompressedModeSelection,
 UL-DPCCH-SlotFormat,
 UL-InterferenceLevel,
 UL-SIR,
 UL-FP-Mode,
 UL-ScramblingCode,
 URA-ID

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```

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
-- *****

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container        {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer  {{RadioLinkSetupRequestFDD-
Extensions}}
    OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { 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 mandatory } |
        { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-
SetupRqstFDD PRESENCE mandatory } |
        { ID id-DCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DCH-InformationList-RL-
SetupRqstFDD PRESENCE mandatory } |
        { ID id-RL-Information-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationList-RL-
SetupRqstFDD PRESENCE mandatory },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode UL-ScramblingCode,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs MaxNrOfUL-DPCHs OPTIONAL
    -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit PunctureLimit,
    ul-TFCS TFCS,
    ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat,
    ul-SIRTarget UL-SIR OPTIONAL,
    diversityMode DiversityMode,
    d-FieldLength D-FieldLength OPTIONAL
    -- This IE is present only if Feed Back mode diversity is activated -- ,
    sSDT-CellIdLength SSDT-CellID-Length OPTIONAL,
    s-FieldLength S-FieldLength OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {UL-DPCH-Information-RL-
SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS TFCS,
    dl-DPCH-SlotFormat DL-DPCH-SlotFormat,
    nrOfDLchannelisationcodes NrOfDLchannelisationcodes,
    tFCI-SignallingMode TFCI-SignallingMode,
    tFCI-Presence TFCI-Presence OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 -- ,
    multiplexingPosition MultiplexingPosition,
    powerOffsetInformation SEQUENCE {
        po1-ForTFCI-Bits PowerOffset,
        po2-ForTPC-Bits PowerOffset,
        po3-ForPilotBits PowerOffset,
        ...
    },
    fdd-dl-TPC-DownlinkStepSize FDD-TPC-DownlinkStepSize,
    iE-Extensions ProtocolExtensionContainer { {DL-DPCH-Information-RL-
SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
InformationItem-RL-SetupRqstFDD

DCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    dCH-ID DCH-ID,
    dCH-CombinationInd DCH-CombinationInd OPTIONAL,
    limitedPowerIncrease LimitedPowerIncrease,
    trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
    ul-transportFormatSet TransportFormatSet,
    dl-transportFormatSet TransportFormatSet,
    ul-BLER BLER,
    dl-BLER BLER,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode UL-FP-Mode,
    qE-Selector QE-Selector,
    toAWS ToAWS,
    toAWE ToAWE,
    dRACControl DRACControl,
    iE-Extensions ProtocolExtensionContainer { {DCH-InformationItem-RL-
SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RL-InformationList-RL-SetupRqstFDD ::= RL-IE-ContainerList1 { {RL-InformationItemIEs-RL-
SetupRqstFDD} }

RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-
SetupRqstFDD PRESENCE mandatory },
  ...
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID RL-ID,
  c-ID C-ID,
  frameOffset FrameOffset,
  chipOffset ChipOffset,
  propagationDelay PropagationDelay OPTIONAL,
  diversityControlField DiversityControlField OPTIONAL
  -- This IE is present only if the RL is not the first one in the RL-InformationList-RL-
SetupRqstFDD --,
  dl-InitialTX-Power DL-Power OPTIONAL,
  primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL,
  sSDT-CellID SSdT-CellID OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
  iE-Extensions ProtocolExtensionContainer { {RL-InformationItem-RL-
SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

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```

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container
  {{RadioLinkReconfigurationPrepareFDD-IEs}},
  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-DCH-ModifyList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-ModifyList-RL-
ReconfPrepFDD PRESENCE optional } |
  { ID id-DCH-AddList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-AddList-RL-
ReconfPrepFDD 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 },
  ...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  ul-ScramblingCode UL-ScramblingCode OPTIONAL,
  ul-SIRTarget UL-SIR OPTIONAL,
  minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
  maxNrOfUL-DPCHs MaxNrOfUL-DPCHs OPTIONAL
  -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 --,
  ul-PunctureLimit PunctureLimit OPTIONAL,

```

```

tFCS                TFCS                OPTIONAL,
ul-DPCCH-SlotFormat UL-DPCCH-SlotFormat  OPTIONAL,
sSDT-CellIDLength  SSdT-CellID-Length  OPTIONAL,
s-FieldLength      S-FieldLength       OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { {UL-DPCH-Information-RL-
ReconfPrepFDD-ExtIEs} } OPTIONAL,
...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
tFCS                TFCS                OPTIONAL,
dl-DPCH-SlotFormat DL-DPCH-SlotFormat  OPTIONAL,
nrOfDLchannelisationcodes NrOfDLchannelisationcodes OPTIONAL,
tFCI-SignallingMode TFCI-SignallingMode  OPTIONAL,
tFCI-Presence       TFCI-Presence       OPTIONAL,
-- This IE is present if Slot Format is from 12 to 16 --,
multiplexingPosition MultiplexingPosition  OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { {DL-DPCH-Information-RL-
ReconfPrepFDD-ExtIEs} } OPTIONAL,
...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-
RL-ReconfPrepFDD

DCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
dCH-ID              DCH-ID,
ul-TransportformatSet TransportFormatSet  OPTIONAL,
dl-TransportformatSet TransportFormatSet  OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority  OPTIONAL,
frameHandlingPriority FrameHandlingPriority  OPTIONAL,
ul-FP-Mode          UL-FP-Mode          OPTIONAL,
toAWS               ToAWS               OPTIONAL,
toAWE               ToAWE               OPTIONAL,
dRACControl         DRACControl         OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepFDD-
ExtIEs} } OPTIONAL,
...
}

DCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-AddList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-
ReconfPrepFDD

DCH-AddItem-RL-ReconfPrepFDD ::= SEQUENCE {
dCH-ID              DCH-ID,
dCH-CombinationInd DCH-CombinationInd  OPTIONAL,
limitedPowerIncrease LimitedPowerIncrease,
trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
ul-TransportformatSet TransportFormatSet,
dl-TransportformatSet TransportFormatSet,
ul-BLER             BLER,
dl-BLER             BLER,
allocationRetentionPriority AllocationRetentionPriority,
frameHandlingPriority FrameHandlingPriority,
payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
ul-FP-Mode          UL-FP-Mode,
qE-Selector         QE-Selector,
toAWS               ToAWS,
toAWE               ToAWE,
dRACControl         DRACControl,
iE-Extensions      ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepFDD-
ExtIEs} } OPTIONAL,
...
}

DCH-AddItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-
RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
dCH-ID              DCH-ID,

```

```

        iE-Extensions
ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= RL-IE-ContainerList0 { {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,
    sSDT-Indication                       SSDT-Indication      OPTIONAL,
    sSDT-CellIdentity                     SSDT-CellID          OPTIONAL
    -- The IE may be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
    iE-Extensions                         ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-
ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

--- PARTLY OMITTED ---

9.3.4 Information Element Definitions

--- PARTLY OMITTED ---

```

MidambleShift ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

-- N
NrOfDLchannelisationcodes ::= INTEGER (1..8)

-- O

-- P

PD ::= INTEGER (0..2047, ...)

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,

```

```
}   crc-not-included
```

--- PARTLY OMITTED ---

REQUEST” and “CELL RECONFIGURATION REQUEST” messages.

Clauses affected:

- 8.3.1 Radio Link Setup
- 8.3.2 Radio Link Addition
- 9.1.4 RADIO LINK SETUP RESPONSE
- 9.1.5 RADIO LINK SETUP FAILURE
- 9.1.7 RADIO LINK ADDITION RESPONSE
- 9.1.8 RADIO LINK ADDITION FAILURE
- 9.3.3 PDU Definitions
- 9.3.4 Information Element Definitions

Other specs affected:

- Other 3G core specifications → List of CRs:
- Other GSM core specifications → List of CRs:
- MS test specifications → List of CRs:
- BSS test specifications → List of CRs:
- O&M specifications → List of CRs:

Other comments:



help.doc

<----- [double-click here for help and instructions on how to create a CR.](#)

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

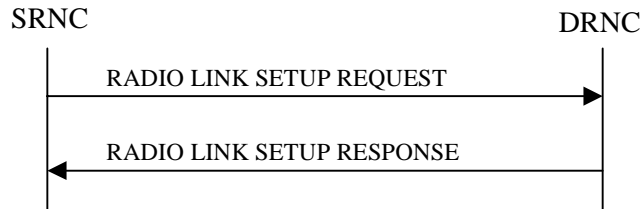


Figure 1: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

[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*.]

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD- Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE

message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.1.3 Unsuccessful Operation

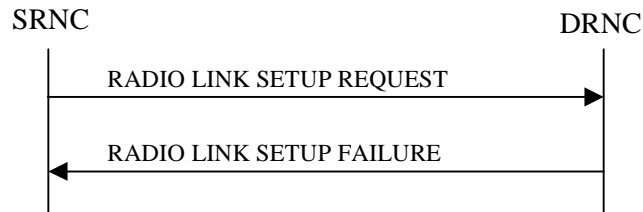


Figure 2: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLs can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. 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.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected DCH" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a 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;
- Unknown C-ID;
- [FDD - Macrodiversity Combining not Possible];
- Requested Configuration not Supported;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

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 the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

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 or more additional RLs towards a UE when there is already at least one RL established to the concerning 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.

8.3.2.2 Successful Operation

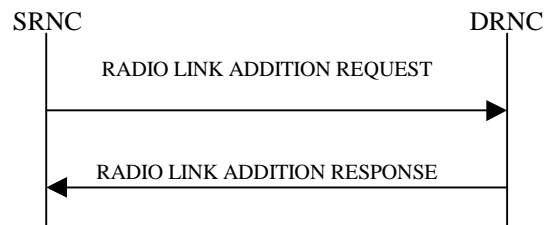


Figure 3: Radio Link Addition procedure: Successful Operation

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

Upon reception, 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 Diversity Control Field 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), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

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

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

[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 the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

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

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

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

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

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

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink 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.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control IE* was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

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

8.3.2.3 Unsuccessful Operation

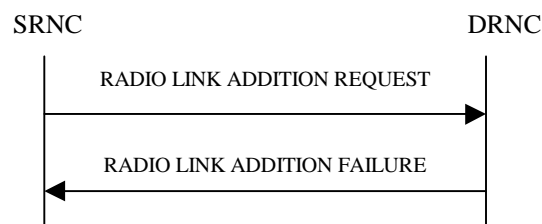


Figure 4: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one RL is unsuccessful, the DRNC shall send a RADIO LINK ADDITION FAILURE as response.

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.

Typical cause values are:

Radio Network Layer Causes:

- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- Macrodiversity Combining not Possible;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure.

Miscellaneous Causes:

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

8.3.2.4 Abnormal Conditions

-

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	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1..<maxno ofRLs>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
> Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>> FACH/PCH Information		1 .. <maxFACH Hcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>> Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>> Segment Information		1.. <maxIBSEG>			–	
>>>>IB SG POS	M				–	
> DL Code Information		1.. <maxnoof DL Codes>			–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	C- NotFirstRL				–	
>CHOICE <i>diversity Indication</i>						
>> <i>Combining</i>					YES	ignore
>>>RL ID	M			Reference RL ID for the combining	–	
>> <i>Non Combining or IE</i>				"IE not	YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
<i>not present</i>				present" is equivalent to "First RL".		
>>>DCH Information Response		<i>0..<maxno ofDCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Closed loop timing adjustment mode	<u>O</u>				:	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		<i>0..<maxno fneighbouringRNCs></i>			EACH	ignore
>> RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		<i>0..<maxno ofFDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxno ofTDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Uplink SIR Target	O		Uplink SIR		YES	ignore
Downlink SIR Target	M		Uplink SIR		YES	ignore
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
NotFirstRL	The IE is present only if the RL is not the first RL in the RL Information
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell.
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

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				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
Unsuccessful RL Information Response		<i>1...<maxno ofRLs></i>			EACH	ignore
>RL ID	M				–	
>Cause	M				–	
Successful RL Information Response		<i>0..<maxno ofRLs-1></i>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>DL Code Information		<i>1..<maxno ofDL Codes></i>			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				–	
>CHOICE <i>diversity Indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL ID for the combining	–	
>>Non Combining or IE not present				"IE not present" is equivalent to "First RL".	YES	ignore
>>>DCH Information Response		<i>0..<maxno ofDCHs></i>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Closed loop timing adjustment mode	<u>O</u>				:	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information	O	<i>0..<maxno ofneighbouringRNCs></i>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>>Per FDD Cell Information		<i>0..<maxno ofFDDneighbours></i>				
>>>>C-Id	M					

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxno ofTDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell

9.1.7 RADIO LINK ADDITION RESPONSE

9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		1..<maxnoofRLs-1>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		1.. <maxIBSEG>			–	
>>>>IB SG POS	M				–	
>DL Code Information		1..<maxnoofDLCodes>			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>CHOICE <i>diversity indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL-Id	-	
>>Non combining					YES	ignore
>>>DCH Information Response		1..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	-	
>>>>DCH ID	M				-	
>>>>Binding ID	M				-	
>>>>Transport Layer Address	M				-	
>SSDT Support Indicator	M				-	
>Minimum Uplink SIR	M		Uplink SIR		-	
>Maximum Uplink SIR	M		Uplink SIR		-	
>Closed loop timing adjustment mode	O				:	
>Maximum Allowed UL Tx Power	M				-	
>Neighbouring Cell Information		0..<maxnoofn eighbouringR NCs>			EACH	ignore
>>RNC-Id	M				-	
>>CN PS Domain Identifier	O				-	
>>CN CS Domain Identifier	O				-	
>>Per FDD Cell Information		0..<maxnoof FDDneighbo urs>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	-	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				-	
>>>Primary Scrambling Code	M				-	
>>>Primary CPICH Power	O				-	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxnoof TDDneighbo urs>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	-	
>>>Frame Offset	O				-	
>>>Cell Parameter ID	M				-	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Sync Case	M				-	
>>>Time Slot	C-Case1				-	
>>>SCH Time Slot	C-Case2				-	
>>>Cell Individual Offset	O				-	
>>>DPCH Constant Value	O				-	
>>>PCCPCH Power	O				-	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

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				YES	reject
Transaction ID	M				–	
Unsuccessful RL Information Response		1..<maxnoof RLS-1>			EACH	ignore
>RL ID	M				–	
>Cause	M				–	
Successful RL Information Response		0..<maxnoof RLS-2>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>DL Code Information		1..<maxnoof DLCodes>			GLOBAL	ignore
>>DL scrambling code	M				–	
>>FDD DL channelisation code Number	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL-Id	–	
>>Non combining					YES	ignore
>>>DCH Information Response		1..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Closed loop timing adjustment mode	<u>O</u>				:	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		0..<maxnoofn eighbouringR NCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>>Per FDD Cell Information		0..<maxnoof FDDneighbo urs>				
>>>>C-Id	M					
>>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>>Frame Offset	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxnoof TDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information

9.2.2.x 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.

<u>Information Element/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>Closed Loop Timing Adjustment Mode</u>			<u>ENUMERATED (Offset1, Offset2,...)</u>	<u>According to [10] chapter 7.1: Offset1 = slot(j+1)mod15 Offset2 = slot(j+2)mod15</u>

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    ClosedLoopTimingAdjustmentMode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,

--- PARTLY OMITTED ---

-- *****
--
-- 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                CRITICALITY ignore    TYPE D-RNTI                PRESENCE
optional } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore    TYPE CN-PS-DomainIdentifier
PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore    TYPE CN-CS-DomainIdentifier
PRESENCE optional } |
    { 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-DL-SIRTarget          CRITICALITY ignore    TYPE DL-SIRTarget
PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore    TYPE CriticalityDiagnostics
PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= RL-IE-ContainerList1 { {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-ID,

```

```

rL-Set-ID                RL-Set-ID,
sAI                      SAI,
ul-InterferenceLevel     UL-InterferenceLevel,
secondary-CCPCH-Info     Secondary-CCPCH-Info-RL-SetupRspFDD    OPTIONAL,
dl-CodeInformationList   DL-CodeInformationList-RL-SetupRspFDD,
diversityIndication      DiversityIndication-RL-SetupRspFDD,
sSDT-SupportIndicator    SSDT-SupportIndicator,
maxUL-SIR               UL-SIR,
minUL-SIR               UL-SIR,
closedloopTimingadjustmentmode ClosedloopTimingadjustmentmode,
maximumAllowedULTxPower MaximumAllowedULTxPower,
neighbouring-CellInformation Neighbouring-CellInformationList-RL-SetupRsp    OPTIONAL,
iE-Extensions           ProtocolExtensionContainer { {RL-InformationResponseItem-RL-
SetupRspFDD-ExtIEs } } OPTIONAL,
...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Secondary-CCPCH-Info-RL-SetupRspFDD ::= SEQUENCE {
fDD-S-CCPCH-Offset      FDD-S-CCPCH-Offset,
dl-ScramblingCode       DL-ScramblingCode,
fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
dl-TFCS                 TFCS,
secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
tFCI-Presence           TFCI-Presence    OPTIONAL,
-- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to
17
multiplexingPosition     MultiplexingPosition,
sTTD-Indicator          STTD-Indicator,
fACH-PCH-InformationList FACH-PCH-InformationList-RL-SetupRspFDD,
schedulingInformation    SchedulingInformation-RL-SetupRspFDD,
iE-Extensions           ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-
SetupRspFDD-ExtIEs } } OPTIONAL,
...
}

Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

FACH-PCH-InformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-
InformationItem-RL-SetupRspFDD

FACH-PCH-InformationItem-RL-SetupRspFDD ::= SEQUENCE {
transportFormatSet      TransportFormatSet,
iE-Extensions           ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-
SetupRspFDD-ExtIEs } } OPTIONAL,
...
}

FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SchedulingInformation-RL-SetupRspFDD ::= SEQUENCE {
iB-SG-Rep              IB-SG-REP,
segmentInformationList SegmentInformationList-RL-SetupRspFDD,
iE-Extensions         ProtocolExtensionContainer { { SchedulingInformation-RL-
SetupRspFDD-ExtIEs } } OPTIONAL,
...
}

SchedulingInformation-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SegmentInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-
RL-SetupRspFDD

SegmentInformationItem-RL-SetupRspFDD ::= SEQUENCE {
iB-SG-POS              IB-SG-POS,
iE-Extensions         ProtocolExtensionContainer { { SegmentInformationItem-RL-
SetupRspFDD-ExtIEs } } OPTIONAL,
...
}

SegmentInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DL-CodeInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
CodeInformationItem-RL-SetupRspFDD

```

```

DL-CodeInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-SetupRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupRspFDD
}}

DiversityIndicationIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-SetupRspFDD CRITICALITY ignore TYPE
DiversityIndicationItem-RL-SetupRspFDD PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-SetupRspFDD ::= CHOICE {
    combining                  Combining-RL-SetupRspFDD,
    nonCombiningOrIENotPresent NonCombiningOrIENotPresen-RL-SetupRspFDD,
    ...
}

Combining-RL-SetupRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupRspFDD }}

CombiningIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-SetupRspFDD CRITICALITY ignore TYPE CombiningItem-RL-SetupRspFDD
PRESENCE mandatory },
    ...
}

CombiningItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    iE-Extensions              ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs}
} OPTIONAL,
    ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrIENotPresen-RL-SetupRspFDD ::= ProtocolIE-Container {{ NonCombiningOrIENotPresenIE-
RL-SetupRspFDD }}

NonCombiningOrIENotPresenIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningOrIENotPresenItem-RL-SetupRspFDD CRITICALITY ignore TYPE
NonCombiningOrIENotPresenItem-RL-SetupRspFDD PRESENCE mandatory },
    ...
}

NonCombiningOrIENotPresenItem-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-SetupRspFDD DCH-InformationResponseList-RL-SetupRspFDD
OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {
NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-
InformationResponseItem-RL-SetupRspFDD

DCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                    BindingID,
    transportLayerAddress        TransportLayerAddress,
    iE-Extensions              ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-SetupRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF
ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-SetupRsp }}

Neighbouring-CellInformationItemIE-RL-SetupRsp RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-Neighbouring-CellInformationItem-RL-SetupRsp CRITICALITY ignore TYPE
      Neighbouring-CellInformationItem-RL-SetupRsp PRESENCE mandatory },
    ...
  }

Neighbouring-CellInformationItem-RL-SetupRsp ::= SEQUENCE {
  rNC-ID RNC-ID,
  cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
  cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
  per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
  per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {Neighbouring-
CellInformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
  ...
}

Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Per-FDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF
Per-FDD-Cell-InformationItem-RL-SetupRsp

Per-FDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
  c-ID C-ID,
  uARFCNforNu UARFCN,
  uARFCNforNd UARFCN,
  frameOffset FrameOffset OPTIONAL,
  primaryScramblingCode PrimaryScramblingCode,
  primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
  cellIndividualOffset CellIndividualOffset OPTIONAL,
  txDiversityIndicator TxDiversityIndicator OPTIONAL,
  sTTD-SupportIndicator sTTD-SupportIndicator OPTIONAL,
  closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
  closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { Per-FDD-Cell-
InformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
  ...
}

Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Per-TDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF
Per-TDD-Cell-InformationItem-RL-SetupRsp

Per-TDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
  c-ID C-ID,
  uARFCNforNt UARFCN,
  frameOffset FrameOffset OPTIONAL,
  cellParameterID CellParameterID,
  syncCase SyncCase,
  timeSlot TimeSlot OPTIONAL
  -- This IE is present only if Sync Case = Case1 -- ,
  sCH-TimeSlot SCH-TimeSlot OPTIONAL
  -- This IE is present only if Sync Case = Case2 -- ,
  cellIndividualOffset CellIndividualOffset OPTIONAL,
  dPCHConstantValue DPCHConstantValue OPTIONAL,
  pCCPCH-Power PCCPCH-Power OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
SetupRsp-ExtIEs} } OPTIONAL,
  ...
}

Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

--- PARTLY OMITTED ---

```

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupFailureFDD-IEs}},

```

```

    protocolExtensions
Extensions}}
    ...
}

RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI
optional } |
  { ID id-CN-PS-DomainIdentifier
PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier
PRESENCE optional } |
  { ID id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD PRESENCE mandatory } |
  { ID id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD
SuccessfulRL-InformationResponseList-RL-SetupFailureFDD PRESENCE optional } |
  { ID id-UL-SIRTarget
optional } |
  { ID id-DL-SIRTarget
PRESENCE optional } |
  { ID id-CriticalityDiagnostics
PRESENCE optional },
  ...
}

UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList1-1 {
{UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
PRESENCE mandatory },
  ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-
InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList0-1 { {SuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD
SuccessfulRL-InformationResponse-RL-SetupFailureFDD
PRESENCE mandatory },
  ...
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  sAI SAI,
  ul-InterferenceLevel UL-InterferenceLevel,
  dl-CodeInformation DL-CodeInformationList-RL-SetupFailureFDD,
  diversityIndication DiversityIndication-RL-SetupFailureFDD,
  sSDT-SupportIndicator SSDT-SupportIndicator,
  maxUL-SIR UL-SIR,
  minUL-SIR UL-SIR,
  closedlooptimingadjustmentmode Closedlooptimingadjustmentmode,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  neighbouring-CellInformationList Neighbouring-CellInformationList-RL-SetupFailureFDD
OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {SuccessfulRL-
InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CodeInformationList-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-
SetupFailureFDD }}

```

```

DL-CodeInformationListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CodeInformationListIE-RL-SetupFailureFDD CRITICALITY ignore TYPE DL-
CodeInformationListIE-RL-SetupFailureFDD PRESENCE mandatory },
  ...
}

DL-CodeInformationListIE-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
CodeInformationItem-RL-SetupFailureFDD

DL-CodeInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
  dl-ScramblingCode DL-ScramblingCode,
  fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
  iE-Extensions ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CodeInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
SetupFailureFDD }}

DiversityIndicationIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DiversityIndicationItem-RL-SetupFailureFDD CRITICALITY ignore TYPE
DiversityIndicationItem-RL-SetupFailureFDD PRESENCE mandatory },
  ...
}

DiversityIndicationItem-RL-SetupFailureFDD ::= CHOICE {
  combining Combining-RL-SetupFailureFDD,
  nonCombiningOrIENotPresent NonCombiningOrIENotPresen-RL-SetupFailureFDD,
  ...
}

Combining-RL-SetupFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupFailureFDD }}

CombiningIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-SetupFailureFDD CRITICALITY ignore TYPE CombiningItem-RL-
SetupFailureFDD PRESENCE mandatory },
  ...
}

CombiningItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-
ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrIENotPresen-RL-SetupFailureFDD ::= ProtocolIE-Container {{
NonCombiningOrIENotPresenIE-RL-SetupFailureFDD }}

NonCombiningOrIENotPresenIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-NonCombiningOrIENotPresenItem-RL-SetupFailureFDD CRITICALITY ignore TYPE
NonCombiningOrIENotPresenItem-RL-SetupFailureFDD PRESENCE mandatory },
  ...
}

NonCombiningOrIENotPresenItem-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-InformationResponse-RL-SetupFailureFDD DCH-InformationResponseList-RL-SetupFailureFDD
OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {
NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-
InformationResponseItem-RL-SetupFailureFDD

DCH-InformationResponseItem-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-ID DCH-ID,
  bindingID BindingID,
  transportLayerAddress TransportLayerAddress,
  iE-Extensions ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

}

DCH-InformationResponseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-SetupFailureFDD ::= SEQUENCE (SIZE
(0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-
SetupFailureFDD }}

Neighbouring-CellInformationItemIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-CellInformationItem-RL-SetupFailureFDD CRITICALITY ignore TYPE
    Neighbouring-CellInformationItem-RL-SetupFailureFDD PRESENCE mandatory },
    ...
}

Neighbouring-CellInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    rNC-ID RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Neighbouring-
CellInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE
(1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-SetupFailureFDD

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNu UARFCN,
    uARFCNforNd UARFCN,
    frameOffset FrameOffset OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    txDiversityIndicator TxDiversityIndicator OPTIONAL,
    sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
    closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Per-FDD-Cell-
InformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE
(1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-SetupFailureFDD

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNt UARFCN,
    frameOffset FrameOffset OPTIONAL,
    cellParameterID CellParameterID,
    syncCase SyncCase,
    timeSlot TimeSlot OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot SCH-TimeSlot OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    dPCHConstantValue DPCHConstantValue OPTIONAL,
    pCCPCH-Power PCCPCH-Power,
    iE-Extensions ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

--- PARTLY OMITTED ---

```

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container        {{RadioLinkAdditionResponseFDD-
    IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-
    Extensions}}
    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 ::= RL-IE-ContainerList1-1 { {RL-
InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
    CRITICALITY ignore    TYPE RL-InformationResponseItem-RL-AdditionRspFDD
    PRESENCE mandatory  },
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    sAI                  SAI,
    ul-InterferenceLevel UL-InterferenceLevel,
    secondary-CCPCH-Info Secondary-CCPCH-Info-RL-AdditionRspFDD    OPTIONAL,
    dl-CodeInformation   DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    minUL-SIR            UL-SIR,
    maxUL-SIR            UL-SIR,
    closedloopTimingAdjustmentmode ClosedloopTimingAdjustmentmode,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    neighbouring-CellInformation Neighbouring-CellInformationList-RL-SetupRsp    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponseItem-RL-
    AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset    FDD-S-CCPCH-Offset,
    dl-ScramblingCode     DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                TFCS,
    secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
    tFCI-Presence          TFCI-Presence    OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to
    17
    multiplexingPosition   MultiplexingPosition,
    sTTD-Indicator         STTD-Indicator,
    fACH-PCH-InformationList FACH-PCH-InformationList-RL-AdditionRspFDD,
    schedulingInformation  SchedulingInformation-RL-AdditionRspFDD,
    iE-Extensions        ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-
    AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-
InformationItem-RL-AdditionRspFDD

FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    transportFormatSet    TransportFormatSet,
    iE-Extensions        ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-
    AdditionRspFDD-ExtIEs} } OPTIONAL,

```



```

}
...
}
FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-Rep          IB-SG-REP,
    segmentInformationList SegmentInformationList-RL-AdditionRspFDD,
    iE-Extensions      ProtocolExtensionContainer { { SchedulingInformation-RL-
AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}
SchedulingInformation-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF
SegmentInformationItem-RL-AdditionRspFDD
SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-POS          IB-SG-POS,
    iE-Extensions      ProtocolExtensionContainer { { SegmentInformationItem-RL-
AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}
SegmentInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-
AdditionRspFDD }}
DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-AdditionRspFDD CRITICALITY ignore TYPE DL-
CodeInformationListIE-RL-AdditionRspFDD PRESENCE mandatory },
    ...
}
DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
CodeInformationItem-RL-AdditionRspFDD
DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    dl-ScramblingCode      DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    iE-Extensions          ProtocolExtensionContainer { {DL-CodeInformationItem-RL-
AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}
DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
AdditionRspFDD }}
DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionRspFDD CRITICALITY ignore TYPE
DiversityIndicationItem-RL-AdditionRspFDD PRESENCE mandatory },
    ...
}
DiversityIndicationItem-RL-AdditionRspFDD ::= CHOICE {
    combining          Combining-RL-AdditionRspFDD,
    nonCombining       NonCombining-RL-AdditionRspFDD,
    ...
}
Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}
CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE CombiningItem-RL-
AdditionRspFDD PRESENCE mandatory },
    ...
}
CombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    iE-Extensions      ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-
ExtIEs} } OPTIONAL,
    ...
}

```

```

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}

NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE NonCombiningItem-RL-
    AdditionRspFDD PRESENCE mandatory },
    ...
}

NonCombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionRspFDD DCH-InformationResponseList-RL-AdditionRspFDD,
    iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-
    AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
InformationResponseItem-RL-AdditionRspFDD

DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-ID DCH-ID,
    bindingID BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
    AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF
Neighbouring-CellInformationItem-RL-AdditionRsp

Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
    rNC-ID RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Neighbouring-
    CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF
Per-FDD-Cell-InformationItem-RL-AdditionRsp

Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNu UARFCN,
    uARFCNforNd UARFCN,
    frameOffset FrameOffset OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    txDiversityIndicator TxDiversityIndicator OPTIONAL,
    sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
    closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Per-FDD-Cell-
    InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF
Per-TDD-Cell-InformationItem-RL-AdditionRsp

Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {

```

```

c-ID          C-ID,
uARFCNforNt  UARFCN,
frameOffset  FrameOffset      OPTIONAL,
cellParameterID CellParameterID,
syncCase     SyncCase,
timeSlot     TimeSlot         OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot SCH-TimeSlot     OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset CellIndividualOffset OPTIONAL,
dPCHConstantValue DPCHConstantValue OPTIONAL,
pCCPCH-Power     PCCPCH-Power,
iE-Extensions    ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
AdditionRsp-ExtIEs } } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

--- PARTLY OMITTED ---
-- *****
-- RADIO LINK ADDITION FAILURE FDD
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      {{RadioLinkAdditionFailureFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-
Extensions}}
    OPTIONAL,
    ...
}

RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD CRITICALITY ignore
    TYPE UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD PRESENCE mandatory } |
    { ID id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD CRITICALITY ignore
    TYPE SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
    PRESENCE optional },
    ...
}

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList1-1 {
{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          Cause,
    iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList0-2 {
{SuccessfulRL-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,
    sAI           SAI,
    ul-InterferenceLevel UL-InterferenceLevel,
    dl-CodeInformation DL-CodeInformationList-RL-AdditionFailureFDD,

```

```

diversityIndication          DiversityIndication-RL-AdditionFailureFDD,
sSDT-SupportIndicator        SSDT-SupportIndicator,
minUL-SIR                    UL-SIR,
maxUL-SIR                    UL-SIR,
closedloopoptimingadjustmentmode Closedloopoptimingadjustmentmode,
maximumAllowedULTxPower      MaximumAllowedULTxPower,
neighbouring-CellInformationList Neighbouring-CellInformationList-RL-AdditionFailureFDD
OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { {SuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-
RL-AdditionFailureFDD }}

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-DL-CodeInformationListIE-RL-AdditionFailureFDD CRITICALITY ignore TYPE DL-
CodeInformationListIE-RL-AdditionFailureFDD PRESENCE mandatory },
...
}

DL-CodeInformationListIE-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-
CodeInformationItem-RL-AdditionFailureFDD

DL-CodeInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
dl-ScramblingCode          DL-ScramblingCode,
fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-
RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}

DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DiversityIndication-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-
AdditionFailureFDD }}

DiversityIndicationIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-DiversityIndicationItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE
DiversityIndicationItem-RL-AdditionFailureFDD PRESENCE mandatory },
...
}

DiversityIndicationItem-RL-AdditionFailureFDD ::= CHOICE {
combining                  Combining-RL-AdditionFailureFDD,
nonCombining              NonCombining-RL-AdditionFailureFDD,
...
}

Combining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionFailureFDD }}

CombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-CombiningItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE CombiningItem-RL-
AdditionFailureFDD PRESENCE mandatory },
...
}

CombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
rL-ID                      RL-ID,
iE-Extensions              ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-
ExtIEs} } OPTIONAL,
...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

NonCombining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionFailureFDD
}}

NonCombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-NonCombiningItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE NonCombiningItem-RL-
AdditionFailureFDD PRESENCE mandatory },
...
}

NonCombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {

```

```

    dCH-InformationResponse-RL-AdditionFailureFDD      DCH-InformationResponseList-RL-
    AdditionFailureFDD,
    iE-Extensions                                     ProtocolExtensionContainer { { NonCombiningItem-RL-
    AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-
InformationResponseItem-RL-AdditionFailureFDD

DCH-InformationResponseItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID              BindingID,
    transportLayerAddress  TransportLayerAddress,
    iE-Extensions         ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-
    AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE
(0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionFailureFDD

Neighbouring-CellInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rNC-ID                RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier    OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier    OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionFailureFDD
    OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionFailureFDD
    OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {Neighbouring-
    CellInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE
(1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNu        UARFCN,
    uARFCNforNd        UARFCN,
    frameOffset        FrameOffset    OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power PrimaryCPICH-Power    OPTIONAL,
    cellIndividualOffset CellIndividualOffset    OPTIONAL,
    txDiversityIndicator TxDiversityIndicator    OPTIONAL,
    sTTD-SupportIndicator STTD-SupportIndicator    OPTIONAL,
    closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { Per-FDD-Cell-
    InformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE
(1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNt        UARFCN,
    frameOffset        FrameOffset    OPTIONAL,
    cellParameterID    CellParameterID,
    syncCase           SyncCase,
    timeSlot           TimeSlot    OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot       SCH-TimeSlot    OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset CellIndividualOffset    OPTIONAL,
    dPCHConstantValue DPCHConstantValue    OPTIONAL,

```

```

pCCPCH-Power          PCCPCH-Power,
iE-Extensions         ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-
AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}
Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```

--- PARTLY OMITTED ---

9.3.4 Information Element Definitions

--- PARTLY OMITTED ---

```

-- 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 {
    transaction-not-allowed,
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    ...
}
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,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    unspecified,
    ...
}
CauseTransport ::= ENUMERATED {
    transmission-link-failure,
    transmission-port-not-available,
    unspecified,
    ...
}
C-ID ::= INTEGER (0..65535)

```

```

CCTrCH-ID                ::= INTEGER (0..15)
CellIndividualOffset     ::= INTEGER (-20..20)
CellParameterID         ::= INTEGER (0..127)
CFN                      ::= INTEGER (0..255)
CFNOffset ::= INTEGER (0..255)
ChannelCodingType ::= ENUMERATED {
    no-coding,
    convolutional-coding,
    turbo-coding
}
ChipOffset               ::= INTEGER (0..38399)
ClosedLoopModel-SupportIndicator ::= ENUMERATED {
    closedLoop-Model-Supported,
    closedLoop-Model-not-Supported
}
ClosedLoopMode2-SupportIndicator ::= ENUMERATED {
    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}
Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}
CodingRate ::= ENUMERATED {
    half,
    third
}
CompressedModeMethod ::= ENUMERATED {
    none,
    puncturing,
    half-SF,
    higher-Layer-Scheduling
}
CRC-Size                ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24
}

```

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 90r3

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**
list expected approval meeting # here ↑

For approval
For information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:
(at least one should be marked with an X)

(U)SIM ME UTRAN / Radio Core Network

Source: **R-WG3** **Date:** **May 2000**

Subject: **DL Initial Power after Handover**

Work item:

Category:
(only one category shall be marked with an X)

F Correction
A Corresponds to a correction in an earlier release
B Addition of feature
C Functional modification of feature
D Editorial modification

Release: Phase 2
Release 96
Release 97
Release 98
Release 99
Release 00

Reason for change:

In the case of the setup of new links over the lur for handover, timeslot ISCP as measured by the UE should be sent, if available, to help in the setting of the initial downlink power of that UE.

Clauses affected: **8.3.1.2, 8.3.2.2, 9.1.3.2, 9.1.6.2, 9.2.3, 9.3.3, 9.4, 9.6**

Other specs affected:

Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
BSS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:

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

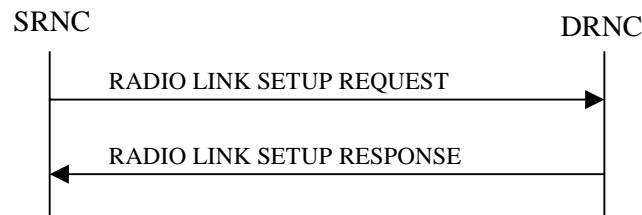


Figure 1: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

[FDD - If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use the indicated value when deciding the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP* IE and/or the *Time Slot ISCP* IE are present, the DRNC should use the indicated values when deciding the Initial DL TX Power.]

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* that the RL is combined with another RL. In this case the *Reference RL ID* shall be included to indicate with which RL the combination is performed. The *Reference RL ID* shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and *Tx diversity capability* (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control IE* is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.1.3 Unsuccessful Operation

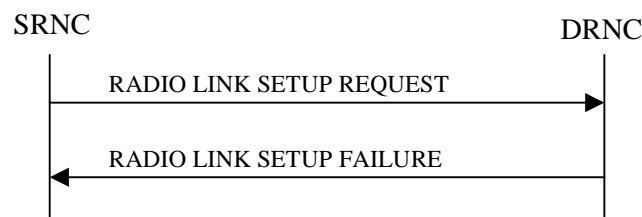


Figure 2: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLs can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. 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.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected DCH" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a 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;
- Unknown C-ID;
- [FDD - Macrodiversity Combining not Possible];
- Requested Configuration not Supported;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

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 the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

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 or more additional RLs towards a UE when there is already at least one RL established to the concerning 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.

8.3.2.2 Successful Operation

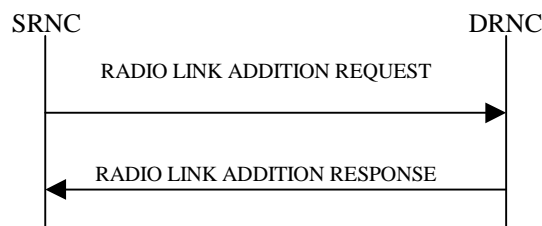


Figure 3: Radio Link Addition procedure: Successful Operation

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

Upon reception, 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 Diversity Control Field 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), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

[FDD - If the *Primary CCPCH Ec/No* IE ~~[FDD]~~ or the ~~*Primary CCPCH RSCP* IE [TDD]~~ measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.]

[TDD - If the *Primary CCPCH RSCP* IE and/or the *Time Slot ISCP* IE are included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use them in the calculation of the Initial DL TX Power. If the *Primary CCPCH RSCP* IE and *Time slot ISCP* IE are not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.]

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

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

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

[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 the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

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

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

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

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

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink 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.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control* IE was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

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

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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		1			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C- SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset	Power offset for the TFCI bits.	–	
>>PO2	M		Power Offset	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC control	M				–	
RL Information		<i>1...<maxn oofRLs></i>			EACH	notify
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Propagation Delay	O				–	
>Diversity Control Field	C – NotFirstRL				–	
>Initial DL TX Power	O		DL Power		–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell ID	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the RL Information .
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofRLs	Maximum number of RLs 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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL CTrCH Information		1..<maxno of CTrCHs>			EACH	notify
>CTrCH ID	M				–	
>TFCS	M			For the UL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
DL CTrCH Information		1..<maxno of CTrCHs>			EACH	notify
>CTrCH ID	M				–	
>TFCS	M			For the DL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
>TDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno of DCHs>			GLOBAL	reject
>DCH ID	M				–	
>CTrCH ID	M			UL CTrCH in which the DCH is mapped	–	
>CTrCH ID	M			DL CTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Primary CCPCH RSCP	O				–	
>Time slot ISCP Info		0..<maxno of DLts>			–	
>>Time slot	M				–	
>>Time slot ISCP	M				–	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.
MaxnoofDLts	Maximum number of Downlink time slots per Radio Link

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				YES	reject
Transaction ID	M				–	
Uplink SIR Target	M		Uplink SIR		YES	reject
RL Information		<i>1..<maxn oofRLs- 1></i>			EACH	notify
>RL ID	M				–	
>C-Id	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Diversity Control Field	M				–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell Identity	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Range bound	Explanation
MaxnoofRLs	Maximum number of radio links for one UE
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

9.1.6.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-Id	M				–	
>Frame Offset	M				–	
>Diversity Control Field	M				–	
>Primary CCPCH RSCP	O				–	
>Time slot ISCP Info		<i>0..<maxnoofDLts></i>			–	
>>Time slot	M				–	
>>Time slot ISCP	M				–	

Range bound	Explanation
MaxnoofDLts	Maximum number of Downlink time slots per Radio Link

9.2.3.x Timeslot ISCP

Timeslot ISCP is the measured interference in a downlink timeslot at the UE, see ref. [14].

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>Timeslot ISCP</u>			<u>INTEGER (0..91)</u>	<u>According to mapping in [14].</u>

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
```

DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
ISCP,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,

```
RepetitionPeriod,  
ReportCharacteristics,  
S-FieldLength,  
S-RNTI,  
SCH-TimeSlot,  
SAI,  
SN,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
ScaledMaxAdjustmentPeriod,  
ScaledMaxAdjustmentStep,  
ScramblingCodeChange,  
SecondaryCCPCH-SlotFormat,  
SyncCase,  
TDD-ChannelisationCode,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TGD,  
TGL,  
TimeSlot,  
ToAWE,  
ToAWS,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TxDiversityIndicator,  
UARFCN,  
UC-ID,  
UL-DeltaSIR,  
UL-DeltaSIRAfter,  
UL-DL-CompressedModeSelection,  
UL-DPCCH-SlotFormat,  
UL-InterferenceLevel,  
UL-SIR,  
UL-FP-Mode,  
UL-ScramblingCode,  
URA-ID  
FROM RNSAP-IEs  
  
PrivateIE-Container{ },
```

```
ProtocolExtensionContainer{},
ProtocolIE-ContainerList{},
ProtocolIE-ContainerPair{},
ProtocolIE-ContainerPairList{},
ProtocolIE-Container{},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfDLTs,
maxNrOfCMpatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { 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-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-DCH-InformationList-RL-SetupRqstTDD CRITICALITY reject TYPE DCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    ul-TFCS              TFCS,
    tFCI-Coding          TFCI-Coding,
    ul-PunctureLimit     PunctureLimit,
    iE-Extensions        ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

```



```
DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    dl-TFCS            TFCS,
    tFCI-Coding       tFCI-Coding,
    dl-PunctureLimit  PunctureLimit,
    tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
    iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
DCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstTDD
```

```
DCH-InformationItem-RL-SetupRqstTDD ::= 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
    dCH-CombinationInd DCH-CombinationInd OPTIONAL,
    limitedPowerIncrease LimitedPowerIncrease,
    trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
    ul-transportFormatSet TransportFormatSet,
    dl-transportFormatSet TransportFormatSet,
    ul-BLER        BLER,
    dl-BLER        BLER,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode     UL-FP-Mode,
    toAWS          ToAWS,
    toAWE          ToAWE,
    iE-Extensions ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
DCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    c-ID          C-ID,
    frameOffset    FrameOffset,
    primaryCCPCH-RSCP PrimaryCCPCH-RSCP OPTIONAL,
    timeSlot-ISCPList-RL-SetupRqstTDD TimeSlot-ISCPList-RL-SetupRqstTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
TimeSlot-ISCPList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF Timeslot-ISCPIItem-RL-SetupRspTDD
```

```
Timeslot-ISCPItem-RL-SetupRspTDD ::= SEQUENCE {  
    timeslot TimeSlot,  
    iSCP ISCP,  
}
```

```
RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

```
RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

```

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-AdditionRqstTDD    CRITICALITY reject    TYPE RL-Information-RL-AdditionRqstTDD    PRESENCE mandatory    },
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    frameOffset          FrameOffset,
    diversityControlField DiversityControlField,
    primaryCCPCH-RSCP    PrimaryCCPCH-RSCP    OPTIONAL,
    timeSlot-ISCPList-RL-AdditionRqstTDD    TimeSlot-ISCPList-RL-AdditionRqstTDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

TimeSlot-ISCPList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF Timeslot-ISCPItem-RL-AdditionRspTDD

Timeslot-ISCPItem-RL-AdditionRspTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    iSCP                    ISCP,
}

RL-Information-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
-- I  
IB-SG-POS ::= INTEGER (0..4095)  
IB-SG-REP ::= INTEGER (16| 32| 64| 128| 256| 512| 1024| 2480)  
IMSI      ::= OCTET STRING (SIZE(3..8))  
  
ISCP      ::= INTEGER (0..91)  
-- According to maping in 25.225  
  
-- J  
-- K  
-- L
```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
id-commonTransportChannelResourcesRelease                INTEGER ::= 2
id-compressedModeCancellationFDD                        INTEGER ::= 3
id-compressedModeCommitFDD                              INTEGER ::= 4
id-compressedModePrepareFDD                             INTEGER ::= 5
id-downlinkPowerControl                                 INTEGER ::= 6
id-downlinkSignallingTransfer                            INTEGER ::= 7
id-errorIndication                                      INTEGER ::= 8
id-measurementFailure                                   INTEGER ::= 9
id-measurementInitiation                                INTEGER ::= 10
id-measurementReporting                                  INTEGER ::= 11
id-measurementTermination                               INTEGER ::= 12
id-pagingRequest                                        INTEGER ::= 13
id-physicalChannelReconfiguration                       INTEGER ::= 14
id-privateMessage                                       INTEGER ::= 15
id-radioLinkAddition                                    INTEGER ::= 16
id-radioLinkDeletion                                    INTEGER ::= 17
id-radioLinkFailure                                     INTEGER ::= 18
id-radioLinkRestoration                                 INTEGER ::= 19
id-radioLinkSetup                                       INTEGER ::= 20
id-srnsRelocationCommit                                 INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation      INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare          INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration               INTEGER ::= 25
id-uplinkSignallingTransfer                             INTEGER ::= 26

-- *****
--
-- Extension constants

```

```
--
-- *****
maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions        INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535
-- *****
--
-- Lists
--
-- *****

maxRateMatching              INTEGER ::= 10
maxNrOfTFCs                  INTEGER ::= 10
maxNrOfTFs                   INTEGER ::= 10
maxNrOfCCTrCHs              INTEGER ::= 10
maxNrOfDCHs                  INTEGER ::= 10
maxNrOfDL-Codes              INTEGER ::= 10
maxNrOfDPCHs                 INTEGER ::= 10
maxNrOfErrors                INTEGER ::= 10
maxNrOfMACcSDU-Length       INTEGER ::= 10
maxNrOfRLs                   INTEGER ::= 10
maxNrOfRLSets                INTEGER ::= 10
maxNrOfRLs-1                 INTEGER ::= 10
maxNrOfRLs-2                 INTEGER ::= 10
maxNrOfSCCPCHs              INTEGER ::= 10
maxNrOfULTs                  INTEGER ::= 15
maxNrOfDLTs                  INTEGER ::= 15
maxNrOfCMPatterns           INTEGER ::= 8
maxRNCinURA                 INTEGER ::= 10
maxTTI-Count                 INTEGER ::= 10
maxCTFC-1                    INTEGER ::= 10
maxNrOfNeighbouringRNCs     INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC  INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC  INTEGER ::= 10
maxFACHCountPlus1           INTEGER ::= 10
maxIBSEG                     INTEGER ::= 16
```

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 94 r1

Current Version: **3.1.0.**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**
 list expected approval meeting # here ↑

for approval
 for information

Strategic
 non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
 (at least one should be marked with an X)

Source: R-WG3 **Date:** May , 2000

Subject: More stringent power control behaviour specification in RNSAP

Work item:

Category:	F Correction	<input checked="" type="checkbox"/>	Release:	Phase 2	<input type="checkbox"/>
(only one category shall be marked with an X)	A Corresponds to a correction in an earlier release	<input type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>		Release 99	<input checked="" type="checkbox"/>
				Release 00	<input type="checkbox"/>

Reason for change: Based on the discussions in the WG1/WG3 power control ad-hoc on Tdoc R3-001090, this contribution proposes the resulting changes to RNSAP. In addition, it is clarified that in R99, the DPC mode is always 0.

Clauses affected: 8.3.1;8.3.2.

Other specs affected:	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

Other comments: This CR uses reference [22] introduced in Tdoc 1284

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

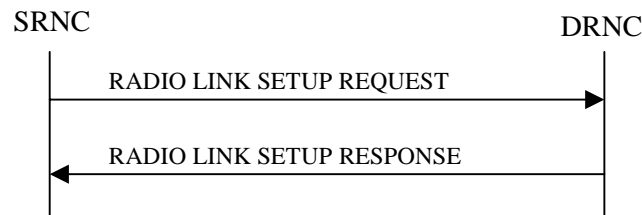


Figure 5: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

[FDD – The DRNS shall start the DL transmission using the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL until UL synchronisation is achieved for the concerning RLS or a DL POWER CONTROL REQUEST message is received. No innerloop 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) with DPC MODE=0 and the power control procedure (see 8.3.7).]

[TDD – The DRNS shall start the DL transmission using the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code and on each Time Slot of a RL until UL synchronisation is achieved for the concerning RL. No innerloop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22] subclause 4.2.3.3).]

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control IE* is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

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 or more additional RLs towards a UE when there is already at least one RL established to the concerning 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.

8.3.2.2 Successful Operation

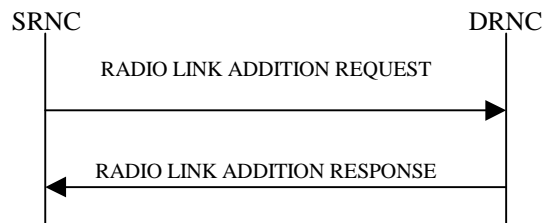


Figure 7: Radio Link Addition procedure: Successful Operation

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

Upon reception, 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 Diversity Control Field 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), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

[FDD - The Initial DL TX Power shall be applied until UL synchronisation is achieved for that RLS or a DL POWER CONTROL REQUEST message is received. No innerloop 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) with DPC_MODE=0 and the power control procedure (see 8.3.7)].

[TDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved for that RL. No innerloop 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 - The DRNS shall use the provided Uplink SIR Target value as the current target for the inner-loop power control.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

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

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

[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 the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

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

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

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

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

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink 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.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control* IE was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

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

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 102r1

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **RAN#8**
list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG

The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:

(at least one should be marked with an X)

(U)SIM ME UTRAN / Radio Core Network

Source:

R-WG3

Date:

May, 2000

Subject:

Introduction of Rx Timing Deviation measurement for TDD for location services

Work item:

Category:

(only one category shall be marked with an X)

F Correction
A Corresponds to a correction in an earlier release
B Addition of feature
C Functional modification of feature
D Editorial modification

Release:

Phase 2
Release 96
Release 97
Release 98
Release 99
Release 00

Reason for change:

This documents provides the Rx Timing Deviation measurement for TDD as a dedicated measurement on RNSAP for location services.

Concerning to the Measurement Increase/Decrease Threshold setting the Rx Timing Deviation is not added. According definition of the report characteristics a measurement report is given only when the measured entity rises/falls more than the requested threshold within the requested time. I.e. in case of the measurement increase/decrease threshold setting the Rx Timing deviation or also the RTT measurement reflects the speed of the UE movement. In addition in TDD the Rx Timing Deviation for positioning is relatively to Timing Advance due to accuracy reasons, which means that mainly values between 0 and 15 will be reported. Thus, we do not see a sence in setting this threshold.

CR102r1:

Within the revised version the references have been updated indicating the reference number of the referred documents.

Clauses affected:

9.2.1.16, 9.2.1.17, 9.2.1.67, 9.3.4

Other specs affected:

Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
BSS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

9.2.1.16 Dedicated Measurement Type

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP, <u>Rx Timing Deviation</u> , ...)	RSCP, <u>Rx Timing Deviation</u> <u>are is</u> -used by TDD only.

NOTE: For definitions of the measurement types refer to ref. [**Error! Bookmark not defined.**] and [14].

9.2.1.17 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
Dedicated measurement Value				
>SIR value	C <i>MeasValue</i>		INTEGER(0..63)	According to mapping in [11] / [14]25.215/25.225
>SIR error Value	C <i>MeasValue</i>		INTEGER(0..125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB ... 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB ... 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
>Transmitted Code Power Value	C <i>MeasValue</i>		INTEGER(0..127)	According to mapping in [11] / [14]25.215/25.225
>RSCP	C <i>MeasValue</i>		INTEGER(0..81)	According to mapping in [14]25.225 (TDD only)
<u>>Rx Timing Deviation</u>	<u>C</u> <u><i>MeasValue</i></u>		<u>INTEGER(0..2047)</u>	<u>According to mapping in [14]25.225 (TDD only)</u>

Condition	Explanation
<i>MeasValue</i>	Only one measurement value can be present at the same time.

9.2.1.67 Measurement Threshold

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

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIR	<i>C – Threshold</i>		INTEGER(0..63)	According to mapping in [111]/[14]25.215/25.225
SIR Error	<i>C – Threshold</i>		INTEGER(0..125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB ... 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB ... 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
Transmitted Code Power	<i>C – Threshold</i>		INTEGER(0..127)	According to mapping in [111]/[14]25.215/25.225
RSCP	<i>C – Threshold</i>		INTEGER(0..81)	According to mapping in [14]25.225 (TDD only)
<u>Rx Timing Deviation</u>	<u><i>C - Threshold</i></u>		<u>INTEGER(0..2047)</u>	<u>According to mapping in [14]25.225 (TDD only)</u>

Condition	Explanation
<i>Threshold</i>	Only one measurement threshold can be present at the same time.

9.3.4 Information Element Definitions

```

-- *****
--
-- Information Element Definitions
--
-- *****

RNSAP-IEs -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxNrOfErrors,
    maxRateMatching,
    maxNrOfTFCs,
    maxNrOfTFs,
    maxCTFC-1,
    maxTTI-Count
FROM RNSAP-Constants

    Criticality,
    ProcedureCode,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolExtensionContainer{ },
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

AllocationRetentionPriority ::= FrameHandlingPriority

AllowedQueuingTime ::= INTEGER (0..60)
-- seconds

-- B

BetaCD ::= INTEGER (0..15)

BindingID ::= OCTET STRING (SIZE (1..4,...))

BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BurstType ::= ENUMERATED {
    type1 (1),
    type2 (2)
}

-- 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 {
    transaction-not-allowed,
    transfer-syntax-error,
    abstract-syntax-error-reject,

```

```

    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    ...
}

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,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    unspecified,
    ...
}

CauseTransport ::= ENUMERATED {
    transmission-link-failure,
    transmission-port-not-available,
    unspecified,
    ...
}

C-ID                ::= INTEGER (0..65535)

CCTrCH-ID           ::= INTEGER (0..15)

CellIndividualOffset ::= INTEGER (-20..20)

CellParameterID    ::= INTEGER (0..127)

CFN                 ::= INTEGER (0..255)

CFNOffset ::= INTEGER (0..255)

ChannelCodingType ::= ENUMERATED {
    no-coding,
    convolutional-coding,
    turbo-coding
}

ChipOffset          ::= INTEGER (0..38399)

ClosedLoopModel1-SupportIndicator ::= ENUMERATED {
    closedLoop-Model1-Supported,
    closedLoop-Model1-not-Supported
}

ClosedLoopMode2-SupportIndicator ::= ENUMERATED {
    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}

CodingRate ::= ENUMERATED {
    half,
    third
}

CompressedModeMethod ::= ENUMERATED {
    none,
    puncturing,
    half-SF,
    higher-Layer-Scheduling
}

CRC-Size            ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24
}

```

```

}

CriticalityDiagnostics ::= SEQUENCE {
    procedureCode          ProcedureCode          OPTIONAL,
    triggeringMessage      TriggeringMessage      OPTIONAL,
    criticalityResponse    Criticality            OPTIONAL,
    transactionID          TransactionID          OPTIONAL,
    iEsCriticalityResponses CriticalityDiagnostics-IE-List,
    iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        criticalityResponse    Criticality,
        iE-ID                  ProtocolIE-ID,
        repetitionNumber       RepetitionNumber   OPTIONAL,
        iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }
    } OPTIONAL,
    ...
}

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CTFC ::= INTEGER (0..maxCTFC-1)

CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID      PLMN-ID,
    lAC          LAC,
    iE-Extensions ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID      PLMN-ID,
    lAC          LAC,
    rAC          RAC,
    iE-Extensions ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

C-RNTI ::= INTEGER (0..65535)

-- D

DCH-CombinationInd ::= INTEGER (0..255)

DCH-ID ::= INTEGER (0..255)

DedicatedMeasurementObjectType ::= ENUMERATED {
    rl,
    rls,
    all-rl,
    all-rls,
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    rx-timing-deviation,
    ...
}

```

```

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue    SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP              RSCP-Value, -- TDD only
    rxTimingDeviationValue  Rx-Timing-Deviation-Value, -- TDD only
    ...
}

DiversityControlField      ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode              ::= ENUMERATED {
    none,
    sTTD,
    closedLoopModel1,
    closedLoopMode2
}

DL-DPCH-SlotFormat        ::= INTEGER (0..16)

DL-SIRTarget              ::= UL-SIR

DL-Power                  ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

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,
    ...
}

DPCH-ID                   ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-32..31)
-- Unit dBm, Step 1dBm

DRACControl              ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (2..12)

D-FieldLength            ::= ENUMERATED {
    v1,
    v2
}

-- E

EventA ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
    ...
}

EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventB ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,

```

```

    measurementHysteresisTime    MeasurementHysteresisTime    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
    ...
}

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,
    iE-Extensions                          ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
    ...
}

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,
    iE-Extensions                        ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
    ...
}

EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- F

FACH-InitialWindowSize                ::= INTEGER { unlimited(255) } (0..255)
-- Number of frames MAC-c SDUs.
-- 255 = Unlimited number of FACH data frames

FDD-DL-ChannelisationCodeNumber       ::= INTEGER (0..255)

FDD-S-CCPCH-Offset                    ::= INTEGER (0..149)

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    ...
}

FACH-PriorityIndicator                 ::= INTEGER { lowest(0), highest(15) } (0..15)

FrameHandlingPriority                  ::= INTEGER { lowest(0), highest(15) } (0..15)

```

```

FrameOffset          ::= INTEGER (0..255)
-- Frames

-- G

GapPositionMode ::= ENUMERATED {
    fixed,
    flexible
}

GapPeriod            ::= INTEGER (0..255)

-- H

-- I

IB-SG-POS           ::= INTEGER (0..4095)

IB-SG-REP           ::= INTEGER (16| 32| 64| 128| 256| 512| 1024| 2480)

IMSI                ::= OCTET STRING (SIZE(3..8))

-- J
-- K
-- L

LAC                 ::= OCTET STRING (SIZE (2)) --(EXCEPT ('0000'H|'FFFF'H))

L3-Information      ::= BIT STRING

-- M

MaxNrOfUL-DPCHs     ::= INTEGER (1..6)

MAC-c-SDU-Length    ::= INTEGER (1..5000)

MaximumAllowedULTxPower ::= INTEGER (-50..33)

MeasurementFilterCoefficient ::= INTEGER (1..256)
-- Measurement Filter Coefficient to be used for measurement

MeasurementID       ::= INTEGER (0..1048575)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

ScaledMaxAdjustmentPeriod ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

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                               SIR-Value-IncrDecrThres,
    sir-error                         SIR-Error-Value-IncrDecrThres,
    transmitted-code-power           Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                              RSCP-Value-IncrDecrThres,
    ...
}

MeasurementThreshold ::= CHOICE {
    sir                               SIR-Value,
    sir-error                         SIR-Error-Value,
}

```

```

    transmitted-code-power          Transmitted-Code-Power-Value,
    rscp                             RSCP-Value,
    rx-timing-deviation              Rx-Timing-Deviation-Value,
    ...
}

MidambleShift                      ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength     ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

-- N

NrOfTransportBlocks                ::= INTEGER (0..4095)

-- O

-- P

PD                                  ::= INTEGER (0..2047, ...)

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

SCH-TimeSlot                       ::= INTEGER (0..6)

Periodic ::= SEQUENCE {
    reportPeriodicity              ReportPeriodicity,
    iE-Extensions                  ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    ...
}

Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PLMN-ID ::= OCTET STRING (SIZE(3))

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerControlMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

PowerOffset                        ::= INTEGER (0..24)

PowerResumeMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

```

```

PrimaryCPICH-Power          ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryCPICH-EcNo          ::= INTEGER (-30..30)

PrimaryCCPCH-RSCP          ::= INTEGER (0..91)
-- According to mapping in [14]25-225

PrimaryScramblingCode      ::= INTEGER (0..511)

PropagationDelay           ::= INTEGER (0..255)

SyncCase ::= ENUMERATED {
    case1,
    case2
}

PunctureLimit              ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100

-- Q

QE-Selector ::= ENUMERATED {
    selected-DCH,
    non-selected-DCH
}

-- R

RAC                        ::= OCTET STRING (SIZE(1))

RANAP-RelocationInformation ::= BIT STRING

RateMatchingAttribute      ::= INTEGER (1..maxRateMatching)

RefTFCNumber ::= INTEGER (0..15)

RepetitionLength          ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber ::= INTEGER (0..255)

ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          Periodic,
    eventA            EventA,
    eventB            EventB,
    eventC            EventC,
    eventD            EventD,
    eventE            EventE,
    eventF            EventF,
    ...
}

ReportPeriodicity ::= CHOICE {
    ten-msec          INTEGER (1..6000),
-- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
-- E.g. value 6000 means 60000ms (i.e. 1min)
-- Unit ms, Step 10ms
    min              INTEGER (1..60)
-- Unit min, Step 1min
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

RL-ID                    ::= INTEGER (0..31)

```



```
RL-Set-ID          ::= INTEGER (0..31)
RNC-ID             ::= INTEGER (0..4095)
RSCP-Value ::= INTEGER (0..81)
| -- According to mapping in \[14\]25-225
RSCP-Value-IncrDecrThres ::= INTEGER (0..80)
| Rx-Timing-Deviation-Value ::= INTEGER \(0..2047\)
-- S
```

CHANGE REQUEST		<i>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</i>
25.423	CR	103r2
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team
For submission to: TSG RAN #8	for approval <input checked="" type="checkbox"/>	strategic <input type="checkbox"/>
<i>list expected approval meeting # here ↑</i>	for information <input type="checkbox"/>	non-strategic <input type="checkbox"/> <small>(for SMG use only)</small>

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** May, 2000

Subject: Change of definition of the quality estimate (QE) for TDD

Work item:

Category: <small>(only one category shall be marked with an X)</small>	F Correction <input checked="" type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/>
	A Corresponds to a correction in an earlier release <input type="checkbox"/>		Release 96 <input type="checkbox"/>
	B Addition of feature <input type="checkbox"/>		Release 97 <input type="checkbox"/>
	C Functional modification of feature <input type="checkbox"/>		Release 98 <input type="checkbox"/>
	D Editorial modification <input type="checkbox"/>		Release 99 <input checked="" type="checkbox"/>
			Release 00 <input type="checkbox"/>

Reason for change:

In WG1 the BER definition has been changed to Transport channel BER and Physical channel BER.
This CR updates therefore the handling of the QE for TDD in the same way as already updated for FDD.

Changes within revised version CR103r1:
 * references have been updated indicating the reference number
 * in section 8.3.7.2 the tagging to TDD has been corrected
 * QE-Selector turned into correct lower/upper case within the ASN.1.

Changes within revised version CR103r2:
 * BER handling for TDD same as for FDD, i.e. if no transport channel BER is available, the QE is the Physical channel BER.

Clauses affected: 8.3.1.2, 8.3.1.3, 8.3.4.2, 8.3.4.3, 8.3.7.2, 8.3.7.3, 9.1.3.2, 9.1.11.2, 9.1.16.2, 9.2.1.x, 9.2.2.48, 9.3.3, 9.3.4

Other specs	Other 3G core specifications <input checked="" type="checkbox"/>	→ List of CRs: 25.427 3.2.0 CR-023, 25.433 3.1.0 CR-119, 25.435 3.2.0 CR-018
affected:	Other GSM core specifications <input type="checkbox"/>	→ List of CRs:
	MS test specifications <input type="checkbox"/>	→ List of CRs:
	BSS test specifications <input type="checkbox"/>	→ List of CRs:
	O&M specifications <input type="checkbox"/>	→ List of CRs:

Other comments:



<----- double-click here for help and instructions on how to create a CR.

8.3 DCH 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

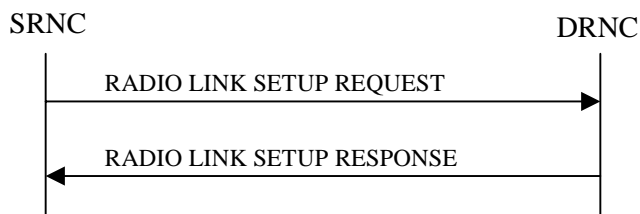


Figure 1: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

~~[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected_DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If the *QE-Selector* is set to "non-selected_DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [425.427]].~~

~~[TDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].~~

~~[FDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected_*DCH*" shall be used for the QE in the UL data frames, ref. [425.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If all DCHs have *QE-Selector* IE set to "non-selected_*DCH*" the Physical channel BER shall be used for the QE, ref. [425.427]].~~

~~[TDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [25.427]].~~

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the

neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.1.3 Unsuccessful Operation

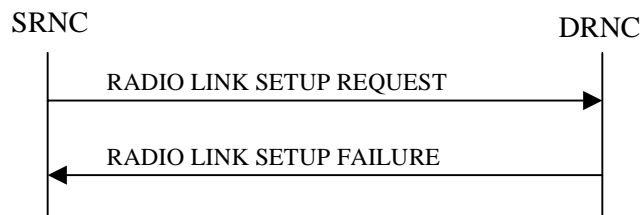


Figure 2: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLs can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. 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.

~~[FDD]—If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected ~~DCH~~" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a 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;
- Unknown C-ID;
- [FDD - Macrodiversity Combining not Possible];
- Requested Configuration not Supported;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

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 the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

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 all Radio Links 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

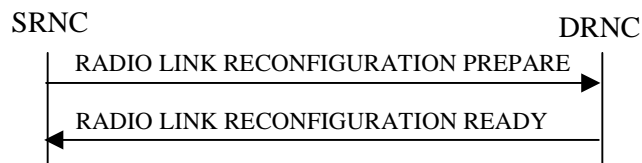


Figure 3: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO

LINK RECONFIGURATION READY message the *Secondary CCPCH Info IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator IE* for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator IE* in the new configuration.

~~[FDD—For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector IE* set to "selected-DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If the *QE-Selector* is set to "non-selected-DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [425.427]].~~

~~[TDD—For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector IE* set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].~~

~~[FDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector IE* set to "selected-DCH" shall be used for the QE in the UL data frames, ref. [425.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If all DCHs have *QE-Selector IE* set to "non-selected-DCH" the Physical channel BER shall be used for the QE, ref. [425.427]].~~

~~[TDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector IE* set to "selected" shall be used for the QE in the UL data frames, ref. [25.427]. If all DCHs have *QE-Selector IE* set to "non-selected" the Physical channel BER shall be used for the QE, ref. [25.427]].~~

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode IE* for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS IE* for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE IE* for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control IE* is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the 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 the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code 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 as a *Channelisation Code (DL)* IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

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 [TDD – the CCTrCH of] the new configuration.

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 [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS 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 exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.4.3 Unsuccessful Operation

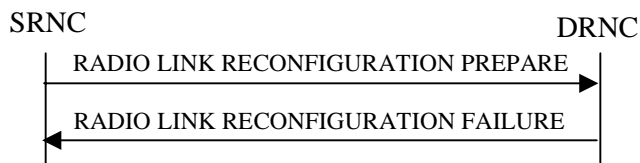


Figure 4: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

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 regard the Synchronised Radio Link Reconfiguration procedure as having failed.

- If the requested Synchronised Radio Link Reconfiguration 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.

~~FDD~~ If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected ~~DCH~~" the DRNS shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.†

In which cases to include only the *Cause* IE on message level and in which cases the *Cause* IE also shall be included for a specific RL is FFS.

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.

Protocol Causes:

- Transaction not Allowed.

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 regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

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

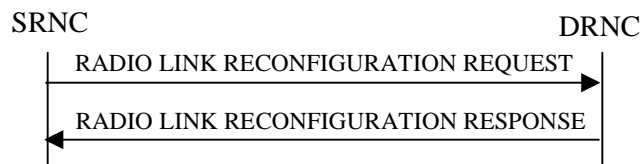


Figure 5: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this new value when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes on the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION REQUEST message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

~~[FDD—For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected-DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If the *QE-Selector* is set to "non-selected-DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [425.427]].~~

~~[TDD—For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].~~

~~[FDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected-DCH" shall be used for the QE in the UL data frames, ref. [425.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [425.427]. If all DCHs have *QE-Selector* IE set to "non-selected-DCH" the Physical channel BER shall be used for the QE, ref. [425.427]].~~

~~[FDD—For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [25.427]].~~

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE and the *Reference to System Information blocks* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

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

Physical Channel Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

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

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the IEs *Maximum Uplink SIR* and *Minimum Uplink SIR* for each Radio Link in the RADIO LINK RECONFIGURATION RESPONSE message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCH in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

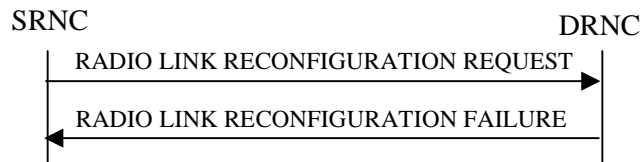
8.3.7.3 Unsuccessful Operation

Figure 6: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

~~FDD~~—If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected-DCH" the DRNS shall regard the Unsynchronised Radio Link Reconfiguration procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.}

If the DRNS cannot allocate the necessary resources for all the new DCHs of a set of co-ordinated DCHs requested to be added it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s) the 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.

Protocol Causes:

- Transaction not Allowed.

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 regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

9.1.3 RADIO LINK SETUP REQUEST

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL CCTrCH Information		1..<maxno of CCTrCHs>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the UL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
DL CCTrCH Information		1..<maxno of CCTrCHs>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the DL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
>TDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno of DCHs>			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped	–	
>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Primary CCPCH RSCP	O				–	

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

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL CCH Information		0..<maxno ofCCHs>			EACH	notify
>CCH ID	M				-	
>TFCS	O			For the UL.	-	
>TFCI Coding	O				-	
>Puncture Limit	O				-	
DL CCH Information		0..<maxno ofCCHs>			EACH	notify
>CCH ID	M				-	
>TFCS	O			For the DL.	-	
>TFCI Coding	O				-	
>Puncture Limit	O				-	
DCHs to Modify		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				-	
>CCH Id	O			UL CCH in which the DCH is mapped.	-	
>CCH Id	O			DL CCH in which the DCH is mapped	-	
>Transport Format Set	O			For the UL.	-	
>Transport Format Set	O			For the DL.	-	
>Allocation/Retention Priority	O				-	
>Frame Handling Priority	O				-	
>UL FP Mode	O				-	
>ToAWS	O				-	
>ToAWE	O				-	
DCHs to Add		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				-	
>CCH Id	M			UL CCH in which the DCH is mapped.	-	
>CCH Id	M			DL CCH in which the DCH is mapped	-	
>DCH Combination Indicator	O				-	
>Limited Power Increase	M				-	
>Tr Ch Source Statistics Descriptor	M				-	
>Transport Format Set	M			For the UL.	-	
>Transport Format Set	M			For the DL.	-	
>BLER	M			For the UL.	-	
>BLER	M			For the DL.	-	
>Allocation/Retention Priority	M				-	
>Frame Handling Priority	M				-	
>Payload CRC Presence	M				-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Indicator						
>UL FP Mode	M				–	
>QE-Selector	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
DCHs to Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M				–	

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

9.1.16 RADIO LINK RECONFIGURATION REQUEST

9.1.16.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		<i>0..<maxnoof CCTrCHs></i>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M				–	
DL CCTrCH Information		<i>0..<maxnoof CCTrCHs></i>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M				–	
DCHs to Modify		<i>0..<maxnoof DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH ID	O			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH ID	O			DL CCTrCH in which the DCH is mapped	–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
DCHs to Add		<i>0..<maxnoof DCHs></i>			GLOBAL	reject
>DCH ID	M				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
> <u>QE-Selector</u>	<u>M</u>				<u>–</u>	
>ToAWS	M				–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>ToAWE	M				–	
DCHs to Delete		<i>0..<maxnoof DCHs></i>			GLOBAL	reject
>DCH ID	M				–	

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.2.1.x QE-Selector

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

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>QE-Selector</u>			<u>ENUMERATED(selected, non-selected)</u>	

9.2.2.48 QE-Selector (VOID)

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

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

9.3.3 PDU Definitions

```

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { 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-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-DCH-InformationList-RL-SetupRqstTDD CRITICALITY reject TYPE DCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
    { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCtTrCH-ID          CCTrCH-ID,
    ul-TFCS             TFCS,
    tFCI-Coding         TFCI-Coding,
    ul-PunctureLimit    PunctureLimit,
    iE-Extensions       ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
    ...
}

```

```

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    dl-TFCS            TFCS,
    tFCI-Coding        TFCI-Coding,
    dl-PunctureLimit   PunctureLimit,
    tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
    iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstTDD

DCH-InformationItem-RL-SetupRqstTDD ::= 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
    dCH-CombinationInd DCH-CombinationInd OPTIONAL,
    limitedPowerIncrease LimitedPowerIncrease,
    trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
    ul-transportFormatSet TransportFormatSet,
    dl-transportFormatSet TransportFormatSet,
    ul-BLER          BLER,
    dl-BLER          BLER,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode       UL-FP-Mode,
    eqE-Selector     QE-Selector,
    toAWS            ToAWS,
    toAWE            ToAWE,
    iE-Extensions    ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    c-ID           C-ID,
    frameOffset    FrameOffset,
    primaryCCPCH-RSCP PrimaryCCPCH-RSCP OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
  protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
  protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DCH-ModifyList-RL-ReconfPrepTDD          CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfPrepTDD          PRESENCE optional } |
  { ID id-DCH-AddList-RL-ReconfPrepTDD             CRITICALITY reject  TYPE DCH-AddList-RL-ReconfPrepTDD             PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfPrepTDD          CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepTDD          PRESENCE optional },
  ...
}

UL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-Information-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-Information-RL-ReconfPrepTDDPRESENCE mandatory },
  ...
}

UL-CCTrCH-Information-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  tFCS                      TFCS          OPTIONAL,
  tFCI-Coding               TFCI-Coding   OPTIONAL,
  punctureLimit             PunctureLimit  OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { {UL-CCTrCH-Information-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-Information-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-ReconfPrepTDD PRESENCE mandatory },
  ...
}

DL-CCTrCH-InformationItem-RL-ReconfPrepTDD ::= SEQUENCE {

```

```

    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS          OPTIONAL,
    tFCI-Coding        TFCI-Coding   OPTIONAL,
    punctureLimit      PunctureLimit OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfPrepTDD

DCH-ModifyItem-RL-ReconfPrepTDD ::= 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,
    ul-FP-Mode      UL-FP-Mode   OPTIONAL,
    toAWS           ToAWS        OPTIONAL,
    toAWE           ToAWE        OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfPrepTDD

DCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID          DCH-ID,
    ul-CCTrCH-ID    CCTrCH-ID,
    dl-CCTrCH-ID    CCTrCH-ID,
    dCH-CombinationInd DCH-CombinationInd OPTIONAL,
    limitedPowerIncrease LimitedPowerIncrease,
    trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
    ul-TransportformatSet TransportFormatSet,
    dl-TransportformatSet TransportFormatSet,
    ul-BLER         BLER,
    dl-BLER         BLER,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority FrameHandlingPriority,
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode      UL-FP-Mode,
    qeqE-Selector QE-Selector,
    toAWS           ToAWS,
    toAWE           ToAWE,
    iE-Extensions  ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}
DCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD
DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dCH-ID DCH-ID,
  iE-Extensions ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}
DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkReconfigurationRequestTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}} OPTIONAL,
  ...
}
RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-ModifyList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-ModifyList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-AddList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-AddList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD PRESENCE optional },
  ...
}
UL-CCTrCH-InformationList-RL-ReconfRqstTDD ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }
UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory },
  ...
}
UL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  tFCS TFCS,

```

```

    iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-ReconfRqstTDD ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory },
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCtRch-ID          CCTrCH-ID,
    tFCS              TFCS,
    iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstTDD

DCH-ModifyItem-RL-ReconfRqstTDD ::= 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,
    ul-FP-Mode      UL-FP-Mode OPTIONAL,
    toAWS           ToAWS OPTIONAL,
    toAWE           ToAWE OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstTDD

DCH-AddItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID          DCH-ID,
    limitedPowerIncrease LimitedPowerIncrease,
    trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
    ul-CCTrCH-ID    CCTrCH-ID,
    dl-CCTrCH-ID    CCTrCH-ID,

```

```

dCH-CombinationInd          DCH-CombinationInd  OPTIONAL,
ul-TransportformatSet       TransportFormatSet,
dl-TransportformatSet       TransportFormatSet,
ul-BLER                     BLER,
dl-BLER                     BLER,
allocationRetentionPriority  AllocationRetentionPriority,
frameHandlingPriority        FrameHandlingPriority,
ul-FP-Mode                  UL-FP-Mode,
qeqE-Selector            QE-Selector,
toAWS                       ToAWS,
toAWE                       ToAWE,
iE-Extensions               ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
...
}

DCH-AddItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-DeleteList-RL-ReconfRqstTDD      ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
dCH-ID          DCH-ID,
iE-Extensions   ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```

9.3.4 Information Element Definitions

```
SyncCase ::= ENUMERATED {
    case1,
    case2
}

PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100

-- Q

QE-Selector ::= ENUMERATED {
    selected-DCH,
    non-selected-DCH
}

-- R

RAC ::= OCTET STRING (SIZE(1))

RANAP-RelocationInformation ::= BIT STRING
```

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 106r2

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**

list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:

(at least one should be marked with an X)

(U)SIM ME UTRAN / Radio Core Network

Source:

R-WG3

Date:

April 2000

Subject:

RNSAP Support for Switching from Cell_DCH to Cell_FACH or URA_PCH States

Work item:

Category:

(only one category
Shall be marked
with an X)

F Correction
A Corresponds to a correction in an earlier release
B Addition of feature
C Functional modification of feature
D Editorial modification

Release: Phase 2
Release 96
Release 97
Release 98
Release 99
Release 00

Reason for change:

CR106R2

- Primary CPICH info IE is removed from UL SIGNALLING TRANSFER INDICATION message.
- Inconsistency between tabular format and ASN.1 concerning the repetition in RNCs with Cells in the Accessed URA IE has been resolved.

CR106R1

- Introduced clarification that if the C-ID is included, the DRNC shall allocate a CRNTI for the concerning cell and signal it in the response.
- The Primary CPICH info IE is removed from the FDD COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message, but in stead included in the UL SIGNALLING TRANSFER INDICATION message.
The inclusion in the UL SIGNALLING TRANSFER INDICATION message is considered required to handle the case of a cell update in a DRNC. If the SRNC wants to move such a UE to the DCH state, it has to be able to include the primary scrambling code in the RRC PHYSICAL CHANNEL RECONFIGURATION message.
Due to the inclusion in the UL SIGNALLING TRANSFER INDICATION message, the SRNC is assumed to always know the primary scrambling code of the cells in the active set when being in DCH state.
- When switching from Cell_DCH state to URA_PCH state and the concerned cell belongs to multiple URAs the SRNC also needs to assign the URA ID to the UE. However, the SRNC can currently not assign the URA ID in this case since the URA ID and knowledge on whether or not the concerned cell belongs to multiple URAs is not available to the SRNC. Therefor relevant parameters are added to the COMMON TRANSPORT CHANNEL RESOURCE RESPONSE messages.

Changes with respect to R0 are indicated with **yellow** marking.

CR106

Updates from CR117 (1516)The current RNSAP imposes some restrictions on switching from Dedicated Transport Channels to Common Transport Channels. The restrictions are that SRNC cannot assign a) the necessary C-RNTI and b) the radio resources to be used when requesting the UE to switch to Common Transport Channels if the UE is in a cell under the control of the DRNC. Not assigning a C-RNTI for the UE leads to longer signalling sequences between the UE and the network and thus poor utilisation of the radio spectrum and additional delay when switching from Dedicated Transport Channels to Common Transport Channels (assuming that RAN WG2 defines the UE behaviour when no C-RNTI is received in the Physical Channel Reconfiguration procedure). This since the UE needs to obtain the C-RNTI by additional signalling between the UE and the network before continuing to communicate with the network. The lack of information on which radio resources to use means that the UE needs to both detect and read information about the radio resources on the Broadcast Channel in the cell before accessing the cell and thus again incurring some additional delay when switching from Dedicated Transport Channels to Common Transport Channels.

This CR introduces the required changes to solve the above-described problem by adding the C-ID as an optional IE in the request message in the Common Transport Channel Resources Initialisation procedure and the necessary information in the response message, i.e. the C-RNTI, the FACH info, RACH info, and the Primary CPICH info.

Clauses affected: 8.4.1.2, 9.1.35, 9.1.36, 9.3.3, and 9.3.6

Other specs affected:

- | | | |
|-------------------------------|--------------------------|----------------|
| Other 3G core specifications | <input type="checkbox"/> | → List of CRs: |
| Other GSM core specifications | <input type="checkbox"/> | → List of CRs: |
| MS test specifications | <input type="checkbox"/> | → List of CRs: |
| BSS test specifications | <input type="checkbox"/> | → List of CRs: |
| O&M specifications | <input type="checkbox"/> | → List of CRs: |

Other comments:

This CR implements CR117 (Alignment of Common Transport Channel Initialisation Procedure with the RRC Specification) and CR118 (Selection of Secondary CCPCH in RNSAP).

This means that CR117 (Approved Tdoc 1574) and CR118 (Approved Tdoc 1296) have to be implemented first and afterwards this CR can be implemented.

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 UE context in the DRNC.

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

8.4.1.2 Successful Operation

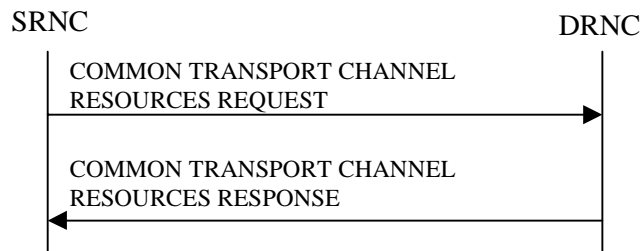


Figure 1: Common Transport Channel Resources Initialisation procedure, Successful Operation

The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST to the DRNC.

Upon reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall respond by sending a COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message to the SRNC.

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 and include the *Binding Identity* and *Transport Layer Address* IEs in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer not Requested", the DRNC shall use the transport bearer for the 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.

The DRNC shall include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c SDU Length* IEs for each priority class.

If there exists multiple Secondary CCPCHs in the cell indicated by the *C-ID* IE or if no *C-ID* IE is included in the COMMON TRANSPORT CHANNEL RESOURCE REQUEST message in the cell where the UE is located and the DRNC decides to use the DRNC selected Secondary CCPCH instead of UE selected Secondary CCPCH, the *FACH Info for optional S-CCPCH* IE group shall be included in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the DRNC includes the *FACH Info for optional S-CCPCH* IE group, then it shall also include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class for ~~this e-new~~ Secondary CCPCH.

If the *C-ID* IE is not included in the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message or if the DRNC does not include the *FACH Info for DRNC Selected S-CCPCH* IE group in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message, the DRNC shall include the *FACH Info for UE Selected S-CCPCH* IE group in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. The DRNC shall include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE in the *FACH Info for UE Selected S-CCPCH* IE group for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c SDU Length* IEs for each priority class.

If there exists multiple RACHs in the cell where the UE is located and the DRNC decides to use the DRNC selected PRACH instead of the UE selected PRACH, the *RACH Info for DRNC Selected PRACH* IE group shall be included 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 *URA ID* IE of the cell identified by the received *C-ID* IE, the *Multiple URA Indicator* IE indicating whether or not the cell belongs to multiple URAs, and the RNC Identity of all other RNCs that are having at least one cell within the URA in the cell.

8.4.1.3 Unsuccessful Operation

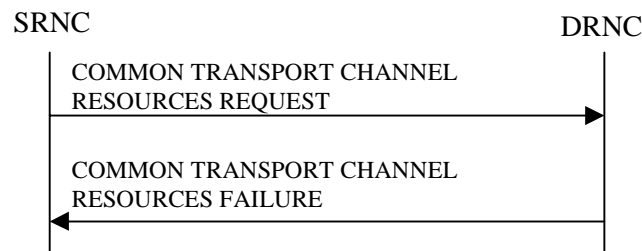


Figure 2: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

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 respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, indicating the cause of the failure.

8.4.1.4 Abnormal Conditions

-

9.1.35 COMMON TRANSPORT CHANNEL RESOURCES REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	M				YES	reject
<u>C-ID</u>	<u>Q</u>				<u>YES</u>	<u>reject</u>
Transport Bearer Request Indicator	M			Request a new transport bearer or to use an existing bearer for the user plane.	YES	reject
Transport Bearer ID	M			Indicates the lur transport bearer to be used for the user plane.	YES	reject

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
C-RNTI	O				YES	ignore
FACH Info for UE Selected S-CCPCH		<u>0..1</u>			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		1..<MaxNb MACcSDU Length>			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for DRNC Selected S-CCPCH		0..1			YES	ignore
>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [7]	–	
>DL Scrambling Code	M				–	
>FDD DL Channelisation Code Number	M				–	
>TFCS	M			For the DL.	–	
>Secondary CCPCH Slot Format	M				–	
>MultiplexingPosition	M				–	
>STTD Indicator	M				–	
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		1..<MaxNb MACcSDU Length>			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
RACH Info for DRNC Selected PRACH		0..1			YES	ignore
>Preamble Signatures	M				–	
>RACH Minimum Spreading Factor	M				–	
>Scrambling Code Number	M				–	
>Puncture Limit	M				–	
>RACH Sub channel Numbers	M				–	
URA ID	O				YES	ignore

Multiple URAs Indicator	O				YES	ignore
RNCs with Cells in the Accessed URA		0..<MaxRNCinURA-1>			GLOBAL	ignore
RNC-Id	M					
Transport Layer Address	O				YES	ignore
Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.
MaxRNCinURA	Maximum number of RNC in one URA.

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
C-RNTI	O				YES	ignore
FACH Info for UE Selected S-CCPCHs		0..1			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>>MAC-c SDU Length		1..<MaxNbMACcSDULength>			GLOBAL	ignore
>>>>MAC-c SDU Length	M				–	
>>>FACH Initial Window Size	M				–	
FACH Info for DRNC Selected group of S-CCPCHs		0..1			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>>Secondary CCPCH	M	1..<MaxnoofS CCPCHs>			GLOBAL	ignore
>>>TDD Channelisation Code	M				–	
>>>Time Slot	M				–	
>>>Burst Type	M				–	
>>>Midamble shift	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>>>>FACH Priority Indicator	M				–	
>>>>>>MAC-c SDU Length		1..<MaxNbMACcSDULength>			GLOBAL	ignore
>>>>>>>MAC-c SDU Length	M				–	
>>>>>>FACH Initial Window Size	M				–	
RACH Info for DRNC Selected PRACH		0..1			YES	ignore
>TDD Channelisation Code	M				–	
>Time Slot	M				–	

>PRACH Midamble	O				–	
URA ID	O				YES	ignore
Multiple URAs Indicator	O				YES	ignore
RNCs with Cells in the Accessed URA		0.. <MaxRNCi nURA-1s			GLOBAL	ignore
>RNC-Id	M					
Transport Layer Address	O				YES	ignore
Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.
MaxnoofSCCPCHs	TBD
MaxRNCinURA	Maximum number of RNC in one URA.

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
    DPCHConstantValue,
```


DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PRACH-Midamble,
PRACH-MinimumSpreadingFactor,
PreambleSignatures,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RACH-SubChannelNumbers,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,

```
RepetitionPeriod,  
ReportCharacteristics,  
S-FieldLength,  
S-RNTI,  
SCH-TimeSlot,  
SAI,  
SN,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
ScaledMaxAdjustmentPeriod,  
ScaledMaxAdjustmentStep,  
ScramblingCodeChange,  
ScramblingCodeNumber,  
SecondaryCCPCH-SlotFormat,  
SyncCase,  
TDD-ChannelisationCode,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TGD,  
TGL,  
TimeSlot,  
ToAWE,  
ToAWS,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TxDiversityIndicator,  
UARFCN,  
UC-ID,  
UL-DeltaSIR,  
UL-DeltaSIRAfter,  
UL-DL-CompressedModeSelection,  
UL-DPCCCH-SlotFormat,  
UL-InterferenceLevel,  
UL-SIR,  
UL-FP-Mode,  
UL-ScramblingCode,  
URA-ID  
FROM RNSAP-IEs
```

```
PrivateIE-Container{},  
ProtocolExtensionContainer{}
```

```
ProtocolIE-ContainerList {},
ProtocolIE-ContainerPair {},
ProtocolIE-ContainerPairList {},
ProtocolIE-Container {},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA-1,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,
id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
```

id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,

id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD,
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD,
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,

id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationListe-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD,
id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,

```

id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

```

```

-- *****
--
-- Common Container List
--
-- *****

```

DPCH-IE-ContainerList	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IEsSetParam } }
RL-IE-ContainerList0	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1-1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-2	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IEsSetParam } }
RL-Set-IE-ContainerList	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IEsSetParam } }
CCTrCH-IE-ContainerList0	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IEsSetParam } }
CCTrCH-IE-ContainerList1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IEsSetParam } }

```

.
.
.
Several messages are omitted.

```

```

-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION
--

```

-- *****

```

UplinkSignallingTransferIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{UplinkSignallingTransferIndication-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{UplinkSignallingTransferIndication-Extensions}}
    ...
}

UplinkSignallingTransferIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID                CRITICALITY ignore TYPE UC-ID                PRESENCE mandatory } |
    { ID id-SAI                  CRITICALITY ignore TYPE SAI                  PRESENCE mandatory } |
    { 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-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-ID               CRITICALITY ignore TYPE URA-ID               PRESENCE mandatory } |
    { ID id-MultipleURAsIndicator CRITICALITY ignore TYPE MultipleURAsIndicator PRESENCE mandatory } |
    { ID id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind CRITICALITY ignore TYPE RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind PRESENCE optional },
    ...
}

RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind ::= SEQUENCE (SIZE (0..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item-UL-ST-Ind

RNCsWithCellsInTheAccessedURA-Item-UL-ST-Ind ::= SEQUENCE {
    rNC-ID                      RNC-ID,
    iE-Extensions                ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind-ExtIEs} } OPTIONAL,
    ...
}

RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UplinkSignallingTransferIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Several messages are omitted.

```

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES REQUEST
--
-- *****

```



```

CommonTransportChannelResourcesRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{CommonTransportChannelResourcesRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer    {{CommonTransportChannelResourcesRequest-Extensions}}
    ...
}

```

```

CommonTransportChannelResourcesRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI          CRITICALITY reject TYPE D-RNTI          PRESENCE mandatory } |
    { ID id-C-ID           CRITICALITY reject TYPE C-ID           PRESENCE optional } |
    { ID id-TransportBearerRequestIndicator CRITICALITY reject TYPE TransportBearerRequestIndicator PRESENCE mandatory } |
    { ID id-TransportBearerID CRITICALITY reject TYPE TransportBearerID PRESENCE mandatory },
    ...
}

```

```

CommonTransportChannelResourcesRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
--
-- *****

```

```

CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{CommonTransportChannelResourcesResponseFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer    {{CommonTransportChannelResourcesResponseFDD-Extensions}}
    ...
}

```

```

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-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD
    PRESENCE optional } |
    { ID id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD
    PRESENCE optional } |
    { ID id-URA-ID         CRITICALITY ignore TYPE URA-ID          PRESENCE optional } |
    { ID id-MultipleURAsIndicator CRITICALITY ignore TYPE MultipleURAsIndicator PRESENCE optional } |
    { ID id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD CRITICALITY ignore TYPE RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD
    PRESENCE optional } |
    { 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 {
    priorityIndicatorAndInitialWindowSize PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD,
    iE-Extensions          ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD PRESENCE mandatory },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths              MAC-c-SDU-LengthList-CTCH-ResourceRspFDD,
    fACH-InitialWindowSize         FACH-InitialWindowSize,
    iE-Extensions                 ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD }}

MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD PRESENCE mandatory },
    ...
}

MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD

MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD ::= SEQUENCE {
    mAC-c-SDU-Length              MAC-c-SDU-Length,
    iE-Extensions                 ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset           FDD-S-CCPCH-Offset,
    dl-ScramblingCode            DL-ScramblingCode,

```

```

    fDD-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                                TFCS,
    secondaryCCPCH-SlotFormat              SecondaryCCPCH-SlotFormat,
    multiplexingPosition                    MultiplexingPosition,
    sTTD-Indicator                          STTD-Indicator,
    priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD,
    iE-Extensions                            ProtocolExtensionContainer { {FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-
option-CTCH-ResourceRspFDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD CRITICALITY ignore TYPE
      PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD PRESENCE mandatory },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-
option-CTCH-ResourceRspFDD

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
    fACH-PriorityIndicator                FACH-PriorityIndicator,
    mAC-c-SDU-Lengths                      MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD,
    fACH-InitialWindowSize                  FACH-InitialWindowSize,
    iE-Extensions                            ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs} }
OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD
      PRESENCE mandatory },
    ...
}

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
    mAC-c-SDU-Length                        MAC-c-SDU-Length,
    iE-Extensions                            ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD ::= SEQUENCE {
    preambleSignatures          PreambleSignatures,
    pRACH-MinimumSpreadingFactor PRACH-MinimumSpreadingFactor,
    scramblingCodeNumber        ScramblingCodeNumber,
    punctureLimit                PunctureLimit,
    rACH-SubChannelNumbers       RACH-SubChannelNumbers,
    iE-Extensions                ProtocolExtensionContainer { { RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD-ExtIEs } } OPTIONAL,
    ...
}

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (0..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item-CTCH-ResourceRspFDD
RNCsWithCellsInTheAccessedURA-Item-CTCH-ResourceRspFDD ::= SEQUENCE {
    rNC-ID                       RNC-ID,
    iE-Extensions                ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
--
-- *****

CommonTransportChannelResourcesResponseTDD ::= SEQUENCE {
    protocolIEs                  ProtocolIE-Container    {{CommonTransportChannelResourcesResponseTDD-IEs}},
    protocolExtensions           ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseTDD-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI                CRITICALITY ignore TYPE S-RNTI                PRESENCE mandatory } |
    { ID id-C-RNTI                CRITICALITY ignore TYPE C-RNTI                PRESENCE optional } |

```

```

{ ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD
  PRESENCE mandatoryoptional } |
{ ID id-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD
  PRESENCE optional } |
{ ID id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD
  PRESENCE optional } |
{ ID id-URA-ID CRITICALITY ignore TYPE URA-ID PRESENCE optional } |
{ ID id-MultipleURAsIndicator CRITICALITY ignore TYPE MultipleURAsIndicator PRESENCE optional } |
{ ID id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD CRITICALITY ignore TYPE RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD
  PRESENCE optional } |
{ ID id-TransportLayerAddress CRITICALITY ignore TYPE TransportLayerAddress PRESENCE optional } |
{ ID id-BindingID CRITICALITY ignore TYPE BindingID PRESENCE optional } |
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
...
}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
  priorityIndicatorAndInitialWindowSizeList CTCH-ResourceRspTDD,
  IE-Extensions ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

FACH-InfoForUESelectedS-CCPCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-
ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-
CTCH-ResourceRspTDD PRESENCE mandatory },
  ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-
ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD ::= SEQUENCE {
  fACH-PriorityIndicator FACH-PriorityIndicator,
  MAC-c-SDU-Lengths MAC-c-SDU-LengthList-CTCH-ResourceRspTDD,
  fACH-InitialWindowSize FACH-InitialWindowSize,
  IE-Extensions ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD }}

MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD PRESENCE mandatory
    },
    ...
}

```

```
MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD
```

```

MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    mAC-c-SDU-Length          MAC-c-SDU-Length,
    iE-Extensions            ProtocolExtensionContainer { {MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
    dl-TFCS                    TFCS,
    secondaryCCPCHs            SecondaryCCPCHList-CTCH-ResourceRspTDD,
    iE-Extensions              ProtocolExtensionContainer { {FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
SecondaryCCPCHList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ SecondaryCCPCHListIEs-CTCH-ResourceRspTDD }}
```

```

SecondaryCCPCHListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE SecondaryCCPCHListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
    ...
}

```

```
SecondaryCCPCHListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF SecondaryCCPCHItem-CTCH-ResourceRspTDD
```

```

SecondaryCCPCHItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    timeSlot                  TimeSlot,
    burstType                 BurstType,
    midambleShift             MidambleShift,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD,
    iE-Extensions             ProtocolExtensionContainer { {SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
 { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD CRITICALITY ignore TYPE
 PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD PRESENCE mandatory },
 ...
 }

PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
 fACH-PriorityIndicator FACH-PriorityIndicator,
 mAC-c-SDU-Lengths MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD,
 fACH-InitialWindowSize FACH-InitialWindowSize,
 iE-Extensions ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs} }
 OPTIONAL,
 ...
 }

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ...
 }

MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
 { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD
 PRESENCE mandatory },
 ...
 }

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
 mAC-c-SDU-Length MAC-c-SDU-Length,
 iE-Extensions ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
 ...
 }

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 ...
 }

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD ::= SEQUENCE {
 tDD-ChannelisationCode TDD-ChannelisationCode,
 timeSlot TimeSlot,
 burstType BurstType,
 pRACH-Midamble PRACH-Midamble,
 iE-Extensions ProtocolExtensionContainer { { RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD-ExtIEs } } OPTIONAL,
 ...
 }

```

}
RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (0..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item-CTCH-ResourceRspTDD
RNCsWithCellsInTheAccessedURA-Item-CTCH-ResourceRspTDD ::= SEQUENCE {
    rNC-ID RNC-ID,
    IE-Extensions ProtocolExtensionContainer ( {RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD-ExtIEs} ) OPTIONAL,
    ...
}
RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Several messages are omitted.

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
id-commonTransportChannelResourcesRelease                INTEGER ::= 2
id-compressedModeCancellationFDD                        INTEGER ::= 3
id-compressedModeCommitFDD                              INTEGER ::= 4
id-compressedModePrepareFDD                             INTEGER ::= 5
id-downlinkPowerControl                                 INTEGER ::= 6
id-downlinkSignallingTransfer                           INTEGER ::= 7
id-errorIndication                                      INTEGER ::= 8
id-measurementFailure                                   INTEGER ::= 9
id-measurementInitiation                                INTEGER ::= 10
id-measurementReporting                                  INTEGER ::= 11
id-measurementTermination                               INTEGER ::= 12
id-pagingRequest                                        INTEGER ::= 13
id-physicalChannelReconfiguration                       INTEGER ::= 14
id-privateMessage                                       INTEGER ::= 15
id-radioLinkAddition                                    INTEGER ::= 16
id-radioLinkDeletion                                    INTEGER ::= 17
id-radioLinkFailure                                     INTEGER ::= 18
id-radioLinkRestoration                                 INTEGER ::= 19
id-radioLinkSetup                                       INTEGER ::= 20
id-srnsRelocationCommit                                 INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation      INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare         INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration              INTEGER ::= 25
id-uplinkSignallingTransfer                             INTEGER ::= 26

-- *****
--
-- Extension constants
--
-- *****

maxPrivateIEs          INTEGER ::= 65535
maxProtocolExtensions  INTEGER ::= 65535
maxProtocolIEs        INTEGER ::= 65535

-- *****
--
-- Lists
--
-- *****

maxRateMatching          INTEGER ::= 10
maxNrOfTFCs              INTEGER ::= 10
maxNrOfTFs               INTEGER ::= 10
maxNrOfCCTrCHs          INTEGER ::= 10
maxNrOfDCHs              INTEGER ::= 10
maxNrOfDL-Codes         INTEGER ::= 10
maxNrOfDPCHs            INTEGER ::= 10
maxNrOfErrors            INTEGER ::= 10
maxNrOfMACcSDU-Length   INTEGER ::= 10
maxNrOfRLs              INTEGER ::= 10
maxNrOfRLSets           INTEGER ::= 10
maxNrOfRLs-1            INTEGER ::= 10
maxNrOfRLs-2            INTEGER ::= 10
maxNrOfSCCPCHs          INTEGER ::= 10

```

```

maxNrOfULTs                INTEGER ::= 15
maxNrOfCMpatterns          INTEGER ::= 8
maxRNCinURA-1            INTEGER ::= 1015
maxTTI-Count               INTEGER ::= 10
maxCTFC-1                  INTEGER ::= 10
maxNrOfNeighbouringRNCs   INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC INTEGER ::= 10
maxFACHCountPlus1         INTEGER ::= 10
maxIBSEG                   INTEGER ::= 16

-- *****
--
-- IEs
--
-- *****

id-AllRLItem-DM-Rprt       INTEGER ::= 0
id-AllRLItem-DM-Rsp       INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt  INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp   INTEGER ::= 3
id-AllowedQueueingTime    INTEGER ::= 4
id-BindingID              INTEGER ::= 5
id-C-ID                   INTEGER ::= 6
id-C-RNTI                 INTEGER ::= 7
id-CFN                    INTEGER ::= 8
id-CN-CS-DomainIdentifier INTEGER ::= 9
id-CN-PS-DomainIdentifier INTEGER ::= 10
id-Cause                  INTEGER ::= 11
id-CellItem-PagingRqst    INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD          INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD              INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD             INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD            INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD                INTEGER ::= 19
id-CriticalityDiagnostics                       INTEGER ::= 20
id-D-RNTI                                       INTEGER ::= 21
id-D-RNTI-ReleaseIndication                     INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD             INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD            INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp                  INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD                INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD                INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD                INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD                INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD             INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD            INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD            INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD            INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD             INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD         INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD         INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD         INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp              INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD            INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD            INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD            INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD            INTEGER ::= 42
id-DCH-InformationResponseListIE-RL-SetupRspTDD INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD  INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD  INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD   INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD  INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD  INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD  INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD   INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD  INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD  INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD        INTEGER ::= 59

```

id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
id-DL-SIRTarget	INTEGER ::= 66
id-DLReferencePower	INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForDRNCSelectedS-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
id-MultipleURAsIndicator	INTEGER ::= 94
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
id-PagingArea-PagingRqst	INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
id-PowerAdjustmentType	INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD	INTEGER ::= xxx
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD	INTEGER ::= xxx
id-RANAP-RelocationInformation	INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112
id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
id-RL-Information-RL-FailureInd	INTEGER ::= 115
id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
id-RL-Information-RL-RestoreInd	INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135

id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
id-RLItem-DM-Rprt	INTEGER ::= 138
id-RLItem-DM-Rqst	INTEGER ::= 139
id-RLItem-DM-Rsp	INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143
id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
id-RL-SetItem-DM-Rprt	INTEGER ::= 148
id-RL-SetItem-DM-Rqst	INTEGER ::= 149
id-RL-SetItem-DM-Rsp	INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspFDD	INTEGER ::= xxx
id-RNCsWithCellsInTheAccessedURA-List-CTCH-ResourceRspTDD	INTEGER ::= xxx
id-ReportCharacteristics	INTEGER ::= 152
id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
id-S-RNTI	INTEGER ::= 155
id-SAI	INTEGER ::= 156
id-SRNC-ID	INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
id-TransportBearerID	INTEGER ::= 163
id-TransportBearerRequestIndicator	INTEGER ::= 164
id-TransportLayerAddress	INTEGER ::= 165
id-UC-ID	INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 182
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 183
id-UL-SIRTarget	INTEGER ::= 184
id-URA-ID	INTEGER ::= 185
id-URAItem-PagingRqst	INTEGER ::= 186
id-UnsuccessfulRL-InformationResponse	INTEGER ::= 187
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	INTEGER ::= 190
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 191
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 192

END

CHANGE REQUEST				Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.	
25.423		CR		108r2	
GSM (AA.BB) or 3G (AA.BBB) specification number ↑				↑ CR number as allocated by MCC support team	
For submission to: TSG RAN#8		for approval		<input checked="" type="checkbox"/>	
list expected approval meeting # here ↑		for information		<input type="checkbox"/>	
		strategic		<input type="checkbox"/>	
		non-strategic		<input type="checkbox"/>	
				(for SMG use only)	

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** May 2000

Subject: Downlink power balancing

Work item: [Empty field]

Category:	F Correction	<input checked="" type="checkbox"/>	Release:	Phase 2	<input type="checkbox"/>
(only one category shall be marked with an X)	A Corresponds to a correction in an earlier release	<input type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>		Release 99	<input checked="" type="checkbox"/>
				Release 00	<input type="checkbox"/>

Reason for change: To clarify/correct the power adjustment performed in the downlink power control procedure.

Clauses affected: 8.3.15.2; 9.1.20; 9.2.2.53; 9.2.2.54; 9.3.3; 9.3.4; 9.3.6

Other specs affected:	Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	
	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

Other comments: [Empty field]



help.doc

<----- double-click here for help and instructions on how to create a CR.

8.3.15.2 Successful Operation



Figure 14.1.4: 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 DRNC shall perform the power adjustment (see below) for all radio links for the UE context using a common DL reference power level.

If the value of the *Power Adjustment Type* IE is *Individual*, the DRNC 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 value of the *Power Adjustment Type* IE is *None*, the DRNS shall suspend on going power adjustments for all radio links for the UE context.

Power Adjustment

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

$$\sum P_{bal} = (1 - r)(P_{ref} - P_{init}) \text{ with an accuracy of } \pm 0.5 \text{ dB}$$

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_{init} is the power at the beginning of the adjustment period and r is given by the *Adjustment Ratio* IE.

The adjustment within one adjustment period shall in any case be performed with the constraints given by the *Max Adjustment Step* IE.

The power adjustments shall be repeated for every adjustment period, until a new DL POWER CONTROL REQUEST message is received or the RL is deleted

The DRNS performs the power balancing by using the received desired *DL Reference Power* IE as a reference for adjusting the applied DL power.

The adjustment of the power shall be done with constrains given by the included parameters *Max Adjustment Step* IE and *Adjustment Period* IE. The Power adjustment is repeated for every adjustment period.

DRNS shall suspend on going power adjustment operations at the reception of a new DL POWER CONTROL REQUEST message, and then performs the adjustment based on the new parameters.

9.1.20 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	ignore
Transaction ID	M				-	
Power Adjustment Type	M				YES	ignore
DL Reference Power	C-Common		DL Power		<u>-YES</u>	<u>ignore</u>
>DL Reference Power Information	C-Individual	1..<maxnofRLs>			GLOBAL	ignore
>>RL ID	M				-	
>>DL Reference Power	M		DL Power		-	
Max Adjustment Step	C-CommonOrIndividual				<u>-YES</u>	<u>ignore</u>
Max -Adjustment Period	C-CommonOrIndividual				<u>-YES</u>	<u>ignore</u>
<u>Adjustment Ratio</u>	<u>C-CommonOrIndividual</u>				<u>YES</u>	<u>ignore</u>

Condition	Explanation
Common	This IE is present only "Adjustment Type " equals to 'Common'
Individual	This IE is present only "Adjustment Type " equals to 'Individual'
CommonOrIndividual	This IE is present only "Adjustment Type " equals to 'Common' or 'Individual'

9.2.2.53 Max Adjustment Step

Defines the maximum allowed value for the change of DL power level during a certain number of slots~~in one slot period~~ that can be utilised by the downlink pPower balancing~~drifting prevention~~ 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
Maximum Adjustment Step			INTEGER (0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.1..10)	dB Slots

9.2.2.54 Max Adjustment Period

Adjustment Period IE defines the period at the end of which the DL transmitted power shall converge, [with an accuracy of + 0.25 dB] to the reference power value assuming zero sum alternating stream of DL PC commands received in that period of time.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Max Adjustment Period			INTEGER (10, 20, 30, 40, ..., 500)	Slots

9.2.2.X 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 .. 300)	Frames

9.2.2.X 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

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
```

DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,

```
ReportCharacteristics,  
S-FieldLength,  
S-RNTI,  
SCH-TimeSlot,  
SAI,  
SN,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
ScaledMaxAdjustmentPeriod,  
ScaledAdjustmentRatio,  
ScaledMaxAdjustmentStep,  
ScramblingCodeChange,  
SecondaryCCPCH-SlotFormat,  
SyncCase,  
TDD-ChannelisationCode,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TGD,  
TGL,  
TimeSlot,  
ToAWE,  
ToAWS,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TxDiversityIndicator,  
UARFCN,  
UC-ID,  
UL-DeltaSIR,  
UL-DeltaSIRAfter,  
UL-DL-CompressedModeSelection,  
UL-DPCCH-SlotFormat,  
UL-InterferenceLevel,  
UL-SIR,  
UL-FP-Mode,  
UL-ScramblingCode,  
URA-ID  
FROM RNSAP-IEs  
  
PrivateIE-Container{ },
```

```

ProtocolExtensionContainer{},
ProtocolIE-ContainerList{},
ProtocolIE-ContainerPair{},
ProtocolIE-ContainerPairList{},
ProtocolIE-Container{},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers

```

```

maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,

```

id-AdjustmentRatio,

```

id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,

```

id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,

id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,
id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD,
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,

id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,


```

id-TransportLayerAddress,
id-UC-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD

```

```
FROM RNSAP-Constants;
```

```
-- partly omitted --
```

```

-- *****
--
-- 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 PowerAdjustmentType          PRESENCE mandatory} |
    { ID id-DLReferencePower             CRITICALITY ignore TYPE DL-Power                 PRESENCE conditional} |
    -- This IE is present only 'Adjustment Type' equals to 'Common'
    { ID id-DLReferencePowerList-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional} |
    -- This IE is present only 'Adjustment Type' equals to 'Individual'
}

```

```

| { ID id-MaxAdjustmentStep          CRITICALITY ignore TYPE ScaledMaxAdjustmentStep          PRESENCE conditional } |
| -- This IE is present only 'Adjustment Type " equals to 'Common' or 'Individual'
| { ID id-MaxAdjustmentPeriod        CRITICALITY ignore TYPE ScaledMaxAdjustmentPeriod        PRESENCE conditional }|_7
| -- This IE is present only 'Adjustment Type " equals to 'Common' or 'Individual'
| { ID id-AdjustmentRatio            CRITICALITY ignore TYPE ScaledAdjustmentRatio          PRESENCE conditional },
| -- This IE is present only 'Adjustment Type " equals to 'Common' or 'Individual'
| ...
| }

DL-ReferencePowerInformationList-DL-PC-Rqst ::= RL-IE-ContainerList1 { {DL-ReferencePowerInformation-DL-PC-Rqst-IEs} }

DL-ReferencePowerInformation-DL-PC-Rqst-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-Rqst ::= SEQUENCE {
  rL-ID          RL-ID,
  dl-Reference-Power          DL-Power,
  iE-Extensions          ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs} } OPTIONAL,
  ...
}

DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- partly omitted --

```

9.3.4 Information Element Definitions

```

-- *****
--
-- Information Element Definitions
--
-- *****

-- partly omitted --

ScaledMaxAdjustmentPeriod ::= INTEGER(1..30050)
-- Unit FrameMaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

```

```

ScaledMaxAdjustmentStep ::= INTEGER(1..10)
-- Unit SlotMaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10
-- partly omitted --
    
```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****
    
```

-- partly omitted --

```

-- *****
--
-- IEs
--
-- *****
    
```

id-AllRLItem-DM-Rprt	INTEGER ::= 0
id-AllRLItem-DM-Rsp	INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt	INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp	INTEGER ::= 3
id-AllowedQueuingTime	INTEGER ::= 4
id-BindingID	INTEGER ::= 5
id-C-ID	INTEGER ::= 6
id-C-RNTI	INTEGER ::= 7
id-CFN	INTEGER ::= 8
id-CN-CS-DomainIdentifier	INTEGER ::= 9
id-CN-PS-DomainIdentifier	INTEGER ::= 10
id-Cause	INTEGER ::= 11
id-CellItem-PagingRqst	INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep	INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep	INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD	INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD	INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD	INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD	INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD	INTEGER ::= 19
id-CriticalityDiagnostics	INTEGER ::= 20
id-D-RNTI	INTEGER ::= 21
id-D-RNTI-ReleaseIndication	INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD	INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD	INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp	INTEGER ::= 25

id-DCH-AddList-RL-ReconfPrepFDD	INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD	INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD	INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD	INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD	INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD	INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD	INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD	INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD	INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD	INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD	INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp	INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD	INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD	INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD	INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD	INTEGER ::= 42
id-DCH-InformationResponseListIE-RL-SetupRspTDD	INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD	INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD	INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD	INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD	INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD	INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD	INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
id-DL-SIRTarget	INTEGER ::= 66
id-DLReferencePower	INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76

id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
id-MultipleURAsIndicator	INTEGER ::= 94
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
id-PagingArea-PagingRqst	INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
id-PowerAdjustmentType	INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
id-RANAP-RelocationInformation	INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112
id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
id-RL-Information-RL-FailureInd	INTEGER ::= 115
id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
id-RL-Information-RL-RestoreInd	INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127

id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135
id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
id-RLItem-DM-Rprt	INTEGER ::= 138
id-RLItem-DM-Rqst	INTEGER ::= 139
id-RLItem-DM-Rsp	INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143
id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
id-RL-SetItem-DM-Rprt	INTEGER ::= 148
id-RL-SetItem-DM-Rqst	INTEGER ::= 149
id-RL-SetItem-DM-Rsp	INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
id-ReportCharacteristics	INTEGER ::= 152
id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
id-S-RNTI	INTEGER ::= 155
id-SAI	INTEGER ::= 156
id-SRNC-ID	INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
id-TransportBearerID	INTEGER ::= 163
id-TransportBearerRequestIndicator	INTEGER ::= 164
id-TransportLayerAddress	INTEGER ::= 165
id-UC-ID	INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178

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id-UL-DPCH-Information-RL-SetupRqstFDD
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD
id-UL-DPCH-InformationItem-RL-AdditionRspTDD
id-UL-DPCH-InformationItem-RL-SetupRspTDD
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD
id-UL-SIRTarget
id-URA-ID
id-URAItem-PagingRqst
id-UnsuccessfulRL-InformationResponse
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
[id-AdjustmentRatio](#)

END

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INTEGER ::= 179
INTEGER ::= 180
INTEGER ::= 181
INTEGER ::= 182
INTEGER ::= 183
INTEGER ::= 184
INTEGER ::= 185
INTEGER ::= 186
INTEGER ::= 187
INTEGER ::= 188
INTEGER ::= 189
INTEGER ::= 190
INTEGER ::= 191
INTEGER ::= 192
INTEGER ::= xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 113r2

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG-RAN #8**
list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** May, 2000

Subject: Transport bearer related parameters

Work item:

Category: F Correction **Release:** Phase 2
(only one category shall be marked with an X) A Corresponds to a correction in an earlier release Release 96
B Addition of feature Release 97
C Functional modification of feature Release 98
D Editorial modification Release 99
Release 00

Reason for change: The following parameters are considered transport bearer related rather than transport channel related: *CRC Presence Indicator, UL FP Mode, TOAWS, TOAWE.*

In the current version of the RNSAP specification the above parameters are provided by the SRNS in RL SETUP REQUEST, RL RECONFIGURATION PREPARE and RL RECONFIGURATION REQUEST for every DCH to be set up, added or modified. In case of co-ordinated DCHs these parameters should apply to the set of co-ordinated DCHs and not to individual DCHs within the set. For a set of co-ordinated DCHs the SRNS should therefore only include these parameters once in the above mentioned messages. This CR proposes the necessary modifications to the procedure texts, message tabular formats and ASN.1.

Clauses affected: 8.3.1.2, 8.3.4.2, 8.3.7.2, 9.1.3.1, 9.1.3.2, 9.1.11.1, 9.1.11.2, 9.1.16.1, 9.1.16.2, 9.2.1.13, 9.3.3, 9.3.4

Other specs affected: Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
BSS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

8.3 DCH procedures

8.3.1 Radio Link Setup

8.3.1.2 Successful Operation

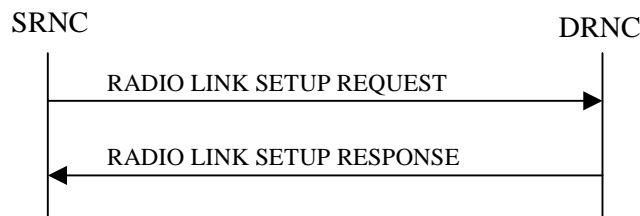


Figure 1: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes [a DCH Info IE with multiple DCH Specific Info IEs then the DCH Combination Indicator IE for a DCH](#), the DRNS shall treat [all the DCHs in the DCH Info IE with the same value of this IE](#) as a set of co-ordinated DCHs.

[FDD - For DCHs [which do not belong to a set of co-ordinated DCHs](#) with [a unique or no "DCH Combination Ind"](#) and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For [a set of co-ordinated DCHs with the same "DCH Combination Ind"](#) the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH [or a set of co-ordinated DCHs](#) as the new DCH FP Mode in the Uplink of the user plane for [this 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 new Time of Arrival Window Start Point in the user plane for [this 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 new Time of Arrival Window End Point in the user plane for ~~this-the DCH~~ or the set of co-ordinated DCHs.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the Diversity Indication that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.4 Synchronised Radio Link Reconfiguration Preparation

8.3.4.2 Successful Operation

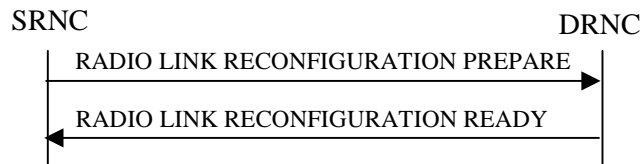


Figure 2: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message 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 RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs to Modify* IE with 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 RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH or a DCH which belongs to 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 this-the DCH or the set of co-ordinated DCHs in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes ~~an~~ the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for this-the DCH or the set of co-ordinated DCHs in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes ~~an~~ the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for this-the DCH or the set of co-ordinated DCHs in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION PREPARE message includes a DCHs to InfoAdd IE with multiple DCH Specific Info IEs then the DCH Combination Indicator IE for a DCH to be added, the DRNS shall treat the DCHs in the DCHs to InfoAdd 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.

1. ~~treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and~~
2. ~~include this DCH in the new configuration only if it can include all DCHs with the same value of the DCH Combination Indicator IE in the new configuration.~~

[FDD - For DCHs which do not belong to a set of co-ordinated DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For a set of co-ordinated DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

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 ~~this 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 Start Point in the user plane for ~~this 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 End Point in the user plane for ~~this the DCH~~ or the set of co-ordinated DCHs in the new configuration

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the 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 the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code 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 as a

Channelisation Code (DL) IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

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 [TDD – the CCTrCH of] the new configuration.

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 [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS 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 exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.7 Unsynchronised Radio Link Reconfiguration

8.3.7.2 Successful Operation

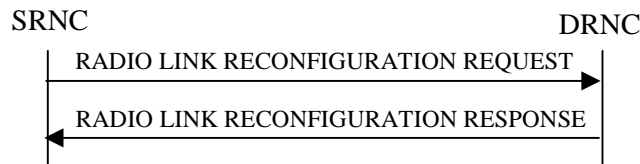


Figure 3: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon reception, 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 before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this new value when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes on 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 RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs to Modify* IE with 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 RADIO LINK RECONFIGURATION REQUEST message includes ~~on~~ the *UL FP Mode* IE for a DCH or a DCH which belongs to 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 ~~this the~~ DCH or the set of co-ordinated DCHs in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes ~~on~~ the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for ~~this the~~ DCH or the set of co-ordinated DCHs in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes ~~on~~ the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for ~~this the~~ DCH or the set of co-ordinated DCHs in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be added to the Radio Link(s), 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 RADIO LINK RECONFIGURATION REQUEST message includes a DCHs to InfoAdd IE with multiple DCH Specific Info IEs then the DCH Combination Indicator IE for a DCH to be added, the DRNS shall treat the DCHs in the DCHs to InfoAdd 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.

1. ~~treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and~~
2. ~~include this DCH in the new configuration only if it can include all DCHs with the same value of the DCH Combination Indicator IE in the new configuration.~~

[FDD - For DCHs which do not belong to a set of co-ordinated DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For a set of co-ordinated DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

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 radio interface in congestion situations within the DRNS once the new configuration has been activated.

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 ~~this 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 Start Point in the user plane for ~~this 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 End Point in the user plane for ~~this the DCH~~ or the set of co-ordinated DCHs in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE and the *Reference to System Information blocks* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

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

Physical Channel Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

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

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the IEs *Maximum Uplink SIR* and *Minimum Uplink SIR* for each Radio Link in the RADIO LINK RECONFIGURATION RESPONSE message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCH in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		1			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C- SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset	Power offset for the TFCI bits.	–	
>>PO2	M		Power Offset	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno ofDCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	<u>M</u>				<u>=</u>	
>UL FP Mode	<u>M</u>				<u>=</u>	
>ToAWS	<u>M</u>				<u>=</u>	
>ToAWE	<u>M</u>				<u>=</u>	
>DCH Specific Info		1..<maxno ofDCHs>			<u>=</u>	
<u>>>DCH ID</u>	<u>M</u>				<u>–</u>	
>DCH Combination Ind	<u>O</u>				<u>–</u>	
<u>>>Limited Power Increase</u>	<u>M</u>				<u>–</u>	
<u>>>Tr Ch Source Statistics Descriptor</u>	<u>M</u>				<u>–</u>	
<u>>>Transport Format Set</u>	<u>M</u>			For the UL.	<u>–</u>	
<u>>>Transport Format Set</u>	<u>M</u>			For the DL.	<u>–</u>	
<u>>>BLER</u>	<u>M</u>			For the UL.	<u>–</u>	
<u>>>BLER</u>	<u>M</u>			For the DL.	<u>–</u>	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>Allocation/Retention Priority	M				-	
>>Frame Handling Priority	M				-	
>>QE-Selector	M				-	
>>DRAC control	M				-	
> Transport Bearer Info		1			=	
>>>Payload CRC Presence Indicator	M				-	
>>>UL FP Mode	M				-	
>>>ToAWS	M				-	
>>>ToAWE	M				-	
RL Information		1...<maxn oofRLs>			EACH	notify
>RL ID	M				-	
>C-ID	M				-	
>Frame Offset	M				-	
>Chip Offset	M				-	
>Propagation Delay	O				-	
>Diversity Control Field	C – NotFirstRL				-	
>Initial DL TX Power	O		DL Power		-	
>Primary CPICH Ec/No	O				-	
>SSDT Cell ID	O				-	
>Transmit Diversity Indicator	C – Diversity mode				-	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the RL Information .
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofRLs	Maximum number of RLs 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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL CCTrCH Information		1..<maxno of CCTrCHs>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the UL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
DL CCTrCH Information		1..<maxno of CCTrCHs>			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the DL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
>TDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno of DCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	<u>M</u>				=	
>UL FP Mode	<u>M</u>				=	
>ToAWS	<u>M</u>				=	
>ToAWE	<u>M</u>				=	
>DCH Specific Info		1..<maxno of DCHs>			=	
__>>DCH ID	M				–	
__>>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped	–	
__>>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	\emptyset				–	
__>>Limited Power Increase	M				–	
__>>Tr Ch Source Statistics Descriptor	M				–	
__>>Transport Format Set	M			For the UL.	–	
__>>Transport Format Set	M			For the DL.	–	
__>>BLER	M			For the UL.	–	
__>>BLER	M			For the DL.	–	
__>>Allocation/Retention Priority	M				–	
__>>Frame Handling Priority	M				–	
> Transport Bearer Info		1			=	
__>>Payload CRC Presence Indicator	<u>M</u>				–	
__>>UL FP Mode	<u>M</u>				–	
__>>ToAWS	<u>M</u>				–	
__>>ToAWE	<u>M</u>				–	
RL Information		1			YES	reject
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	

>Primary CCPCH RSCP	O				-	
---------------------	---	--	--	--	---	--

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

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		0..1			YES	reject
>UL Scrambling code	O				-	
>UL SIR Target	O		Uplink SIR		-	
>Min UL Channelisation Code Length	O				-	
>Max Number of UL DPDCHs	C – CodeLen				-	
>Puncture Limit	O			For the UL.	-	
>TFCS	O			TFCS for the UL.	-	
>UL DPCCH Slot Format	O				-	
>SSDT Cell Identity Length	O				-	
>S-Field Length	O				-	
DL DPCH Information		0..1			YES	reject
>TFCS	O			TFCS for the DL.	-	
>DL DPCH Slot Format	O				-	
>TFCI Signalling Mode	O				-	
>TFCI Presence	C- SlotFormat				-	
>MultiplexingPosition	O				-	
DCHs to Modify		0..<maxnoof DCHs>			GLOBAL	reject
>UL FP Mode	O				-	
>ToAWS	O				-	
>ToAWE	O				-	
>DCH Specific Info		1..<maxnoof DCHs>			-	
>>DCH ID	M				-	
>>Transport Format Set	O			For the UL.	-	
>>Transport Format Set	O			For the DL.	-	
>>Allocation/Retention Priority	O				-	
>>Frame Handling Priority	O				-	
>>DRAC Control	O				-	
>Transport Bearer Info		1			-	
>>>UL FP Mode	O				-	
>>>ToAWS	O				-	
>>>ToAWE	O				-	
>>DRAC Control	O				-	
DCHs to Add		0..<maxnoof DCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	M				-	
>UL FP Mode	M				-	
>ToAWS	M				-	
>ToAWE	M				-	
>DCH Specific Info		1..<maxnoof DCHs>			-	
>>DCH ID	M				-	
>>DCH Combination	O				-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Indicator						
>>Limited Power Increase	M				–	
>>Tr Ch Source Statistics Descriptor	M				–	
>>Transport Format Set	M			For the UL.	–	
>>Transport Format Set	M			For the DL.	–	
>>BLER	M			For the UL.	–	
>>BLER	M			For the DL.	–	
>>Allocation/Retention Priority	M				–	
>>Frame Handling Priority	M				–	
>>QE-Selector	M				–	
>>DRAC Control	M				–	
>Transport Bearer Info						
>>>Payload CRC Presence Indicator	M				–	
>>>UL FP Mode	M				–	
>QE-Selector	M				–	
>>>ToAWS	M				–	
>>>ToAWE	M				–	
>DRAC Control	M				–	
DCHs to Delete		0..<maxnoof DCHs>			GLOBAL	reject
>DCH ID	M				–	
RL Information		0..<maxnoof RLS>			EACH	reject
>RL ID	M				–	
>SSDT Indication	O				–	
>SSDT Cell Identity	C - SSSTIndON				–	

Condition	Explanation
SSSTIndON	The IE may be present if the SSDT Indication is set to 'SSDT Active in the UE'.
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofRLs	Maximum number of RLS for a UE.

9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		0..<maxno ofCCTrCHs>			EACH	notify
>CCTrCH ID	M				-	
>TFCS	O			For the UL.	-	
>TFCI Coding	O				-	
>Puncture Limit	O				-	
DL CCTrCH Information		0..<maxno ofCCTrCHs>			EACH	notify
>CCTrCH ID	M				-	
>TFCS	O			For the DL.	-	
>TFCI Coding	O				-	
>Puncture Limit	O				-	
DCHs to Modify		0..<maxno ofDCHs>			GLOBAL	reject
>UL FP Mode	O				-	
>ToAWS	O				-	
>ToAWE	O				-	
>DCH Specific Info		1..<maxno ofDCHs>			-	
>>DCH ID	M				-	
>>CCTrCH Id	O			UL CCTrCH in which the DCH is mapped.	-	
>>CCTrCH Id	O			DL CCTrCH in which the DCH is mapped	-	
>>Transport Format Set	O			For the UL.	-	
>>Transport Format Set	O			For the DL.	-	
>>Allocation/Retention Priority	O				-	
>>Frame Handling Priority	O				-	
>Transport Bearer Info		1				
>>>UL FP Mode	O				-	
>>>ToAWS	O				-	
>>>ToAWE	O				-	
DCHs to Add		0..<maxno ofDCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	M				-	
>UL FP Mode	M				-	
>ToAWS	M				-	
>ToAWE	M				-	
>DCH Specific Info		1..<maxno ofDCHs>			-	
>>>DCH ID	M				-	
>>>CCTrCH Id	M			UL CCTrCH in which the DCH is mapped.	-	
>>>CCTrCH Id	M			DL CCTrCH in which the DCH is	-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				mapped		
>DCH Combination Indicator	⓪				-	
>>Limited Power Increase	M				-	
>>Tr Ch Source Statistics Descriptor	M				-	
>>Transport Format Set	M			For the UL.	-	
>>Transport Format Set	M			For the DL.	-	
>>BLER	M			For the UL.	-	
>>BLER	M			For the DL.	-	
>>Allocation/Retention Priority	M				-	
>>Frame Handling Priority	M				-	
>Transport Bearer Info		1				
>>>Payload CRC Presence Indicator	M				-	
>>>UL FP Mode	M				-	
>>>ToAWS	M				-	
>>>ToAWE	M				-	
DCHs to Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				-	

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

9.1.16 RADIO LINK RECONFIGURATION REQUEST

9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		0..1			YES	reject
>TFCS	O			TFCS for the UL.	-	
DL DPCH Information		0..1			YES	reject
>TFCS	O			TFCS for the DL.	-	
>TFCI Signalling Mode	O				-	
DCHs to Modify		0..<maxno ofDCHs>			GLOBAL	reject
>UL FP Mode	M				=	
>ToAWS	M				=	
>ToAWE	M				=	
>DCH Specific Info		1..<maxno ofDCHs>			=	
>>DCH ID	M				-	
>>Transport Format Set	O			For the UL.	-	
>>Transport Format Set	O			For the DL.	-	
>>Allocation/Retention Priority	O				-	
>>Frame Handling Priority	O				-	
>>DRAC Control	O					
>Transport Bearer Info		1				
>>UL FP Mode	O				-	
>>ToAWS	O				-	
>>ToAWE	O				-	
>>DRAC Control	O					
DCHs to add		0..<maxno ofDCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	M				=	
>UL FP Mode	M				=	
>ToAWS	M				=	
>ToAWE	M				=	
>DCH Specific Info		1..<maxno ofDCHs>			=	
>>DCH ID	M				-	
>>DCH Combination Ind	O				-	
>>Limited Power Increase	M				-	
>>Tr Ch Source Statistics Descriptor	M				-	
>>Transport Format Set	M			For the UL.	-	
>>Transport Format Set	M			For the DL.	-	
>>BLER	M			For the UL.	-	
>>BLER	M			For the DL.	-	
>>Allocation/Retention Priority	M				-	
>>Frame Handling Priority	M				-	
>>QE-Selector	M				=	

>>DRAC Control	M				-	
>Transport Bearer Info		1				
>>Payload CRC Presence Indicator	M				-	
>>>UL FP mode	M				-	
>QE Selector	M				-	
>>>ToAWS	M				-	
>>>ToAWE	M				-	
>DRAC Control	M				-	
DCHs to Delete		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				-	

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

9.1.16.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				-	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		0..<maxnoof CCTrCHs>			EACH	notify
>CCTrCH ID	M				-	
>TFCS	M				-	
DL CCTrCH Information		0..<maxnoof CCTrCHs>			EACH	notify
>CCTrCH ID	M				-	
>TFCS	M				-	
DCHs to Modify		0..<maxnoof DCHs>			GLOBAL	reject
>UL FP Mode	M				=	
>ToAWS	M				=	
>ToAWE	M				=	
>DCH Specific Info		1..<maxnoof DCHs>			=	
__>>DCH ID	M				-	
__>>CCTrCH ID	O			UL CCTrCH in which the DCH is mapped.	-	
__>>CCTrCH ID	O			DL CCTrCH in which the DCH is mapped	-	
__>>Transport Format Set	O			For the UL.	-	
__>>Transport Format Set	O			For the DL.	-	
__>>Allocation/Retention Priority	O				-	
__>>Frame Handling Priority	O				-	
>Transport Bearer Info		1				
__>>UL FP Mode	⊖				-	
__>>ToAWS	⊖				-	
__>>ToAWE	⊖				-	
DCHs to Add		0..<maxnoof DCHs>			GLOBAL	reject
>Payload CRC Presence Indicator	M				=	
>UL FP Mode	M				=	
>ToAWS	M				=	
>ToAWE	M				=	
>DCH Specific Info		1..<maxnoof DCHs>			=	
__>>DCH ID	M				-	
__>>Limited Power Increase	M				-	
__>>Tr Ch Source Statistics Descriptor	M				-	
__>>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped.	-	
__>>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	-	
>DCH Combination Ind	⊖				-	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<u>→</u> >Transport Format Set	M			For the UL.	–	
<u>→</u> >Transport Format Set	M			For the DL.	–	
<u>→</u> >BLER	M			For the UL.	–	
<u>→</u> >BLER	M			For the DL.	–	
<u>→</u> >Allocation/Retention Priority	M				–	
<u>→</u> >Frame Handling Priority	M				–	
>Transport Bearer Info		<u>1</u>				
<u>→</u> >Payload CRC Presence Indicator	M				–	
<u>→</u> >UL FP Mode	M				–	
<u>→</u> >ToAWS	M				–	
<u>→</u> >ToAWE	M				–	
DCHs to Delete		<i>0..<maxnoof DCHs></i>			GLOBAL	reject
>DCH ID	M				–	

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.2 Information Element Functional Definition and Contents

9.2.1 Common Parameters

This subclause contains parameters that are common to FDD and TDD.

9.2.1.13 ~~DCH Combination Indicator~~

~~The DCH Combination Indicator is used to indicate the multiplexing of more than one DCH on transport bearer. The value should be unique for each group of coordinated DCH's per request message.~~

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DCH Combination Ind			INTEGER (0..255)	

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,

```

DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,


```
ReportCharacteristics,
S-FieldLength,
S-RNTI,
SCH-TimeSlot,
SAI,
SN,
SSDT-CellID,
SSDT-CellID-Length,
SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
ScaledMaxAdjustmentPeriod,
ScaledMaxAdjustmentStep,
ScramblingCodeChange,
SecondaryCCPCH-SlotFormat,
SyncCase,
TDD-ChannelisationCode,
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TGD,
TGL,
TimeSlot,
ToAWE,
ToAWS,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
TFCS,
TransportFormatSet,
TransportLayerAddress,
TrCH-SrcStatisticsDescr,
TxDiversityIndicator,
UARFCN,
UC-ID,
UL-DeltaSIR,
UL-DeltaSIRAfter,
UL-DL-CompressedModeSelection,
UL-DPCCCH-SlotFormat,
UL-InterferenceLevel,
UL-SIR,
UL-FP-Mode,
UL-ScramblingCode,
URA-ID
FROM RNSAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{}
```

```
ProtocolIE-ContainerList{},
ProtocolIE-ContainerPair{},
ProtocolIE-ContainerPairList{},
ProtocolIE-Container{},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,
id-CriticalityDiagnostics,
id-D-RNTI,
```

id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,

id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,
id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD,
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,

id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,

```

id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

```

```

-- *****
--
-- Common Container List
--
-- *****

```

DPCH-IE-ContainerList	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IEsSetParam } }
RL-IE-ContainerList0	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1-1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-2	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IEsSetParam } }
RL-Set-IE-ContainerList	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IEsSetParam } }
CCTrCH-IE-ContainerList0	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IEsSetParam } }
CCTrCH-IE-ContainerList1	{ RNSAP-PROTOCOL-IES : IEsSetParam }	::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IEsSetParam } }

```

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

```

```

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}
    ...
}

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { 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 mandatory } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE DL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DCH-Information-RL-SetupRqstFDD     CRITICALITY reject  TYPE DCH-InformationList-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-RL-Information-RL-SetupRqstFDD     CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD  PRESENCE mandatory } ,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode                UL-ScramblingCode,
    minUL-ChannelisationCodeLength    MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs                  MaxNrOfUL-DPCHs          OPTIONAL
    -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit                 PunctureLimit,
    ul-TFCS                           TFCS,
    ul-DPCCH-SlotFormat              UL-DPCCH-SlotFormat,
    ul-SIRTarget                     UL-SIR                   OPTIONAL,
    diversityMode                    DiversityMode,
    d-FieldLength                    D-FieldLength           OPTIONAL
    -- This IE is present only if Feed Back mode diversity is activated -- ,
    sSDT-CellIdLength                SSDT-CellID-Length      OPTIONAL,
    s-FieldLength                    S-FieldLength           OPTIONAL,
    IE-Extensions                    ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                              TFCS,
    dl-DPCH-SlotFormat                DL-DPCH-SlotFormat,
    tFCI-SignallingMode               TFCI-SignallingMode,
    tFCI-Presence                     TFCI-Presence          OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 -- ,
    multiplexingPosition              MultiplexingPosition,
    powerOffsetInformation            SEQUENCE {
        po1-ForTFCI-Bits              PowerOffset,
        po2-ForTPC-Bits               PowerOffset,
        po3-ForPilotBits              PowerOffset,
        ...
    }
}

```

```

    },
    fdd-dl-TPC-DownlinkStepSize      FDD-TPC-DownlinkStepSize,
    iE-Extensions                    ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationList-RL-SetupRqstFDD      ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstFDD

```

```

DCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
    ul-FP-Mode                       UL-FP-Mode,
    toAWS                             ToAWS,
    toAWE                             ToAWE,
    dCH-SpecificInformationList      DCH-SpecificInformationList-RL-SetupRqstFDD,
    transportBearerItem              TransportBearerItem-RL-SetupRqstFDD,
    ...
}

```

```

DCH-SpecificInformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-SpecificItem-RL-SetupRqstFDD

```

```

DCH-SpecificItem-RL-SetupRqstFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    dCH-CombinationInd              DCH-CombinationInd OPTIONAL,
    limitedPowerIncrease             LimitedPowerIncrease,
    trCH-SrcStatisticsDescr          TrCH-SrcStatisticsDescr,
    ul-transportFormatSet            TransportFormatSet,
    dl-transportFormatSet            TransportFormatSet,
    ul-BLER                          BLER,
    dl-BLER                          BLER,
    allocationRetentionPriority       AllocationRetentionPriority,
    frameHandlingPriority             FrameHandlingPriority,
    payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
    ul-FP-Mode                       UL-FP-Mode,
    qE-Selector                      QE-Selector,
    toAWS                             ToAWS,
    toAWE                             ToAWE,
    dRACControl                      DRACControl,
    iE-Extensions                    ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

DCH-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

TransportBearerItem-RL-SetupRqstFDD ::= SEQUENCE {
    payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,

```



```

ul-FP-Mode UL-FP-Mode,
toAWS ToAWS,
toAWE ToAWE,
IE-Extensions ProtocolExtensionContainer { { TransportBearerItem-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

TransportBearerItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RL-InformationList-RL-SetupRqstFDD ::= RL-IE-ContainerList1 { {RL-InformationItemIEs-RL-SetupRqstFDD} }

RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-SetupRqstFDD PRESENCE mandatory },
  ...
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID RL-ID,
  c-ID C-ID,
  frameOffset FrameOffset,
  chipOffset ChipOffset,
  propagationDelay PropagationDelay OPTIONAL,
  diversityControlField DiversityControlField OPTIONAL
  -- This IE is present only if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
  dl-InitialTX-Power DL-Power OPTIONAL,
  primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL,
  sSDT-CellID SSDT-CellID OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
  IE-Extensions ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupRequestTDD-IEs}},

```

```

    protocolExtensions          ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
    ...
}

RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { 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-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
  { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
  { ID id-DCH-InformationList-RL-SetupRqstTDD CRITICALITY reject  TYPE DCH-InformationList-RL-SetupRqstTDD PRESENCE mandatory } |
  { ID id-RL-Information-RL-SetupRqstTDD          CRITICALITY reject  TYPE RL-Information-RL-SetupRqstTDD          PRESENCE mandatory },
  ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtTrCH-ID                CCTrCH-ID,
  ul-TFCS                   TFCS,
  tFCI-Coding               TFCI-Coding,
  ul-PunctureLimit          PunctureLimit,
  iE-Extensions             ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= CCTrCH-IE-ContainerList1 { {DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory },
  ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtTrCH-ID                CCTrCH-ID,
  dl-TFCS                   TFCS,
  tFCI-Coding               TFCI-Coding,
  dl-PunctureLimit          PunctureLimit,
  tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
  iE-Extensions             ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstTDD
```

```
DCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  dCH-SpecificInformationList DCH-SpecificInformationList-RL-SetupRqstTDD,
  transportBearerItem TransportBearerItem-RL-SetupRqstTDD,
  ...
}
```

```
DCH-SpecificInformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-SpecificItem-RL-SetupRqstTDD
```

```
DCH-SpecificItem-RL-SetupRqstTDD ::= 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
  dCH-CombinationInd DCH-CombinationInd OPTIONAL,
  limitedPowerIncrease LimitedPowerIncrease,
  trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
  ul-transportFormatSet TransportFormatSet,
  dl-transportFormatSet TransportFormatSet,
  ul-BLER BLER,
  dl-BLER BLER,
  allocationRetentionPriority AllocationRetentionPriority,
  frameHandlingPriority FrameHandlingPriority,
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  iE-Extensions ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}
```

```
DCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
TransportBearerItem-RL-SetupRqstTDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  iE-Extensions ProtocolExtensionContainer { { TransportBearerItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}
```

```

}
TransportBearerItem-RL-SetupRqstTDD-ExtIEs-RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    frameOffset          FrameOffset,
    primaryCCPCH-RSCP    PrimaryCCPCH-RSCP OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs-RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkSetupRequestTDD-Extensions-RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

[CR writer's comment: Unmodified message modules are not included in the CR.]

```

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationPrepareFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}
    ...
}

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-DCH-ModifyList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-ModifyList-RL-ReconfPrepFDD PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfPrepFDD CRITICALITY reject TYPE DCH-AddList-RL-ReconfPrepFDD 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 },
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode          OPTIONAL,
    ul-SIRTarget               UL-SIR                      OPTIONAL,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength OPTIONAL,
    maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL
    -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 --,
    ul-PunctureLimit          PunctureLimit            OPTIONAL,
    tFCS                       TFCS                  OPTIONAL,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat        OPTIONAL,
    sSDT-CellIDLength          SSDT-CellID-Length        OPTIONAL,
    s-FieldLength              S-FieldLength            OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    tFCS                       TFCS                  OPTIONAL,
    dl-DPCH-SlotFormat          DL-DPCH-SlotFormat        OPTIONAL,
    tFCI-SignallingMode         TFCI-SignallingMode        OPTIONAL,
    tFCI-Presence               TFCI-Presence            OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 --,
    multiplexingPosition         MultiplexingPosition        OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfPrepFDD

DCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-FP-Mode          UL-FP-Mode          OPTIONAL,
    toAWS              ToAWS              OPTIONAL,
    toAWE              ToAWE              OPTIONAL,
    dCH-SpecificInformationList DCH-ModifySpecificInformationList-RL-ReconfPrepFDD,
    transportBearerItem DCH-ModifyTransportBearerItem-RL-ReconfPrepFDD,
    ...
}

DCH-ModifySpecificInformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-RL-ReconfPrepFDD

DCH-ModifySpecificItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID              DCH-ID,
    ul-TransportformatSet TransportFormatSet OPTIONAL,
    dl-TransportformatSet TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority FrameHandlingPriority OPTIONAL,
    ul-FP-Mode          UL-FP-Mode          OPTIONAL,
    toAWS              ToAWS              OPTIONAL,
    toAWE              ToAWE              OPTIONAL,
    dRACControl        DRACControl        OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-FP-Mode          UL-FP-Mode,
    toAWS              ToAWS,
    toAWE              ToAWE,
    iE-Extensions      ProtocolExtensionContainer { { DCH-ModifyTransportBearerItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfPrepFDD

```

```

DCH-AddItem-RL-ReconfPrepFDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  dCH-SpecificInformationList DCH-AddSpecificInformationList-RL-ReconfPrepFDD,
  transportBearerItem DCH-AddTransportBearerItem-RL-ReconfPrepFDD,
  ...
}

```

DCH-AddSpecificInformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-AddSpecificItem-RL-ReconfPrepFDD

```

DCH-AddSpecificItem-RL-ReconfPrepFDD ::= SEQUENCE {
  dCH-ID DCH-ID,
  dCH-CombinationInd DCH-CombinationInd OPTIONAL,
  limitedPowerIncrease LimitedPowerIncrease,
  trCH-SrcStatisticsDescr TrCH-SrcStatisticsDescr,
  ul-TransportformatSet TransportFormatSet,
  dl-TransportformatSet TransportFormatSet,
  ul-BLER BLER,
  dl-BLER BLER,
  allocationRetentionPriority AllocationRetentionPriority,
  frameHandlingPriority FrameHandlingPriority,
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  qE-Selector QE-Selector,
  toAWS ToAWS,
  toAWE ToAWE,
  dRACControl DRACControl,
  iE-Extensions ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

DCH-AddItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DCH-AddTransportBearerItem-RL-ReconfPrepFDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
  ul-FP-Mode UL-FP-Mode,
  toAWS ToAWS,
  toAWE ToAWE,
  iE-Extensions ProtocolExtensionContainer { {DCH-AddTransportBearerItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
  ...
}


```

```

DCH-AddTransportBearerItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}


```

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

```

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions         ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= RL-IE-ContainerList0 { {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,
    sSDT-Indication      SSDT-Indication    OPTIONAL,
    sSDT-CellIdentity    SSDT-CellID       OPTIONAL
    -- The IE may be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
    iE-Extensions         ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject    TYPE AllowedQueuingTime          PRESENCE optional    } |
    { ID id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD    CRITICALITY notify    TYPE UL-CCTrCH-InformationList-RL-ReconfPrepTDD    PRESENCE optional    } |
    { ID id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD    CRITICALITY notify    TYPE DL-CCTrCH-InformationList-RL-ReconfPrepTDD    PRESENCE optional    } |

```



```

{ ID id-DCH-ModifyList-RL-ReconfPrepTDD    CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfPrepTDD    PRESENCE optional } |
{ ID id-DCH-AddList-RL-ReconfPrepTDD      CRITICALITY reject  TYPE DCH-AddList-RL-ReconfPrepTDD      PRESENCE optional } |
{ ID id-DCH-DeleteList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepTDD   PRESENCE optional },
...
}

UL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-Information-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-Information-RL-ReconfPrepTDD PRESENCE mandatory  },
  ...
}

UL-CCTrCH-Information-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS               TFCS          OPTIONAL,
  tFCI-Coding        TFCI-Coding   OPTIONAL,
  punctureLimit      PunctureLimit  OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-Information-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-Information-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-ReconfPrepTDD ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-ReconfPrepTDD PRESENCE mandatory  },
  ...
}

DL-CCTrCH-InformationItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS               TFCS          OPTIONAL,
  tFCI-Coding        TFCI-Coding   OPTIONAL,
  punctureLimit      PunctureLimit  OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfPrepTDD

DCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  ul-FP-Mode          UL-FP-Mode          OPTIONAL,
  toAWS              ToAWS              OPTIONAL,

```

```

toAWE                               ToAWE           OPTIONAL,
dCH-SpecificInformationList         DCH-ModifySpecificInformationList-RL-ReconfPrepTDD,
transportBearerItem                 DCH-ModifyTransportBearerItem-RL-ReconfPrepTDD,
...
}

DCH-ModifySpecificInformationList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-RL-ReconfPrepTDD

DCH-ModifySpecificItem-RL-ReconfPrepTDD ::= 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,
    ul-FP-Mode                         UL-FP-Mode         OPTIONAL,
    toAWS                              ToAWS              OPTIONAL,
    toAWE                              ToAWE              OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfPrepTDD ::= SEQUENCE {
    ul-FP-Mode                         UL-FP-Mode,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    iE-Extensions                      ProtocolExtensionContainer { {DCH-ModifyTransportBearerItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfPrepTDD          ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfPrepTDD

DCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    payloadCRC-PresenceIndicator       PayloadCRC-PresenceIndicator,
    ul-FP-Mode                         UL-FP-Mode,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    dCH-SpecificInformationList         DCH-AddSpecificInformationList-RL-ReconfPrepTDD,
    transportBearerItem                 DCH-AddTransportBearerItem-RL-ReconfPrepTDD,
    ...
}

```

DCH-AddSpecificInformationList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-AddSpecificItem-RL-ReconfPrepTDD

DCH-AddSpecificItem-RL-ReconfPrepTDD ::= SEQUENCE {

dCH-ID	DCH-ID,
ul-CCTrCH-ID	CCTrCH-ID,
dl-CCTrCH-ID	CCTrCH-ID,
dCH-CombinationInd	DCH-CombinationInd OPTIONAL,
limitedPowerIncrease	LimitedPowerIncrease,
trCH-SrcStatisticsDescr	TrCH-SrcStatisticsDescr,
ul-TransportformatSet	TransportFormatSet,
dl-TransportformatSet	TransportFormatSet,
ul-BLER	BLER,
dl-BLER	BLER,
allocationRetentionPriority	AllocationRetentionPriority,
frameHandlingPriority	FrameHandlingPriority,
payloadCRC-PresenceIndicator	PayloadCRC-PresenceIndicator,
ul-FP-Mode	UL-FP-Mode,
toAWS	ToAWS,
toAWE	ToAWE,
iE-Extensions	ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
...	

DCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

...

~~DCH-AddTransportBearerItem-RL-ReconfPrepTDD ::= SEQUENCE {~~

payloadCRC-PresenceIndicator	PayloadCRC-PresenceIndicator,
ul-FP-Mode	UL-FP-Mode,
toAWS	ToAWS,
toAWE	ToAWE,
iE-Extensions	ProtocolExtensionContainer { { DCH-AddTransportBearerItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
...	

~~DCH-AddTransportBearerItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {~~

~~...~~

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {

dCH-ID	DCH-ID,
iE-Extensions	ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
...	

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

...

```
RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

[CR writer's comment: Unmodified message modules are not included in the CR.]

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationRequestFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}
    ...
}

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-DCH-ModifyList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-ModifyList-RL-ReconfRqstFDD PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-AddList-RL-ReconfRqstFDD PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                TFCS OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                TFCS OPTIONAL,
    tFCI-SignallingMode TFCS-SignallingMode OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstFDD

DCH-ModifyItem-RL-ReconfRqstFDD ::= SEQUENCE {
    ul-FP-Mode                UL-FP-Mode                OPTIONAL,
    toAWS                    ToAWS                    OPTIONAL,
    toAWE                    ToAWE                    OPTIONAL,
    dCH-SpecificInformationList DCH-ModifySpecificInformationList-RL-ReconfRqstFDD,
    transportBearerItem       DCH-ModifyTransportBearerItem-RL-ReconfRqstFDD,

```

```

...
]

DCH-ModifySpecificInformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-RL-ReconfRqstFDD

DCH-ModifySpecificItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    ul-TransportformatSet TransportFormatSet OPTIONAL,
    dl-TransportformatSet TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority  FrameHandlingPriority OPTIONAL,
    ul-FP-Mode            UL-FP-Mode OPTIONAL,
    toAWS                 ToAWS OPTIONAL,
    toAWE                 ToAWE OPTIONAL,
    dRACControl           DRACControl OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfRqstFDD ::= SEQUENCE {
ul-FP-Mode            UL-FP-Mode,
toAWS                 ToAWS,
toAWE                 ToAWE,
iE-Extensions         ProtocolExtensionContainer { { DCH-ModifyTransportBearerItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

DCH-ModifyTransportBearerItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-AddList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstFDD

DCH-AddItem-RL-ReconfRqstFDD ::= SEQUENCE {
    payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
    ul-FP-Mode            UL-FP-Mode,
    toAWS                 ToAWS,
    toAWE                 ToAWE,
    dCH-SpecificInformationList DCH-AddSpecificInformationList-RL-ReconfRqstFDD,
    transportBearerItem     DCH-AddTransportBearerItem-RL-ReconfRqstFDD,
    ...
}

DCH-AddSpecificInformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-AddSpecificItem-RL-ReconfRqstFDD

DCH-AddSpecificItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,

```

```


dCH-CombinationInd          DCH-CombinationInd OPTIONAL,
limitedPowerIncrease        LimitedPowerIncrease,
trCH-SrcStatisticsDescr    TrCH-SrcStatisticsDescr,
ul-TransportformatSet      TransportFormatSet,
dl-TransportformatSet      TransportFormatSet,
ul-BLER                     BLER,
dl-BLER                     BLER,
allocationRetentionPriority AllocationRetentionPriority,
frameHandlingPriority       FrameHandlingPriority,
payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
ul-FP-Mode                  UL-FP-Mode,
qE-Selector                 QE-Selector,
toAWS                       ToAWS,
toAWE                       ToAWE,
dRACControl                 DRACControl,
iE-Extensions               ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

DCH-AddItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-AddTransportBearerItem-RL-ReconfRqstFDD ::= SEQUENCE {

payloadCRC-PresenceIndicator PayloadCRC-PresenceIndicator,
ul-FP-Mode                    UL-FP-Mode,
toAWS                         ToAWS,
toAWE                         ToAWE,
iE-Extensions                 ProtocolExtensionContainer { { DCH-AddTransportBearerItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

DCH-AddTransportBearerItem-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                        DCH-ID,
iE-Extensions                 ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}


```

```
-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****
```

```
RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}          OPTIONAL,
  ...
}
```

```
RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-ModifyList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-ModifyList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-AddList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-AddList-RL-ReconfRqstTDD PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstTDD PRESENCE optional },
  ...
}
```

```
UL-CCTrCH-InformationList-RL-ReconfRqstTDD ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }
```

```
UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory },
  ...
}
```

```
UL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}
```

```
UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DL-CCTrCH-InformationList-RL-ReconfRqstTDD ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }
```

```
DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory },
  ...
}
```

```
DL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS,
```



```

    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstTDD

DCH-ModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    ul-FP-Mode              UL-FP-Mode          OPTIONAL,
    toAWS                   ToAWS              OPTIONAL,
    toAWE                   ToAWE              OPTIONAL,
    dCH-SpecificInformationList DCH-ModifySpecificInformationList-RL-ReconfRqstTDD,
    transportBearerItem     DCH-ModifyTransportBearerItem-RL-ReconfRqstTDD,
    ...
}

DCH-ModifySpecificInformationList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-RL-ReconfRqstTDD

DCH-ModifySpecificItem-RL-ReconfRqstTDD ::= 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,
    ul-FP-Mode             UL-FP-Mode          OPTIONAL,
    toAWS                  ToAWS              OPTIONAL,
    toAWE                  ToAWE              OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfRqstTDD ::= SEQUENCE {
    ul-FP-Mode              UL-FP-Mode,
    toAWS                   ToAWS,
    toAWE                   ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DCH-ModifyTransportBearerItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyTransportBearerItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

DCH-AddList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstTDD

```

DCH-AddItem-RL-ReconfRqstTDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
  ul-FP-Mode                        UL-FP-Mode,
  toAWS                             ToAWS,
  toAWE                             ToAWE,
  dCH-SpecificInformationList       DCH-AddSpecificInformationList-RL-ReconfRqstTDD,
  transportBearerItem               DCH-AddTransportBearerItem-RL-ReconfRqstTDD,
  ...
}

```

~~DCH-AddSpecificInformationList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-AddSpecificItem-RL-ReconfRqstTDD~~

```

DCH-AddSpecificItem-RL-ReconfRqstTDD ::= SEQUENCE {
  dCH-ID                            DCH-ID,
  limitedPowerIncrease              LimitedPowerIncrease,
  trCH-SrcStatisticsDescr           TrCH-SrcStatisticsDescr,
  ul-CCTrCH-ID                     CCTrCH-ID,
  dl-CCTrCH-ID                     CCTrCH-ID,
  dCH-CombinationInd                DCH-CombinationInd OPTIONAL,
  ul-TransportformatSet             TransportFormatSet,
  dl-TransportformatSet             TransportFormatSet,
  ul-BLER                           BLER,
  dl-BLER                           BLER,
  allocationRetentionPriority        AllocationRetentionPriority,
  frameHandlingPriority              FrameHandlingPriority,
  ul-FP-Mode                        UL-FP-Mode,
  toAWS                             ToAWS,
  toAWE                             ToAWE,
  iE-Extensions                     ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}


```

```

DCH-AddItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DCH-AddTransportBearerItem-RL-ReconfRqstTDD ::= SEQUENCE {
  payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
  ul-FP-Mode                        UL-FP-Mode,
  toAWS                             ToAWS,
  toAWE                             ToAWE,
  iE-Extensions                     ProtocolExtensionContainer { { DCH-AddTransportBearerItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}


```

```

DCH-AddTransportBearerItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}


```

```
DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID          DCH-ID,
    iE-Extensions  ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

[CR writer's comment: Unmodified message modules are not included in the CR.]

9.3.4 Information Element Definitions

```

-- *****
--
-- Information Element Definitions
--
-- *****

RNSAP-IEs -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxNrOfErrors,
    maxRateMatching,
    maxNrOfTFCs,
    maxNrOfTFS,
    maxCTFC-1,
    maxTTL-Count
FROM RNSAP-Constants

    Criticality,
    ProcedureCode,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

AllocationRetentionPriority ::= FrameHandlingPriority

AllowedQueuingTime ::= INTEGER (0..60)
-- seconds

-- B

BetaCD ::= INTEGER (0..15)

BindingID ::= OCTET STRING (SIZE (1..4,...))

BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BurstType ::= ENUMERATED {

```

```
    type1 (1),
    type2 (2)
}

-- 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 {
    transaction-not-allowed,
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    ...
}

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,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    unspecified,
    ...
}

CauseTransport ::= ENUMERATED {
```

```
    transmission-link-failure,  
    transmission-port-not-available,  
    unspecified,  
    ...  
}  
  
C-ID                ::= INTEGER (0..65535)  
  
CCTrCH-ID          ::= INTEGER (0..15)  
  
CellIndividualOffset ::= INTEGER (-20..20)  
  
CellParameterID    ::= INTEGER (0..127)  
  
CFN                ::= INTEGER (0..255)  
  
CFNOffset ::= INTEGER (0..255)  
  
ChannelCodingType ::= ENUMERATED {  
    no-coding,  
    convolutional-coding,  
    turbo-coding  
}  
  
ChipOffset          ::= INTEGER (0..38399)  
  
ClosedLoopModel-SupportIndicator ::= ENUMERATED {  
    closedLoop-Model-Supported,  
    closedLoop-Model-not-Supported  
}  
  
ClosedLoopMode2-SupportIndicator ::= ENUMERATED {  
    closedLoop-Mode2-Supported,  
    closedLoop-Mode2-not-Supported  
}  
  
CodingRate ::= ENUMERATED {  
    half,  
    third  
}  
  
CompressedModeMethod ::= ENUMERATED {  
    none,  
    puncturing,  
    half-SF,  
    higher-Layer-Scheduling  
}  
  
CRC-Size            ::= ENUMERATED {  
    v0,  
    v8,
```

```

    v12,
    v16,
    v24
}

CriticalityDiagnostics ::= SEQUENCE {
    procedureCode          ProcedureCode          OPTIONAL,
    triggeringMessage      TriggeringMessage      OPTIONAL,
    criticalityResponse    Criticality            OPTIONAL,
    transactionID         TransactionID          OPTIONAL,
    iEsCriticalityResponses CriticalityDiagnostics-IE-List,
    iE-Extensions         ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        criticalityResponse    Criticality,
        iE-ID                 ProtocolIE-ID,
        repetitionNumber      RepetitionNumber    OPTIONAL,
        iE-Extensions         ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
        ...
    }

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CTFC ::= INTEGER (0..maxCTFC-1)

CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID    PLMN-ID,
    lAC        LAC,
    iE-Extensions ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID    PLMN-ID,
    lAC        LAC,
    rAC        RAC,
    iE-Extensions ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

```

```
CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

C-RNTI ::= INTEGER (0..65535)

-- D

| DCH-CombinationInd ::= INTEGER (0..255)

DCH-ID ::= INTEGER (0..255)

DedicatedMeasurementObjectType ::= ENUMERATED {
    rl,
    rls,
    all-rl,
    all-rls,
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    ...
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value SIR-Value,
    sIR-ErrorValue SIR-Error-Value,
    transmittedCodePowerValue Transmitted-Code-Power-Value,
    rSCP RSCP-Value, -- TDD only
    ...
}

DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closedLoopMode1,
    closedLoopMode2
}

DL-DPCH-SlotFormat ::= INTEGER (0..16)
```



```
DL-SIRTarget ::= UL-SIR

DL-Power ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

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,
    ...
}

DPCH-ID ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-32..31)
-- Unit dBm, Step 1dBm

DRACControl ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (2..12)

D-FieldLength ::= ENUMERATED {
    v1,
    v2
}

-- E
```

[CR writer's comment: End of modifications to ASN.1 part.]

TSG-RAN Working Group 3 Meeting #13
Hawaii, USA, 22nd – 26th May 2000

Document **R3-001541**

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR CR116r1 Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**

list expected approval meeting # here

↑

for approval

for information

strategic

non-strategic

(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** April 2000

Subject: Correction of CR Implementation on v3.0.0

Work item:

Category: F Correction **Release:** Phase 2
(only one category shall be marked with an X) A Corresponds to a correction in an earlier release Release 96
B Addition of feature Release 97
C Functional modification of feature Release 98
D Editorial modification Release 99
Release 00

Reason for change: The scope of this CR is to correct the implementation of CRs on v3.0.0, wherever necessary.

This CR contains the following corrected implementations:

- Chapter 3: The subchapter 3.2 was incorrectly deleted. + Editorial correction of implementation of CR20r1 and CR22r1.
- Chapter 8.3.9.2: CR19r1 and CR20r1 were not combined correctly.
- Chapter 9.1.3.1: Editorial correction of implementation of CR18r1.
- Chapter 9.1.4.2: CR63r2 was not fully implemented.
- Chapter 9.1.20: CR40r1 was not correctly implemented.
- Chapter 9.1.31: CR31r1 and CR20r1 were not combined correctly.
- Chapter 9.1.36.2: CR63r2 was not implemented correctly.
- Chapter 9.2.1.1: Editorial correction of implementation of CR42r1.
- Chapter 9.2.1.37: Incorrect reference number assignment when removing the auto-numbered references at CR implementation.
- Chapter 9.2.1.53: Incorrect reference number assignment when removing the auto-numbered references at CR implementation.
- Chapter 9.2.1.61: Incorrect reference number assignment when removing the auto-numbered references at CR implementation.
- Chapter 9.2.2.4: Not deleted in compliance with the 3GPP drafting rules.
- Chapter 9.2.2.5: Not deleted in compliance with the 3GPP drafting rules.
- Chapter 9.2.2.21: Incorrect reference number assignment when removing the auto-numbered references at CR implementation.
- Chapter 9.3.3: CR31r1 was not implemented correctly for the messages RADIO LINK ADDITION RESPONSE and RADIO LINK ADDITION FAILURE [FDD]. The implementation for these messages was done in alignment of the implementation of the same CR for the messages RADIO LINK SETUP RESPONSE and RADIO LINK SETUP FAILURE [FDD]. (These corrections have made CR93 obsolete.)
- Chapter 9.3.3: CR20r1 was not implemented fully for the DEDICATED

MEASUREMENT INITIATION REQUEST, DEDICATED MEASUREMENT INITIATION RESPONSE, and DEDICATED MEASUREMENT REPORT messages.

- Chapter 9.3.6: CR20r1 was not implemented.
- Chapter 9.3.6: CR31r1 was not implemented correctly (consequences of changes to chapter 9.3.3).

The deleted chapters 9.2.2.4 and 9.2.2.5 have been corrected to comply with the 3GPP Drafting Rules, i.e. the chapter heading shall remain (visible in the ToC) and the content shall be "Void".

Clauses affected: 3, 8.3.9.2, 9.1.3.1, 9.1.4.2, 9.1.20, 9.1.31, 9.1.36.2, 9.2.1.1, 9.2.1.37, 9.2.1.53, 9.2.1.61, 9.2.2.4, 9.2.2.5, 9.2.2.21, 9.3.3, and 9.3.6.

Other specs affected:	Other 3G core specifications	<input type="text"/>	→ List of CRs:	
	Other GSM core specifications	<input type="text"/>	→ List of CRs:	
	MS test specifications	<input type="text"/>	→ List of CRs:	
	BSS test specifications	<input type="text"/>	→ List of CRs:	
	O&M specifications	<input type="text"/>	→ List of CRs:	

Other comments: By approving this CR, CR93 becomes obsolete.

<----- double-click here for help and instructions on how to create a CR.

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 successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.
- On time supervision expiry (i.e. absence of expected response). Whether or not any Class 1 procedure will have a timer on RNSAP is FFS. To be sorted out when discussing the details of the error cases.

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

Radio Link Set: A set of one or more Radio Links that has a common generation of Transmit Power Control (TPC) commands in the DL.

3.2 Symbols

Void.

3.23 Abbreviations

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

ASN.1	Abstract Syntax Notation One
BLER	Block Error Rate
CCCH	Common Control Channel
CCPCH	Common Control Physical Channel
CCTrCH	Coded Composite Transport Channel
CFN	Connection Frame Number
CN	Core Network
CPICH	Common Pilot Channel
CRNC	Controlling RNC
DCH	Dedicated Channel
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel

DRNC	Drift RNC
DRNS	Drift RNS
DRX	Discontinuous Reception
DSCH	Downlink Shared Channel
EP	Elementary Procedure
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
IE	Information Element
MAC	Medium Access Control
PCPCH	Physical Common Packet Channel
PDU	Protocol Data Unit
RAB	Radio Access Bearer
RACH	Random Access Channel
RL	Radio Link
RLC	Radio Link Control
RLS	Radio Link Set
RNS	Radio Network Subsystem
RNSAP	Radio Network Subsystem Application Part
RNTI	Radio Network Temporary Identifier
RRC	Radio Resource Control
RSCP	Received Signal Code Power
SCH	Synchronisation Channel
SDU	Signalling Data Unit
SFN	System Frame Number
SRNC	Serving RNC
SRNS	Serving RNS
SSDT	Site Selection Diversity Transmit
TDD	Time Division Duplex
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
UARFCN	UTRA Absolute Radio Frequency Channel Number
UE	User Equipment
UL	Uplink
URA	UTRAN Registration Area
UTRAN	UMTS Terrestrial Radio Access Network

8.3.9.2 Successful Operation

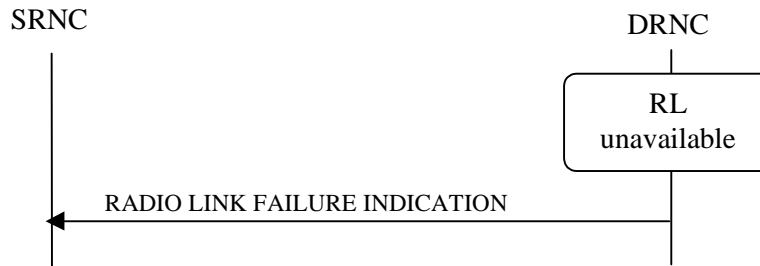


Figure 1: RL Failure procedure, Successful Operation

When DRNC detects that a one or more Radio Links or Radio Link Sets are no longer available, it shall send the RL FAILURE INDICATION message to the SRNC. The message indicates the failed Radio Links or Radio Link Sets with the most appropriate cause values defined in the *Cause* IE. If the failure concerns one or more individual Radio Links the DRNS shall indicate the affected Radio Link(s) using the *RL Information* IE group. [FDD - If the failure concerns one or more Radio Link Sets the DRNS shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE group.]

~~[FDD—When the RL Failure procedure is used to notify loss of UL synchronisation: the message shall be sent when indicated by the UL sync detection algorithm defined in [TS25.214 and TS25.224].]~~

~~[TDD—When the RL Failure procedure is used to notify the non-achievement or loss of UL synchronisation: the message shall be sent when the UL synchronisation of newly established Radio Link is not achieved after any of the procedures RL Setup or RL Addition. The message shall also be sent if the UL synchronisation it is lost during an active connection.]~~

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure.

Miscellaneous Causes:

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

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				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		1			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C- SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset	Power offset for the TFCI bits.	–	
>>PO2	M		Power Offset	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M				–	
DCH Information		1..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
>Limited Power Increase	M				–	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC control	M				–	
RL Information		<i>1...<maxn oofRLs></i>			EACH	notify
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Propagation Delay	O				–	
>Diversity Control Field	C – NotFirstRL				–	
>Initial DL TX Power	O		DL Power		–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell ID	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the RL Information .
Diversity mode	This IE is present unless <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> group is "none"

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

9.1.4 RADIO LINK SETUP RESPONSE

9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>UL Interference per Time Slot		1 .. <maxnoof ULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>UL CCTrCH Information		1..<maxno ofCCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>> DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		1..<maxno ofCCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DCH Information Response		1..<maxno ofDCHs>		Only one DCH per set of co-ordinated	GLOBAL	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
				DCHs shall be included.		
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>Neighbouring Cell Information	O	0..<maxno ofneighbouringRNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxno ofFDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Cell Individual Offset	O					
>>>Primary CPICH Power	O				–	
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxno ofTDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	OM		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDPCHs	Maximum number of DPCHs for one CTrCH.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell
MaxnoofCTrCHs	Maximum number of CTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.1.20 DL POWER CONTROL REQUEST [FDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	ignore
Transaction ID	M				-	
Power Adjustment Type	M				YES	ignore
DL Reference Power	C-Common		DL Power		-	
>DL Reference Power Information	C-Individual	<i>1..<maxnoofRLs></i>			GLOBAL	ignore
>>RL ID	M				-	
>>DL Reference Power	M		DL Power		-	
Max Adjustment Step	C-CommonOrIndividual				-	
Max. Adjustment Period	C-CommonOrIndividual				-	

Condition	Explanation
Common	This IE is present only "Adjustment Type " equals to 'Common'
Individual	This IE is present only "Adjustment Type " equals to 'Individual'
CommonOrIndividual	This IE is present only "Adjustment Type " equals to 'Common' or 'Individual'

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

9.1.31 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	ignore
Transaction Id	M				–	
Measurement Id	M				YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>				Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>"RL" or "ALL RL"						
>>RL Information		1..<maxnoofRLs>			EACH	ignore
>>>RL-Id	M				–	
>>>DPCH Id	O				–	
>>>Dedicated Measurement Value	M				–	
>"RLS" or "ALL RLS"					–	
>>RL Set Information		1..<maxnoofRLSets>			EACH	ignore
>>>RL Set ID	M				–	
>>>Dedicated Measurement Value	M				–	
CFN	O			Dedicated Measurement Time Reference	YES	ignore

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.

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCHs coupled to PRACH		1			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		1..<MaxNbMACcSDULength>			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional group of S-CCPCHs		0..1			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>Secondary CCPCH	M	1..<MaxnoofSCCPCHs>			GLOBAL	ignore
>>TDD Channelisation Code	M				–	
>>Time Slot	M				–	
>>Burst Type	M				–	
>>Midamble shift	M				–	
>>TDD Physical Channel Offset	M				–	
>>Repetition Period	M				–	
>>Repetition Length	M				–	
>>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>>FACH Priority Indicator	M				–	
>>>MAC-c SDU Length		1..<MaxNbMACcSDULength>			GLOBAL	ignore
>>>>MAC-c SDU Length	M				–	
>>>FACH Initial Window Size	M				–	
>>>>Transport Layer Address	O				YES	ignore
>>>>Binding Identity	O				YES	ignore

Criticality Diagnostics	O				YES	ignore
-------------------------	---	--	--	--	-----	--------

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.
MaxnoofSCCPCHs	TBD

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.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Allocation/Retention Priority			Frame Handling Priority	

9.2.1.37 RANAP Relocation Information

This parameter is transparent to the RNSAP. The parameter contains information for the Relocation procedure as defined in [42].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
RANAP Relocation Information			Bit String	The contents is defined in ref. [42].

9.2.1.53 Transport Format Combination Set

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFC zero, the second to 1 and so on.
>CTFC	M		INTEGER(0..MaxCTFC-1)	Integer number calculated according to ref. [4416].
>CHOICE Gain Factors	C-PhysChan			
>>Signalled Gain Factors				
>>>Gain Factor β_c	M		Integer (0..15)	For UL DPCH or control part of PRACH in FDD; mapping in accordance to TS 25.213
>>>Gain Factor β_D	M		Integer (0..15)	For UL DPCH or data part of PRACH in FDD; mapping in accordance to TS 25.213
>>>Reference TFC nr	O		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

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH or PRACH channel in FDD, not when the TFCS is used for other physical channels.

Range bound	Explanation
<i>MaxnoofTFCs</i>	The maximum number of Transport Format Combinations (1024).
<i>MaxCTFC</i>	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].

9.2.1.61 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 CRNC, 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. [44316]

9.2.2.4 Diversity Control Field

~~Void.~~

9.2.2.5 Diversity Indication

~~Deleted.Void.~~

9.2.2.21 Power Resume Mode (PRM)

Power Resume Mode selects the uplink power control method to calculate the initial transmit power after the gap. PRM can take two values (0 or 1) and is described in ref. [4210].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power Resume Mode			ENUMERATED (0, 1,..)	Described in ref. [9810].

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,

```

DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,


```

ReportCharacteristics,
S-FieldLength,
S-RNTI,
SCH-TimeSlot,
SAI,
SN,
SSDT-CellID,
SSDT-CellID-Length,
SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
ScaledMaxAdjustmentPeriod,
ScaledMaxAdjustmentStep,
ScramblingCodeChange,
SecondaryCCPCH-SlotFormat,
SyncCase,
TDD-ChannelisationCode,
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TGD,
TGL,
TimeSlot,
ToAWE,
ToAWS,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
TFCS,
TransportFormatSet,
TransportLayerAddress,
TrCH-SrcStatisticsDescr,
TxDiversityIndicator,
UARFCN,
UC-ID,
UL-DeltaSIR,
UL-DeltaSIRAfter,
UL-DL-CompressedModeSelection,
UL-DPCCH-SlotFormat,
UL-InterferenceLevel,
UL-SIR,
UL-FP-Mode,
UL-ScramblingCode,
URA-ID
FROM RNSAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{}

```

```

ProtocolIE-ContainerList {},
ProtocolIE-ContainerPair {},
ProtocolIE-ContainerPairList {},
ProtocolIE-Container {},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers

```

```

maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMpatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,

```

```

id-AllRLItem-DM-Rqst,
id-AllRLItem-Set-DM-Rqst,
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,

```

id-CriticalityDiagnostics,
 id-D-RNTI,
 id-D-RNTI-ReleaseIndication,
 id-DCH-AddListIE-RL-ReconfReadyFDD,
 id-DCH-AddListIE-RL-ReconfReadyTDD,
 id-DCH-AddListIE-RL-ReconfRsp,
 id-DCH-AddList-RL-ReconfPrepFDD,
 id-DCH-AddList-RL-ReconfPrepTDD,
 id-DCH-AddList-RL-ReconfRqstFDD,
 id-DCH-AddList-RL-ReconfRqstTDD,
 id-DCH-DeleteList-RL-ReconfPrepFDD,
 id-DCH-DeleteList-RL-ReconfPrepTDD,
 id-DCH-DeleteList-RL-ReconfRqstFDD,
 id-DCH-DeleteList-RL-ReconfRqstTDD,
 id-DCH-Information-RL-SetupRqstFDD,
 id-DCH-InformationList-RL-SetupRqstTDD,
 id-DCH-ModifyListIE-RL-ReconfReadyFDD,
 id-DCH-ModifyListIE-RL-ReconfReadyTDD,
 id-DCH-ModifyListIE-RL-ReconfRsp,
 id-DCH-ModifyList-RL-ReconfPrepFDD,
 id-DCH-ModifyList-RL-ReconfPrepTDD,
 id-DCH-ModifyList-RL-ReconfRqstFDD,
 id-DCH-ModifyList-RL-ReconfRqstTDD,
 id-DCH-InformationResponseListIE-RL-SetupRspTDD,
 id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
 id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
 id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
 id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
 id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
 id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
 id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
 id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
 id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
 id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
 id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
 id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
 id-DL-CodeInformationListIE-RL-AdditionRspFDD,
 id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
 id-DL-CodeInformationListIE-RL-SetupFailureFDD,
 id-DL-DPCH-Information-RL-ReconfPrepFDD,
 id-DL-DPCH-Information-RL-SetupRqstFDD,
 id-DL-DPCH-Information-RL-ReconfRqstFDD,
 id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
 id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
 id-DL-DPCH-InformationItem-RL-SetupRspTDD,
 id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
 id-DL-SIRTarget,
 id-DLReferencePower,
 id-DLReferencePowerList-DL-PC-Rqst,
 id-DL-ReferencePowerInformation-DL-PC-Rqst,
 id-DRXCycleLengthCoefficient,

id-DedicatedMeasurementObjectType-DM-Rprt,
 id-DedicatedMeasurementObjectType-DM-Rqst,
 id-DedicatedMeasurementObjectType-DM-Rsp,
 id-DedicatedMeasurementType,
 id-DiversityIndicationItem-RL-AdditionFailureFDD,
 id-DiversityIndicationItem-RL-AdditionRspFDD,
 id-DiversityIndicationItem-RL-AdditionRspTDD,
 id-DiversityIndicationItem-RL-SetupFailureFDD,
 id-DiversityIndicationItem-RL-SetupRspFDD,
 id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
 id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
 id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
 id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
 id-IMSI,
 id-L3-Information,
 id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
 id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
 id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
 id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
 id-MaxAdjustmentPeriod,
 id-MaxAdjustmentStep,
 id-MeasurementFilterCoefficient,
 id-MeasurementID,
 id-MultipleURAsIndicator,
~~id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,~~
~~id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,~~
~~id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,~~
~~id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,~~
~~id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,~~
~~id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,~~
~~id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,~~
~~id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,~~
id-Neighbouring-CellInformationItem-RL-AdditionFailureFDD,
id-Neighbouring-CellInformationItem-RL-AdditionRsp,
 id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
 id-Neighbouring-CellInformationItem-RL-SetupRsp,
 id-NonCombiningItem-RL-AdditionFailureFDD,
 id-NonCombiningItem-RL-AdditionRspFDD,
 id-NonCombiningItem-RL-AdditionRspTDD,
 id-NonCombiningOrIENotPresenItem-RL-SetupFailureFDD,
 id-NonCombiningOrIENotPresenItem-RL-SetupRspFDD,
 id-PagingArea-PagingRqst,
 id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
 id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
 id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
 id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
 id-PowerAdjustmentType,
 id-ProcedureScope-DL-PC-Rqst,
 id-RANAP-RelocationInformation,
 id-RL-Information-PhyChReconfRqstFDD,
 id-RL-Information-PhyChReconfRqstTDD,

id-RL-Information-RL-AdditionRqstFDD,
 id-RL-Information-RL-AdditionRqstTDD,
 id-RL-Information-RL-DeletionRqst,
 id-RL-Information-RL-FailureInd,
 id-RL-Information-RL-ReconfPrepFDD,
 id-RL-Information-RL-RestoreInd,
 id-RL-Information-RL-SetupRqstFDD,
 id-RL-Information-RL-SetupRqstTDD,
 id-RL-InformationItem-DM-Rprt,
 id-RL-InformationItem-DM-Rqst,
 id-RL-InformationItem-DM-Rsp,
 id-RL-InformationItem-RL-SetupRqstFDD,
 id-RL-InformationList-RL-AdditionRqstFDD,
 id-RL-InformationList-RL-DeletionRqst,
 id-RL-InformationList-RL-ReconfPrepFDD,
 id-RL-InformationResponse-RL-AdditionRspTDD,
 id-RL-InformationResponse-RL-ReconfReadyTDD,
 id-RL-InformationResponse-RL-SetupRspTDD,
 id-RL-InformationResponseItem-RL-AdditionRspFDD,
 id-RL-InformationResponseItem-RL-ReconfReadyFDD,
 id-RL-InformationResponseItem-RL-ReconfRsp,
 id-RL-InformationResponseItem-RL-SetupRspFDD,
 id-RL-InformationResponseList-RL-AdditionRspFDD,
 id-RL-InformationResponseList-RL-ReconfReadyFDD,
 id-RL-InformationResponseList-RL-ReconfRsp,
 id-RL-InformationResponseList-RL-SetupRspFDD,
 id-RLItem-DM-Rprt,
 id-RLItem-DM-Rqst,
 id-RLItem-DM-Rsp,
 id-RL-ReconfigurationFailure-RL-ReconfFail,
 id-RL-ReconfigurationFailureList-RL-ReconfFail,
 id-RL-Set-InformationItem-DM-Rprt,
 id-RL-Set-InformationItem-DM-Rqst,
 id-RL-Set-InformationItem-DM-Rsp,
 id-RL-Set-Information-RL-FailureInd,
 id-RL-Set-Information-RL-RestoreInd,
 id-RL-SetItem-DM-Rprt,
 id-RL-SetItem-DM-Rqst,
 id-RL-SetItem-DM-Rsp,
 id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
 id-ReportCharacteristics,
 id-Reporting-Object-RL-FailureInd,
 id-Reporting-Object-RL-RestoreInd,
 id-S-RNTI,
 id-SAI,
 id-SRNC-ID,
 id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
 id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
 id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
 id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
 id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,

```

id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAIItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

-- *****
--
-- Common Container List
--
-- *****

DPCH-IE-ContainerList      { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IESSetParam } }
RL-IE-ContainerList0      { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IESSetParam } }
RL-IE-ContainerList1      { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IESSetParam } }
RL-IE-ContainerList1-1    { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IESSetParam } }
RL-IE-ContainerList0-1    { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IESSetParam } }
RL-IE-ContainerList0-2    { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IESSetParam } }
RL-Set-IE-ContainerList   { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IESSetParam } }
CCTrCH-IE-ContainerList0  { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IESSetParam } }
CCTrCH-IE-ContainerList1  { RNSAP-PROTOCOL-IES : IESSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IESSetParam } }

.
.

```

```

•
•
•
<Editor's note: Several messages have been omitted.>
•
•
•
-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}    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 ::= RL-IE-ContainerList1-1 { {RL-InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
      CRITICALITY ignore    TYPE RL-InformationResponseItem-RL-AdditionRspFDD    PRESENCE mandatory    },
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    sAI                  SAI,
    ul-InterferenceLevel    UL-InterferenceLevel,
    secondary-CCPCH-Info    Secondary-CCPCH-Info-RL-AdditionRspFDD    OPTIONAL,
    dl-CodeInformation    DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication    DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator    SSdT-SupportIndicator,
    minUL-SIR            UL-SIR,
    maxUL-SIR            UL-SIR,
    maximumAllowedULTxPower    MaximumAllowedULTxPower,
    neighbouring-CellInformationList    Neighbouring-CellInformationList-RL-AdditionSetupRsp    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
    fdd-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                    TFCS,
    secondaryCCPCH-SlotFormat  SecondaryCCPCH-SlotFormat,
    tFCI-Presence              TFCI-Presence OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition      MultiplexingPosition,
    sTTD-Indicator            STTD-Indicator,
    fach-PCH-InformationList  FACH-PCH-InformationList-RL-AdditionRspFDD,
    schedulingInformation      SchedulingInformation-RL-AdditionRspFDD,
    iE-Extensions             ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}
Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-AdditionRspFDD
FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    transportFormatSet      TransportFormatSet,
    iE-Extensions           ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}
FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-Rep              IB-SG-REP,
    segmentInformationList SegmentInformationList-RL-AdditionRspFDD,
    iE-Extensions         ProtocolExtensionContainer { { SchedulingInformation-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}
SchedulingInformation-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-AdditionRspFDD
SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-POS              IB-SG-POS,
    iE-Extensions         ProtocolExtensionContainer { { SegmentInformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,

```



```

}
...
}
SegmentInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}
DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-DL-CodeInformationListIE-RL-AdditionRspFDD CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionRspFDD PRESENCE mandatory },
...
}
DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionRspFDD
DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
dl-ScramblingCode DL-ScramblingCode,
fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
ie-Extensions ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
...
}
DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionRspFDD }}
DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-DiversityIndicationItem-RL-AdditionRspFDD CRITICALITY ignore TYPE DiversityIndicationItem-RL-AdditionRspFDD PRESENCE mandatory },
...
}
DiversityIndicationItem-RL-AdditionRspFDD ::= CHOICE {
combining Combining-RL-AdditionRspFDD,
nonCombining NonCombining-RL-AdditionRspFDD,
...
}
Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}
CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
{ ID id-CombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE CombiningItem-RL-AdditionRspFDD PRESENCE mandatory },
...
}
CombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
rL-ID RL-ID,
ie-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
...
}

```

```

}

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}

NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-NonCombiningItem-RL-AdditionRspFDD  CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspFDD  PRESENCE mandatory },
  ...
}

NonCombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-InformationResponse-RL-AdditionRspFDD          DCH-InformationResponseList-RL-AdditionRspFDD,
  iE-Extensions                                     ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspFDD

DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-ID                DCH-ID,
  bindingID              BindingID,
  transportLayerAddress  TransportLayerAddress,
  iE-Extensions          ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-AdditionRsp }}

Neighbouring-CellInformationItemIE-RL-AdditionRsp RNSAP-PROTOCOL-IES ::= {
{ ID id-Neighbouring-CellInformationItem-RL-AdditionRsp  CRITICALITY ignore  TYPE  Neighbouring-CellInformationItem-RL-AdditionRsp  PRESENCE
mandatory },
...
}

Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
  rNC-ID                RNC-ID,
  cN-PS-DomainIdentifier CN-PS-DomainIdentifier  OPTIONAL,
  cN-CS-DomainIdentifier CN-CS-DomainIdentifier  OPTIONAL,
  per-FDD-Cell-InformationList  Per-FDD-Cell-InformationList-RL-AdditionRsp  OPTIONAL,

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```

    per-TDD-Cell-InformationList          Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    iE-Extensions                         ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRsp

Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                                 C-ID,
    uARFCNforNu                          UARFCN,
    uARFCNforNd                          UARFCN,
    frameOffset                          FrameOffset          OPTIONAL,
    primaryScramblingCode                PrimaryScramblingCode,
    primaryCPICH-Power                   PrimaryCPICH-Power    OPTIONAL,
    cellIndividualOffset                  CellIndividualOffset  OPTIONAL,
    txDiversityIndicator                 TxDiversityIndicator  OPTIONAL,
    sTTD-SupportIndicator                 STTD-SupportIndicator OPTIONAL,
    closedLoopModel-SupportIndicator      ClosedLoopModel-SupportIndicator OPTIONAL,
    closedLoopMode2-SupportIndicator      ClosedLoopMode2-SupportIndicator OPTIONAL,
    iE-Extensions                         ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRsp

Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                                 C-ID,
    uARFCNforNt                          UARFCN,
    frameOffset                          FrameOffset          OPTIONAL,
    cellParameterID                      CellParameterID,
    syncCase                              SyncCase,
    timeSlot                              TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                          SCH-TimeSlot        OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset                  CellIndividualOffset  OPTIONAL,
    dPCHConstantValue                    DPCHConstantValue    OPTIONAL,
    pCCPCH-Power                          PCCPCH-Power,
    iE-Extensions                         ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
RadioLinkAdditionResponseFDD-Extensions 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 mandatory } |
  { ID id-CriticalityDiagnostics
    CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  sAI            SAI,
  ul-InteferencePerTimeslot
                UL-InterferenceList-RL-AdditionRspTDD,
  ul-CCTrCHInformation
                UL-CCTrCHInformationList-RL-AdditionRspTDD,
  dl-CCTrCHInformation
                DL-CCTrCHInformationList-RL-AdditionRspTDD,
  diversityIndication
                DiversityIndication-RL-AdditionRspTDD,
  minUL-SIR     UL-SIR,
  maxUL-SIR     UL-SIR,
  maximumAllowedULTxPower
                MaximumAllowedULTxPower,
  neighbouring-CellInformationList
                Neighbouring-CellInformationList-RL-AdditionRspTDD OPTIONAL,
  iE-Extensions
                ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-InterferenceList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-AdditionRspTDD

UL-InterferenceItem-RL-AdditionRspTDD ::= SEQUENCE {
  timeSlot      TimeSlot,
  ul-InterferenceLevel
                UL-InterferenceLevel,
  iE-Extensions
                ProtocolExtensionContainer { { UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-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 {
cTrCH-ID CTrCH-ID,
ul-DPCH-Information UL-DPCH-InformationList-RL-AdditionRspTDD,
iE-Extensions ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
...
}
UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
UL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
dPCH-ID DPCH-ID,
tDD-ChannelisationCode TDD-ChannelisationCode,
burstType BurstType,
midambleShift MidambleShift,
timeSlot TimeSlot,
tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
repetitionPeriod RepetitionPeriod,
repetitionLength RepetitionLength,
tFCI-Presence TFCI-Presence,
iE-Extensions ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
...
}
UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}
DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}
DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD   CRITICALITY ignore   TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD   PRESENCE mandatory
},
  ...
}
DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD
DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  dl-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRspTDD,
  iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}
DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
DL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
  dPCH-ID                DPCH-ID,
  tDD-ChannelisationCode TDD-ChannelisationCode,
  burstType              BurstType,
  midambleShift          MidambleShift,
  timeSlot               TimeSlot,
  tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod       RepetitionPeriod,
  repetitionLength       RepetitionLength,
  tFCI-Presence          TFCI-Presence,
  iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}
DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
DiversityIndication-RL-AdditionRspTDD ::= ProtocolIE-Container {{DiversityIndicationIE-RL-AdditionRspTDD}}
DiversityIndicationIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {

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```

    { ID id-DiversityIndicationItem-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DiversityIndicationItem-RL-AdditionRspTDD    PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-AdditionRspTDD ::= CHOICE {
    combining        Combining-RL-AdditionRspTDD,
    nonCombining     NonCombining-RL-AdditionRspTDD,
    ...
}

Combining-RL-AdditionRspTDD ::= ProtocolIE-Container {{CombiningIE-RL-AdditionRspTDD}}

CombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionRspTDD    CRITICALITY ignore    TYPE CombiningItem-RL-AdditionRspTDD    PRESENCE mandatory },
    ...
}

CombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombining-RL-AdditionRspTDD ::= ProtocolIE-Container {{NonCombiningIE-RL-AdditionRspTDD}}

NonCombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionRspTDD    CRITICALITY ignore    TYPE NonCombiningItem-RL-AdditionRspTDD    PRESENCE mandatory },
    ...
}

NonCombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionRspFDD        DCH-InformationResponseList-RL-AdditionRspFDD,
    iE-Extensions        ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspTDD

DCH-InformationResponseItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID              BindingID,
    transportLayerAddress  TransportLayerAddress,
    iE-Extensions        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}
DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRspTDD

Neighbouring-CellInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    rNC-ID RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRspTDD

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNu UARFCN,
    uARFCNforNd UARFCN,
    frameOffset FrameOffset OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    txDiversityIndicator TxDiversityIndicator OPTIONAL,
    sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
    closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRspTDD

Per-TDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNt UARFCN,
    frameOffset FrameOffset OPTIONAL,


```



```

cellParameterID CellParameterID,
syncCase SyncCase,
timeSlot TimeSlot OPTIONAL
-- This IE is present only if Sync-Case = Case1 --,
sCH-TimeSlot SCH-TimeSlot OPTIONAL
-- This IE is present only if Sync-Case = Case2 --,
cellIndividualOffset CellIndividualOffset OPTIONAL,
dpCHConstantValue DPCHConstantValue OPTIONAL,
pCCPCH-Power PCCPCH-Power,
iE-Extensions ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkAdditionResponseTDD-Extensions 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-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD PRESENCE mandatory } |
  { ID id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD CRITICALITY ignore TYPE SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD PRESENCE optional } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList1-1 { {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                Cause,
    iE-Extensions       ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList0-2 { {SuccessfulRL-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,
    sAI                 SAI,
    ul-InterferenceLevel UL-InterferenceLevel,
    dl-CodeInformation  DL-CodeInformationList-RL-AdditionFailureFDD,
    diversityIndication DiversityIndication-RL-AdditionFailureFDD,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    minUL-SIR           UL-SIR,
    maxUL-SIR           UL-SIR,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    neighbouring-CellInformationList Neighbouring-CellInformationList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }}

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-AdditionFailureFDD    CRITICALITY ignore    TYPE DL-CodeInformationListIE-RL-AdditionFailureFDD    PRESENCE
      mandatory },
    ...
}

DL-CodeInformationListIE-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionFailureFDD

DL-CodeInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dl-ScramblingCode    DL-ScramblingCode,

```

```

    fdd-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                          ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionFailureFDD }}

DiversityIndicationIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionFailureFDD    CRITICALITY ignore    TYPE        DiversityIndicationItem-RL-AdditionFailureFDD    PRESENCE
mandatory },
    ...
}

DiversityIndicationItem-RL-AdditionFailureFDD ::= CHOICE {
    combining                Combining-RL-AdditionFailureFDD,
    nonCombining              NonCombining-RL-AdditionFailureFDD,
    ...
}

Combining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionFailureFDD }}

CombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionFailureFDD    CRITICALITY ignore    TYPE CombiningItem-RL-AdditionFailureFDD    PRESENCE mandatory },
    ...
}

CombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionFailureFDD }}

NonCombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionFailureFDD    CRITICALITY ignore    TYPE NonCombiningItem-RL-AdditionFailureFDD    PRESENCE mandatory },
    ...
}

NonCombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionFailureFDD    DCH-InformationResponseList-RL-AdditionFailureFDD,
    iE-Extensions            ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionFailureFDD

DCH-InformationResponseItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions        ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-CellInformationItem-RL-AdditionFailureFDD }}

Neighbouring-CellInformationItemIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-Neighbouring-CellInformationItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Neighbouring-CellInformationItem-RL-AdditionFailureFDD
  PRESENCE mandatory },
  ...
}

Neighbouring-CellInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rNC-ID                RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionFailureFDD OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNu        UARFCN,
    uARFCNforNd        UARFCN,
    frameOffset        FrameOffset OPTIONAL,

```

```

primaryScramblingCode          PrimaryScramblingCode,
primaryCPICH-Power             PrimaryCPICH-Power    OPTIONAL,
cellIndividualOffset           CellIndividualOffset  OPTIONAL,
txDiversityIndicator           TxDiversityIndicator  OPTIONAL,
sTTD-SupportIndicator          STTD-SupportIndicator  OPTIONAL,
closedLoopMode1-SupportIndicator ClosedLoopMode1-SupportIndicator  OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator  OPTIONAL,
iE-Extensions                  ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
c-ID                           C-ID,
uARFCNforNt                     UARFCN,
frameOffset                     FrameOffset          OPTIONAL,
cellParameterID                 CellParameterID,
syncCase                         SyncCase,
timeSlot                         TimeSlot             OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot                     SCH-TimeSlot          OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset             CellIndividualOffset  OPTIONAL,
dPCHConstantValue               DPCHConstantValue    OPTIONAL,
pCCPCH-Power                    PCCPCH-Power,
iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
protocolIEs                      ProtocolIE-Container    {{RadioLinkAdditionFailureTDD-IEs}},

```

```

    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

UnsuccessfulRL-InformationResponse ::= SEQUENCE {
    rL-ID RL-ID,
    cause Cause,
    iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

.
.
.
<Editor's note: Several messages have been omitted.>

.
.
.

-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****

DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs ProtocolIE-Container {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}          OPTIONAL,
    ...
}

DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID CRITICALITY reject TYPE MeasurementID PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rqst CRITICALITY ignore 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 },

```

```

}
...
DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
    rL                RL-DM-Rqst,
    rLS               RL-Set-DM-Rqst,
    allRL             All-RL-DM-Rqst,
    allRLS          All-RL-Set-DM-Rqst,
    ...
}

RL-DM-Rqst ::= ProtocolIE-Container { { RLIE-DM-Rqst } }

RLIE-DM-Rqst RNSAP-PROTOCOL-IES ::= {
    { ID id-RLItem-DM-Rqst      CRITICALITY reject  TYPE RLItem-DM-Rqst      PRESENCE mandatory },
    ...
}

RLItem-DM-Rqst ::= SEQUENCE {
    rL-InformationList-DM-Rqst  RL-InformationList-DM-Rqst,
    iE-Extensions              ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rqst ::= RL-IE-ContainerList1 { {RL-Information-DM-Rqst-IEs} }

RL-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rqst      CRITICALITY reject  TYPE RL-InformationItem-DM-Rqst      PRESENCE mandatory },
    ...
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID      OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rqst ::= ProtocolIE-Container { { RL-SetIE-DM-Rqst } }

RL-SetIE-DM-Rqst RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-SetItem-DM-Rqst      CRITICALITY reject  TYPE RL-SetItem-DM-Rqst      PRESENCE mandatory },
    ...
}

```

```

}

RL-SetItem-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-Rqst ::= RL-Set-IE-ContainerList { {RL-Set-Information-DM-Rqst-IEs} }

RL-Set-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rqst  CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rqst  PRESENCE mandatory },
    ...
}

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                        RL-Set-ID,
    iE-Extensions                    ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

All-RL-DM-Rqst ::= ProtocolIE-Container {{ All-RLIE-DM-Rqst }}

All-RLIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
{ ID id-All-RLItem-DM-Rqst  CRITICALITY ignore TYPE All-RLItem-DM-Rqst  PRESENCE mandatory },
...
}

All-RLItem-DM-Rqst ::= NULL

All-RL-Set-DM-Rqst ::= ProtocolIE-Container {{ All-RLIE-Set-DM-Rqst }}

All-RLIE-Set-DM-Rqst NBAP-PROTOCOL-IES ::= {
{ ID id-All-RLItem-Set-DM-Rqst  CRITICALITY ignore  TYPE  All-RLItem-Set-DM-Rqst  PRESENCE mandatory },
...
}

All-RLItem-Set-DM-Rqst ::= NULL

DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}
    ...
}

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 mandatory } |
    { ID id-CFN                    CRITICALITY ignore TYPE CFN                    PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rLs                RL-DM-Rsp,
    rLS                RL-Set-DM-Rsp,
    allRL              AllRL-DM-Rsp,
    allRLS             AllRL-Set-DM-Rsp,
    ...
}

RL-DM-Rsp ::= ProtocolIE-Container {{ RLIE-DM-Rsp }}

RLIE-DM-Rsp RNSAP-PROTOCOL-IES ::= {
    { ID id-RLItem-DM-Rsp          CRITICALITY ignore TYPE RLItem-DM-Rsp          PRESENCE mandatory },
    ...
}

RLItem-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp      RL-InformationList-DM-Rsp,
    iE-Extensions                 ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rsp ::= ProtocolIE-Container {{ RL-SetIE-DM-Rsp }}

RL-SetIE-DM-Rsp RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-SetItem-DM-Rsp      CRITICALITY ignore TYPE RL-SetItem-DM-Rsp      PRESENCE mandatory },
    ...
}

```

```

RL-SetItem-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp  RL-Set-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-DM-Rsp ::= ProtocolIE-Container {{ AllRLIE-DM-Rsp }}

AllRLIE-DM-Rsp RNSAP-PROTOCOL-IES ::= {
    { ID id AllRLItem-DM-Rsp          CRITICALITY ignore      TYPE AllRLItem-DM-Rsp          PRESENCE mandatory },
    ...
}

AllRLItem-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp      RL-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { AllRLItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

AllRLItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-Set-DM-Rsp ::= ProtocolIE-Container {{ AllRL-SetIE-DM-Rsp }}

AllRL-SetIE-DM-Rsp RNSAP-PROTOCOL-IES ::= {
    { ID id AllRL-SetItem-DM-Rsp      CRITICALITY ignore      TYPE AllRL-SetItem-DM-Rsp      PRESENCE mandatory },
    ...
}

AllRL-SetItem-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp    RL-Set-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { AllRL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

AllRL-SetItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp          ::= RL-IE-ContainerList1 { {RL-Information-DM-Rsp-IEs} }

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,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rsp                ::= RL-Set-IE-ContainerList { {RL-Set-Information-DM-Rsp-IEs} }

RL-Set-Information-DM-Rsp-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp          CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rsp          PRESENCE mandatory },
    ...
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    iE-Extensions            ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rspns-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rspns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****

DedicatedMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementInitiationFailure-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
    ...
}

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 ::= {
}
...
}
-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

DedicatedMeasurementReport ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementReport-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}} OPTIONAL,
    ...
}

DedicatedMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore TYPE MeasurementID          PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rprt PRESENCE mandatory } |
    { ID id-CFN                    CRITICALITY ignore TYPE CFN                    PRESENCE optional },
    ...
}

DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
    rLs                RL-DM-Rprt,
    rLS                RL-Set-DM-Rprt,
    allRL              AllRL-DM-Rprt,
    allRLS             AllRL-Set-DM-Rprt,
    ...
}

RL-DM-Rprt ::= ProtocolIE-Container {{ RLIE-DM-Rprt }}

RLIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
    { ID id-RLItem-DM-Rprt          CRITICALITY ignore TYPE RLItem-DM-Rprt          PRESENCE mandatory },
    ...
}

RLItem-DM-Rprt ::= SEQUENCE {
    rL-InformationList-DM-Rprt      RL-InformationList-DM-Rprt,
    iE-Extensions                   ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } OPTIONAL,
    ...
}

RLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RL-Set-DM-Rprt ::= ProtocolIE-Container {{ RL-SetIE-DM-Rprt }}

RL-SetIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-SetItem-DM-Rprt      CRITICALITY ignore      TYPE      RL-SetItem-DM-Rprt      PRESENCE mandatory  },
  ...
}

RL-SetItem-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 ::= {
  ...
}

AllRL-DM-Rprt ::= ProtocolIE-Container {{ AllRLIE-DM-Rprt }}

AllRLIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
  { ID id-AllRLItem-DM-Rprt      CRITICALITY ignore      TYPE      AllRLItem-DM-Rprt      PRESENCE mandatory  },
  ...
}

AllRLItem-DM-Rprt ::= SEQUENCE {
  rL-InformationList-DM-Rprt     RL-InformationList-DM-Rprt,
  iE-Extensions                    ProtocolExtensionContainer { { AllRLItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

AllRLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

AllRL-Set-DM-Rprt ::= ProtocolIE-Container {{ AllRL-SetIE-DM-Rprt }}

AllRL-SetIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
  { ID id-AllRL-SetItem-DM-Rprt  CRITICALITY ignore      TYPE      AllRL-SetItem-DM-Rprt  PRESENCE mandatory  },
  ...
}

AllRL-SetItem-DM-Rprt ::= SEQUENCE {
  rL-Set-InformationList-DM-Rprt RL-Set-InformationList-DM-Rprt,
  iE-Extensions                    ProtocolExtensionContainer { { AllRL-SetItem-DM-Rprt-ExtIEs } } OPTIONAL,
  ...
}

AllRL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}


```

```

RL-InformationList-DM-Rprt ::= RL-IE-ContainerList1 { {RL-Information-DM-Rprt-IEs} }

RL-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rprt      CRITICALITY ignore  TYPE RL-InformationItem-DM-Rprt      PRESENCE mandatory  },
  ...
}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
  rL-ID                RL-ID,
  dPCH-ID              DPCH-ID                OPTIONAL,
  dedicatedMeasurementValue  DedicatedMeasurementValue,
  iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-DM-Rprt ::= RL-Set-IE-ContainerList { {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,
  dedicatedMeasurementValue  DedicatedMeasurementValue,
  iE-Extensions        ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
  ...
}

RL-Set-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

.
.
.
<Editor's note: Several messages have been omitted.>

.
.
.

```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
id-commonTransportChannelResourcesRelease                INTEGER ::= 2
id-compressedModeCancellationFDD                        INTEGER ::= 3
id-compressedModeCommitFDD                              INTEGER ::= 4
id-compressedModePrepareFDD                             INTEGER ::= 5
id-downlinkPowerControl                                 INTEGER ::= 6
id-downlinkSignallingTransfer                           INTEGER ::= 7
id-errorIndication                                      INTEGER ::= 8
id-measurementFailure                                   INTEGER ::= 9
id-measurementInitiation                                INTEGER ::= 10
id-measurementReporting                                  INTEGER ::= 11
id-measurementTermination                               INTEGER ::= 12
id-pagingRequest                                        INTEGER ::= 13
id-physicalChannelReconfiguration                       INTEGER ::= 14
id-privateMessage                                       INTEGER ::= 15
id-radioLinkAddition                                    INTEGER ::= 16
id-radioLinkDeletion                                    INTEGER ::= 17
id-radioLinkFailure                                     INTEGER ::= 18
id-radioLinkRestoration                                 INTEGER ::= 19
id-radioLinkSetup                                       INTEGER ::= 20
id-srnsRelocationCommit                                 INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation     INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare         INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration              INTEGER ::= 25
id-uplinkSignallingTransfer                             INTEGER ::= 26

-- *****
--
-- Extension constants

```

```

--
-- *****
maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions        INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535
-- *****
--
-- Lists
--
-- *****

maxRateMatching              INTEGER ::= 10
maxNrOfTFCs                  INTEGER ::= 10
maxNrOfTFs                   INTEGER ::= 10
maxNrOfCCTrCHs              INTEGER ::= 10
maxNrOfDCHs                  INTEGER ::= 10
maxNrOfDL-Codes              INTEGER ::= 10
maxNrOfDPCHs                 INTEGER ::= 10
maxNrOfErrors                INTEGER ::= 10
maxNrOfMACcSDU-Length       INTEGER ::= 10
maxNrOfRLs                   INTEGER ::= 10
maxNrOfRLSets                INTEGER ::= maxNrOfRLs+0
maxNrOfRLs-1                 INTEGER ::= 10
maxNrOfRLs-2                 INTEGER ::= 10
maxNrOfSCCPCHs              INTEGER ::= 10
maxNrOfULTs                  INTEGER ::= 15
maxNrOfCMPatterns           INTEGER ::= 8
maxRNCinURA                 INTEGER ::= 10
maxTTI-Count                 INTEGER ::= 10
maxCTFC-1                    INTEGER ::= 10
maxNrOfNeighbouringRNCs     INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC  INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC  INTEGER ::= 10
maxFACHCountPlus1           INTEGER ::= 10
maxIBSEG                     INTEGER ::= 16
-- *****
--
-- IEs
--
-- *****

id-AllRLItem-DM-Rprt         INTEGER ::= 0
id-AllRLItem-DM-Rsp         INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt    INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp     INTEGER ::= 3
id-AllowedQueuingTime       INTEGER ::= 4
id-BindingID                 INTEGER ::= 5

```


id-C-ID	INTEGER ::= 6
id-C-RNTI	INTEGER ::= 7
id-CFN	INTEGER ::= 8
id-CN-CS-DomainIdentifier	INTEGER ::= 9
id-CN-PS-DomainIdentifier	INTEGER ::= 10
id-Cause	INTEGER ::= 11
id-CellItem-PagingRqst	INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep	INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep	INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD	INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD	INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD	INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD	INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD	INTEGER ::= 19
id-CriticalityDiagnostics	INTEGER ::= 20
id-D-RNTI	INTEGER ::= 21
id-D-RNTI-ReleaseIndication	INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD	INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD	INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp	INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD	INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD	INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD	INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD	INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD	INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD	INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD	INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD	INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD	INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD	INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD	INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp	INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD	INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD	INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD	INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD	INTEGER ::= 42
id-DCH-InformationResponseListIE-RL-SetupRspTDD	INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD	INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD	INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD	INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD	INTEGER ::= 56

id-DL-CodeInformationListIE-RL-ReconfReadyFDD	INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD	INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
id-DL-SIRTarget	INTEGER ::= 66
id-DLReferencePower	INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
id-MultipleURAsIndicator	INTEGER ::= 94
<u>id-Neighbouring-CellInformationItem-RL-AdditionFailureFDD</u>	<u>INTEGER ::= xxx</u>
<u>id-Neighbouring-CellInformationItem-RL-AdditionRsp</u>	<u>INTEGER ::= xxx</u>
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
id-PagingArea-PagingRqst	INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105

id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
id-PowerAdjustmentType	INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
id-RANAP-RelocationInformation	INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112
id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
id-RL-Information-RL-FailureInd	INTEGER ::= 115
id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
id-RL-Information-RL-RestoreInd	INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135
id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
id-RLItem-DM-Rprt	INTEGER ::= 138
id-RLItem-DM-Rqst	INTEGER ::= 139
id-RLItem-DM-Rsp	INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143
id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
id-RL-SetItem-DM-Rprt	INTEGER ::= 148
id-RL-SetItem-DM-Rqst	INTEGER ::= 149
id-RL-SetItem-DM-Rsp	INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
id-ReportCharacteristics	INTEGER ::= 152
id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
id-S-RNTI	INTEGER ::= 155
id-SAI	INTEGER ::= 156

id-SRNC-ID	INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
id-TransportBearerID	INTEGER ::= 163
id-TransportBearerRequestIndicator	INTEGER ::= 164
id-TransportLayerAddress	INTEGER ::= 165
id-UC-ID	INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 182
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 183
id-UL-SIRTarget	INTEGER ::= 184
id-URA-ID	INTEGER ::= 185
id-URAIItem-PagingRqst	INTEGER ::= 186
id-UnsuccessfulRL-InformationResponse	INTEGER ::= 187
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	INTEGER ::= 190
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 191
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 192
id-AllRLItem-DM-Rqst	INTEGER ::= xxx
id-AllRLItem-Set-DM-Rqst	INTEGER ::= xxx

END

CHANGE REQUEST		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.	
25.423 CR CR117r2		Current Version: 3.1.0	
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team	
For submission to: TSG RAN #8	for approval <input checked="" type="checkbox"/>	strategic <input type="checkbox"/>	(for SMG use only)
list expected approval meeting # here ↑	for information <input type="checkbox"/>	non-strategic <input type="checkbox"/>	

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** April 2000

Subject: Alignment of Common Transport Channel Initialisation Procedure with the RRC Specification

Work item:

Category:	F Correction <input type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>		Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	---	--	-----------------	--

(only one category shall be marked with an X)

Reason for change:

CR117r2: The procedure text for changing Secondary CCPCH and RACH has been changed to only describe the DRNC behaviour.

CR117r1:

8.4.1.2: Clarification has been made regarding what the absence of *RACH Info for DRNC Selected PRACH* IE group implies. For consistency the same clarification has been done for the absence of *FACH Info for optional S-CCPCH* IE group. The changes are highlighted with yellow.

9.1.36: The *PRACH Information* IE group in the *RACH Info for DRNC Selected PRACH* IE group has been removed.
The *Scrambling Code Number* IE has been aligned with the CR136 for 25.433. I.e. the DL Scrambling Code reference in the IE type and reference field has been removed.

9.2.2.x: An editorial change has been made in the value range described for the PRACH Minimum Spreading Factor.

9.3.3: ScramblingCodeNumber is added. The changes are highlighted with yellow.

9.3.4: ScramblingCodeNumber is added. The changes are highlighted with yellow.

CR117:

In the current RRC Protocol Specification the SRNC may assign new Physical Channel Resources in the Cell Update Confirm Message. For this reason the COMMON TRANSPORT CHANNEL RESOURCES INITIALISATION RESPONSE message includes a possibility to select a new Secondary CCPCH, rather than the one used as default for the UE. However, when introducing this in the RNSAP specification we seem to have overlooked the uplink direction (the discussion was focused on how to select the S-CCPCH in the DL of the Iur User Plane).

This CR introduces the missing information to align RNSAP with the RRC specification,

e.g. the Cell Update procedure.

Clauses affected: 3.2, 8.4.1.2, 9.1.36.1, 9.2.1.66, 9.2.2.42, 9.2.2.x, 9.2.2.x, 9.2.2.x, 9.2.3.x, 9.3.3, 9.3.4, and 9.3.6

<u>Other specs affected:</u>	Other 3G core specifications	<input type="text"/>	→ List of CRs:
	Other GSM core specifications	<input type="text"/>	→ List of CRs:
	MS test specifications	<input type="text"/>	→ List of CRs:
	BSS test specifications	<input type="text"/>	→ List of CRs:
	O&M specifications	<input type="text"/>	→ List of CRs:

Other comments: This assumes that reference 21 to be included as proposed in CR115 TS 25.423.

3.2 Abbreviations

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

ASN.1	Abstract Syntax Notation One
BLER	Block Error Rate
CCCH	Common Control Channel
CCPCH	Common Control Physical Channel
CCTrCH	Coded Composite Transport Channel
CFN	Connection Frame Number
CN	Core Network
CPICH	Common Pilot Channel
CRNC	Controlling RNC
DCH	Dedicated Channel
DL	Downlink
DPCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DRNC	Drift RNC
DRNS	Drift RNS
DRX	Discontinuous Reception
DSCH	Downlink Shared Channel
EP	Elementary Procedure
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
IE	Information Element
MAC	Medium Access Control
PCPCH	Physical Common Packet Channel
PDU	Protocol Data Unit
<u>PRACH</u>	<u>Physical Random Access Channel</u>
RAB	Radio Access Bearer
RACH	Random Access Channel
RL	Radio Link
RLC	Radio Link Control
RLS	Radio Link Set
RNS	Radio Network Subsystem
RNSAP	Radio Network Subsystem Application Part
RNTI	Radio Network Temporary Identifier
RRC	Radio Resource Control
RSCP	Received Signal Code Power
SCH	Synchronisation Channel
SDU	Signalling Data Unit
SFN	System Frame Number
SRNC	Serving RNC
SRNS	Serving RNS
SSDT	Site Selection Diversity Transmit
TDD	Time Division Duplex
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
TPC	Transmit Power Control
UARFCN	UTRA Absolute Radio Frequency Channel Number
UE	User Equipment
UL	Uplink
URA	UTRAN Registration Area
UTRAN	UMTS Terrestrial Radio Access Network

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 UE context in the DRNC.

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

8.4.1.2 Successful Operation

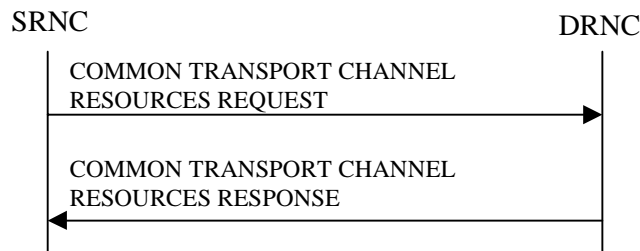


Figure 130: Common Transport Channel Resources Initialisation procedure, Successful Operation

The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST to the DRNC.

Upon reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall respond by sending a COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message to the SRNC.

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 and include the *Binding Identity* and *Transport Layer Address* IEs in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer not Requested", the DRNC shall use the transport bearer for the indicated by the *Transport Bearer ID* IE.

The DRNC shall include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c SDU Length* IEs for each priority class.

If there exists multiple Secondary CCPCHs in the cell where the UE is located and the DRNC decides to use the DRNC selected Secondary CCPCH instead of UE selected Secondary CCPCH, the *FACH Info for optional S-CCPCH* IE group shall be included in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message. If the DRNC includes the *FACH Info for optional S-CCPCH* IE group, then it shall also include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class for the new Secondary CCPCH.

If there exists multiple Secondary CCPCHs in the cell where the UE is located, the DRNC may include in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message the *FACH Info for optional S-CCPCH* IE group to be used by the UE which is different from the Secondary CCPCH used by the UE at reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message. If the DRNC includes the *FACH Info for optional S-CCPCH* IE group, then it shall also include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class for the new Secondary CCPCH.

If there exists multiple RACHs in the cell where the UE is located and the DRNC decides to use the DRNC selected PRACH instead of the UE selected PRACH, the *RACH Info for DRNC Selected PRACH* IE group shall be included in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

8.4.1.3 Unsuccessful Operation

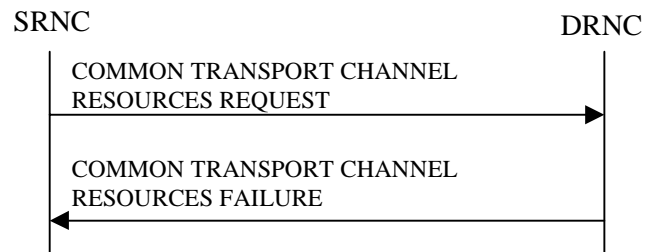


Figure 234: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

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 respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, indicating the cause of the failure.

8.4.1.4 Abnormal Conditions

-

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCH coupled to PRACH or PCPCH		1			YES	ignore
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		1..<MaxNb MACcSDU Length>			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional S-CCPCH		0..1			YES	ignore
>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [7]	–	
>DL Scrambling Code	M				–	
>FDD DL Channelisation Code Number	M				–	
>TFCS	M			For the DL.	–	
>Secondary CCPCH Slot Format	M				–	
>MultiplexingPosition	M				–	
>STTD Indicator	M				–	
>Priority Indicator & Initial Window Size		1..16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		1..<MaxNb MACcSDU Length>			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
RACH Info for DRNC Selected PRACH		0..1			YES	ignore
>Preamble Signatures	M				–	
>RACH Minimum Spreading Factor	M				–	
>Scrambling Code Number	M				–	
>Puncture Limit	M				–	
>RACH Sub channel Numbers	M				–	
Transport Layer Address	O				YES	ignore

Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCHs coupled to PRACH		1			YES	ignore
>Priority Indicator & Initial Window Size		1.. 16		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>>MAC-c SDU Length		1..< MaxNbMA CcSDULen gth>			GLOBAL	ignore
>>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional group of S-CCPCHs		0.. 1			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>Secondary CCPCH	M	1..< MaxnoofS CCPCHs>			GLOBAL	ignore
>>TDD Channelisation Code	M				–	
>>Time Slot	M				–	
>>Burst Type	M				–	
>>Midamble shift	M				–	
>>TDD Physical Channel Offset	M				–	
>>Repetition Period	M				–	
>>Repetition Length	M				–	
>>>Priority Indicator & Initial Window Size		1.. 16		Provide Information for each priority class used	GLOBAL	ignore
>>>>FACH Priority Indicator	M				–	
>>>>MAC-c SDU Length		1..< MaxNbMA CcSDULen gth>			GLOBAL	ignore
>>>>>MAC-c SDU Length	M				–	
>>>>FACH Initial Window Size	M				–	
RACH Info for DRNC Selected PRACH		<u>0..1</u>			<u>YES</u>	<u>ignore</u>
<u>>TDD Channelisation Code</u>	<u>M</u>				<u>–</u>	
<u>>Time Slot</u>	<u>M</u>				<u>–</u>	
<u>>PRACH Midamble</u>	<u>O</u>				<u>–</u>	
<u>>>>Transport Layer</u>	<u>O</u>				<u>YES</u>	<u>ignore</u>

Address						
>>>Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.
MaxnoofSCCPCHs	TBD

9.2.2.x Preamble Signature

This IE gives the preamble signatures allowed for a PRACH.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>Preamble Signatures</u>			<u>BIT STRING (16)</u>	<u>Bit 0=P0</u> <u>Bit 1=P1</u> <u>..</u> <u>Bit 15=P15</u> <u>See ref. [21].</u>

9.2.2.x PRACH Minimum Spreading Factor

This IE gives the lowest allowed spreading factor for a PRACH.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>PRACH Minimum Spreading Factor</u>			<u>Enumerated (32,64,128, 256,...)</u>	<u>Defines the lowest allowed. See ref. [16].</u>

9.2.2.x RACH Sub Channel Numbers

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>RACH Sub Channel Numbers</u>			<u>BIT STRING (12)</u>	<u>Bit 0=Sub Channel Number 0</u> <u>Bit 1=Sub Channel Number 1</u> <u>...</u> <u>Bit 11=Sub Channel Number 11</u>

9.2.2.x Scrambling Code Number

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Scrambling Code Number	■	■	INTEGER (0..15)	Identification of scrambling code see Ref. [21].

9.2.3.x PRACH Midamble

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>PRACH Midamble</u>			<u>ENUMERATED</u> (<u>Inverted</u> , <u>Direct</u>)	

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
    DPCHConstantValue,
```

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DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PRACH-Midamble,
PRACH-MinimumSpreadingFactor,
PreambleSignatures,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RACH-SubChannelNumbers,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,

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```
RepetitionPeriod,
ReportCharacteristics,
S-FieldLength,
S-RNTI,
SCH-TimeSlot,
SAI,
SN,
SSDT-CellID,
SSDT-CellID-Length,
SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
ScaledMaxAdjustmentPeriod,
ScaledMaxAdjustmentStep,
ScramblingCodeChange,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
SyncCase,
TDD-ChannelisationCode,
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TGD,
TGL,
TimeSlot,
ToAWE,
ToAWS,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
TFCS,
TransportFormatSet,
TransportLayerAddress,
TrCH-SrcStatisticsDescr,
TxDiversityIndicator,
UARFCN,
UC-ID,
UL-DeltaSIR,
UL-DeltaSIRAfter,
UL-DL-CompressedModeSelection,
UL-DPCCCH-SlotFormat,
UL-InterferenceLevel,
UL-SIR,
UL-FP-Mode,
UL-ScramblingCode,
URA-ID
FROM RNSAP-IEs

PrivateIE-Container{},
ProtocolExtensionContainer{}
```

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```
ProtocolIE-ContainerList {},
ProtocolIE-ContainerPair {},
ProtocolIE-ContainerPairList {},
ProtocolIE-Container {},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,
id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
```

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id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,

id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD,
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD,
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,

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id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,

```

id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD

```

FROM RNSAP-Constants;

```

-- *****
--
-- Common Container List
--
-- *****

```

```

DPCH-IE-ContainerList      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IEsSetParam } }
RL-IE-ContainerList0      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1-1    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-1    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-2    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IEsSetParam } }
RL-Set-IE-ContainerList   { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IEsSetParam } }
CCTrCH-IE-ContainerList0  { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IEsSetParam } }
CCTrCH-IE-ContainerList1  { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IEsSetParam } }

```

```

.
.
.
<Parts of the ASN.1 module is omitted>
.
.
.

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
--
-- *****

```

CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {

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```
protocolIEs ProtocolIE-Container {{CommonTransportChannelResourcesResponseFDD-IEs}},
protocolExtensions ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseFDD-Extensions}} OPTIONAL,
...
}

CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-S-RNTI CRITICALITY ignore TYPE S-RNTI PRESENCE mandatory } |
  { ID id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD PRESENCE mandatory } |
  { ID id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD PRESENCE optional } |
  { ID id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD CRITICALITY ignore TYPE RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD PRESENCE optional } |
  { 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-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
  priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD,
  iE-Extensions ProtocolExtensionContainer { {FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
  ...
}

FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD PRESENCE mandatory },
  ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD ::= SEQUENCE {
  fACH-PriorityIndicator FACH-PriorityIndicator,
  mAC-c-SDU-Lengths MAC-c-SDU-LengthList-CTCH-ResourceRspFDD,
  fACH-InitialWindowSize FACH-InitialWindowSize,
  iE-Extensions ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
  ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

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```
MAC-c-SDU-LengthList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD }}
```

```
MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {  
  { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD PRESENCE mandatory  
  },  
  ...  
}
```

```
MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD
```

```
MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD ::= SEQUENCE {  
  mAC-c-SDU-Length MAC-c-SDU-Length,  
  iE-Extensions ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,  
  ...  
}
```

```
MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {  
  fDD-S-CCPCH-Offset FDD-S-CCPCH-Offset,  
  dl-ScramblingCode DL-ScramblingCode,  
  fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,  
  dl-TFCS TFCS,  
  secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,  
  multiplexingPosition MultiplexingPosition,  
  sTTD-Indicator STTD-Indicator,  
  priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD,  
  iE-Extensions ProtocolExtensionContainer { {FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,  
  ...  
}
```

```
FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-  
option-CTCH-ResourceRspFDD }}
```

```
PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {  
  { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD CRITICALITY ignore TYPE  
  PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD PRESENCE mandatory },  
  ...  
}
```

```
PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-  
option-CTCH-ResourceRspFDD
```

```
PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {  
  fACH-PriorityIndicator FACH-PriorityIndicator,  
  mAC-c-SDU-Lengths MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD,  
  fACH-InitialWindowSize FACH-InitialWindowSize,
```

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```
    iE-Extensions          ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs} }
OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD    CRITICALITY ignore    TYPE    MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD
    PRESENCE mandatory },
    ...
}

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
    mAC-c-SDU-Length          MAC-c-SDU-Length,
    iE-Extensions            ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD ::= SEQUENCE {
    preambleSignatures          PreambleSignatures,
    pRACH-MinimumSpreadingFactor PRACH-MinimumSpreadingFactor,
    scramblingCodeNumber        ScramblingCodeNumber,
    punctureLimit                PunctureLimit,
    rACH-SubChannelNumbers       RACH-SubChannelNumbers,
    iE-Extensions                ProtocolExtensionContainer { { RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD-ExtIEs } } OPTIONAL,
    ...
}

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
--
-- *****
```

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```
CommonTransportChannelResourcesResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{CommonTransportChannelResourcesResponseTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer    {{CommonTransportChannelResourcesResponseTDD-Extensions}}
    OPTIONAL,
    ...
}

CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI          CRITICALITY ignore TYPE S-RNTI          PRESENCE mandatory } |
    { ID id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD
    PRESENCE mandatory } |
    { ID id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD
    optional } |
    { ID id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD
    PRESENCE optional } |
    { 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-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD ::= SEQUENCE {
    priorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD,
    iE-Extensions          ProtocolExtensionContainer { {FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths              MAC-c-SDU-LengthList-CTCH-ResourceRspTDD,
    fACH-InitialWindowSize         FACH-InitialWindowSize,
    iE-Extensions                  ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD }}

MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD PRESENCE mandatory
  },
  ...
}

MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD

MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD ::= SEQUENCE {
  mAC-c-SDU-Length MAC-c-SDU-Length,
  iE-Extensions ProtocolExtensionContainer { {MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
  dl-TFCS TFCS,
  secondaryCCPCHs SecondaryCCPCHList-CTCH-ResourceRspTDD,
  iE-Extensions ProtocolExtensionContainer { {FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SecondaryCCPCHList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ SecondaryCCPCHListIEs-CTCH-ResourceRspTDD }}

SecondaryCCPCHListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD CRITICALITY ignore TYPE SecondaryCCPCHListIE-CTCH-ResourceRspTDD PRESENCE mandatory },
  ...
}

SecondaryCCPCHListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF SecondaryCCPCHItem-CTCH-ResourceRspTDD

SecondaryCCPCHItem-CTCH-ResourceRspTDD ::= SEQUENCE {
  tDD-ChannelisationCode TDD-ChannelisationCode,
  timeSlot TimeSlot,
  burstType BurstType,
  midambleShift MidambleShift,
  tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  priorityIndicatorAndInitialWindowSizeList PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD,
  iE-Extensions ProtocolExtensionContainer { {SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-
option-CTCH-ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD CRITICALITY ignore TYPE
    PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD PRESENCE mandatory },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-
option-CTCH-ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths              MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD,
    fACH-InitialWindowSize         FACH-InitialWindowSize,
    iE-Extensions                  ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs} }
OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD CRITICALITY ignore TYPE MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD
    PRESENCE mandatory },
    ...
}

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
    mAC-c-SDU-Length              MAC-c-SDU-Length,
    iE-Extensions                  ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD ::= SEQUENCE {
    tDD-ChannelisationCode        TDD-ChannelisationCode,
    timeSlot                       TimeSlot,

```


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```
burstType BurstType,  
pRACH-Midamble PRACH-Midamble,  
iE-Extensions ProtocolExtensionContainer { { RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD-ExtIEs } } OPTIONAL,  
    ...  
}  
  
RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}  
  
CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

9.3.4 Information Element Definitions

```

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.
.
<Parts of the ASN.1 module is omitted>
.
.
.
-- P

PD ::= INTEGER (0..2047, ...)

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

SCH-TimeSlot ::= INTEGER (0..6)

Periodic ::= SEQUENCE {
    reportPeriodicity ReportPeriodicity,
    iE-Extensions ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    ...
}

Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PLMN-ID ::= OCTET STRING (SIZE(3))

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerControlMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

PowerOffset ::= INTEGER (0..24)

PowerResumeMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct,
    ...
}

PRACH-MinimumSpreadingFactor ::= ENUMERATED {
    v32,
    v64,
    v128,
    v256,
    ...
}

PreambleSignatures ::= BIT STRING (SIZE (16))
-- Bit 0=P0, Bit 1=P1, .. ,Bit 15=P15 See ref. [21] --

PrimaryCPICH-Power ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

```

```

PrimaryCPICH-EcNo          ::= INTEGER (-30..30)

PrimaryCCPCH-RSCP         ::= INTEGER (0..91)
-- According to maping in 25.225

PrimaryScramblingCode     ::= INTEGER (0..511)

PropagationDelay          ::= INTEGER (0..255)

SyncCase ::= ENUMERATED {
    case1,
    case2
}

PunctureLimit            ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100

-- Q

QE-Selector ::= ENUMERATED {
    selected-DCH,
    non-selected-DCH
}

-- R

RAC                      ::= OCTET STRING (SIZE(1))

RACH-SubChannelNumbers ::= BIT STRING (SIZE (12))
-- Bit 0=Sub Channel Number 0, Bit 1=Sub Channel Number 1, ..., Bit 11=Sub Channel Number 11

RANAP-RelocationInformation ::= BIT STRING

RateMatchingAttribute     ::= INTEGER (1..maxRateMatching)

RefTFNNumber ::= INTEGER (0..15)

RepetitionLength         ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber ::= INTEGER (0..255)

ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          Periodic,
    eventA            EventA,
    eventB            EventB,
    eventC            EventC,
    eventD            EventD,
    eventE            EventE,
    eventF            EventF,
    ...
}

ReportPeriodicity ::= CHOICE {
    ten-msec          INTEGER (1..6000),
    -- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
    -- E.g. value 6000 means 60000ms (i.e. 1min)
    -- Unit ms, Step 10ms
    min               INTEGER (1..60)
    -- Unit min, Step 1min
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

```

```
RL-ID ::= INTEGER (0..31)
RL-Set-ID ::= INTEGER (0..31)
RNC-ID ::= INTEGER (0..4095)
RSCP-Value ::= INTEGER (0..81)
-- According to mapping in 25.225
RSCP-Value-IncrDecrThres ::= INTEGER (0..80)
-- S
SAC ::= OCTET STRING (SIZE (2))
SAI ::= SEQUENCE {
    pLMN-ID PLMN-ID,
    lAC LAC,
    sAC SAC,
    iE-Extensions ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
}
SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
ScramblingCodeChange ::= ENUMERATED {
    code-change,
    no-code-change
}
ScramblingCodeNumber ::= INTEGER (0..15)
SIR-Error-Value ::= INTEGER (0..125)
SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)
SIR-Value ::= INTEGER (0..63)
-- According to mapping in 25.215/25.225
SIR-Value-IncrDecrThres ::= INTEGER (0..62)
SecondaryCCPCH-SlotFormat ::= INTEGER (0..17)
-- refer to 25.211
SN ::= TimeSlot
S-FieldLength ::= ENUMERATED {
    v1,
    v2
}
S-RNTI ::= INTEGER (0..1048575)
-- From 0 to 2^20-1
SSDT-CellID ::= ENUMERATED {
    a,
    b,
    c,
    d,
    e,
    f,
    g,
    h
}
SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}
SSDT-Indication ::= ENUMERATED {
    sSDT-active-in-the-UE,
    sSDT-not-active-in-the-UE
}
SSDT-SupportIndicator ::= ENUMERATED {
```

```
sSDT-supported,  
sSDT-not-supported  
}  
  
STTD-Indicator ::= ENUMERATED {  
    active,  
    inactive  
}  
  
STTD-SupportIndicator ::= ENUMERATED {  
    sTTD-Supported,  
    sTTD-not-Supported  
}
```

9.3.6 Constant Definitions

```

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.
.
<Parts of the ASN.1 module is omitted>
.
.
.

id-AllRLItem-DM-Rprt                INTEGER ::= 0
id-AllRLItem-DM-Rsp                 INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt            INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp             INTEGER ::= 3
id-AllowedQueuingTime               INTEGER ::= 4
id-BindingID                        INTEGER ::= 5
id-C-ID                             INTEGER ::= 6
id-C-RNTI                           INTEGER ::= 7
id-CFN                              INTEGER ::= 8
id-CN-CS-DomainIdentifier           INTEGER ::= 9
id-CN-PS-DomainIdentifier           INTEGER ::= 10
id-Cause                            INTEGER ::= 11
id-CellItem-PagingRqst              INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD  INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD  INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD     INTEGER ::= 19
id-CriticalityDiagnostics           INTEGER ::= 20
id-D-RNTI                           INTEGER ::= 21
id-D-RNTI-ReleaseIndication         INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD  INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD  INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp       INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD     INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD     INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD     INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD     INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD  INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD  INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD  INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD  INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD   INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp    INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD  INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD  INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD  INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD  INTEGER ::= 42
id-DCH-InformationResponseListIE-RL-SetupRspTDD INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD INTEGER ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD INTEGER ::= 65
id-DL-SIRTarget                     INTEGER ::= 66
id-DLReferencePower                 INTEGER ::= 67

```

id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
id-MultipleURAsIndicator	INTEGER ::= 94
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
id-PagingArea-PagingRqst	INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
id-PowerAdjustmentType	INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspFDD	INTEGER ::= xxx
id-RACH-InfoForDRNCSelectedPRACH-CTCH-ResourceRspTDD	INTEGER ::= xxx
id-RANAP-RelocationInformation	INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112
id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
id-RL-Information-RL-FailureInd	INTEGER ::= 115
id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
id-RL-Information-RL-RestoreInd	INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135
id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
id-RLItem-DM-Rprt	INTEGER ::= 138
id-RLItem-DM-Rqst	INTEGER ::= 139
id-RLItem-DM-Rsp	INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143

id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
id-RL-SetItem-DM-Rprt	INTEGER ::= 148
id-RL-SetItem-DM-Rqst	INTEGER ::= 149
id-RL-SetItem-DM-Rsp	INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
id-ReportCharacteristics	INTEGER ::= 152
id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
id-S-RNTI	INTEGER ::= 155
id-SAI	INTEGER ::= 156
id-SRNC-ID	INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
id-TransportBearerID	INTEGER ::= 163
id-TransportBearerRequestIndicator	INTEGER ::= 164
id-TransportLayerAddress	INTEGER ::= 165
id-UC-ID	INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 182
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 183
id-UL-SIRTarget	INTEGER ::= 184
id-URA-ID	INTEGER ::= 185
id-URAItem-PagingRqst	INTEGER ::= 186
id-UnsuccessfulRL-InformationResponse	INTEGER ::= 187
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	INTEGER ::= 190
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 191
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 192

END

CHANGE REQUEST		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.
25.423	CR	120R1
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team
For submission to: TSG RAN #8 <small>list expected approval meeting # here</small>		Current Version: 3.1.0
for approval <input checked="" type="checkbox"/>		strategic <input type="checkbox"/>
for information <input type="checkbox"/>		non-strategic <input type="checkbox"/>
		(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** May 2000

Subject: Definition of UE Context

Work item:

Category:	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

Reason for change: This CR clarifies what is meant by a UE Context in RNSAP.
 In the RNSAP specification the term UE Context is used only for the DRNC, with one exception. This is in the IE definition of the S-RNTI. This CR therefore modifies the definition of the S-RNTI to ensure that when the term UE Context is used it is only UE context in the DRNC that is referred to.

Clauses affected: 3.1, 9.2.1.43

Other specs affected:	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: 25.433 CR140 → List of CRs: → List of CRs: → List of CRs: → List of CRs:
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Other comments:

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 successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.
- On time supervision expiry (i.e. absence of expected response). Whether or not any Class 1 procedure will have a timer on RNSAP is FFS. To be sorted out when discussing the details of the error cases.

Class 2 EPs are considered always successful.

Prepared Reconfiguration: Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

Radio Link Set: set of one or more Radio Links that has a common generation of Transmit Power Control (TPC) commands in the DL.

UE Context: The UE Context contains the necessary information for the DRNC for communication with a specific UE. The UE Context is created in conjunction with 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. The UE Context is deleted by the Radio Link Deletion procedure or by the Common Transport Channel Resources Release procedure when no more Radio Links nor any common transport channels are established towards the concerning 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 oriented mode of the signalling bearer, unless specified otherwise in the procedure text.

9.2.1.43 S-RNTI

S-RNTI identifies is the UE context identifier in the SRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
S-RNTI			Integer(0..2 ²⁰ -1)	

CHANGE REQUEST		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.
25.423	CR	125r1
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team
For submission to: TSG RAN #8 <small>list expected approval meeting # here</small>		Current Version: 3.1.0
for approval <input checked="" type="checkbox"/>		strategic <input type="checkbox"/>
for information <input type="checkbox"/>		non-strategic <input type="checkbox"/>
		(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** April 2000

Subject: Correction of the DPCH Constant Value IE

Work item:

Category:	F Correction <input type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input checked="" type="checkbox"/> D Editorial modification <input type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

Reason for change:

CR125r1:
Influenced ASN.1 is included.

CR125:
In the current RNSAP specification the *DPCH Constant Value* IE is not aligned with the RRC specification. The value range allowed by the RNSAP specification by far exceeds the value range defined for RRC. The unit of the IE is also not correct.

This CR also the currently defined RNSAP IE *DPCH Constant Value* with the RRC Specification in terms of "unit" and value range with the RRC *Constant Value* IE (used for the DPCH Constant Value).

Clauses affected: 9.2.1.66 and 9.3.4

Other specs affected:	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:
------------------------------	---	--

Other comments:

9.2.1.66 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 (- 3210...3410)	Unit dB Granularity 1 dB.

```

•
•
•
Several IEs are omitted.
•
•
•
-- D

DCH-CombinationInd      ::= INTEGER (0..255)

DCH-ID                  ::= INTEGER (0..255)

DedicatedMeasurementObjectType ::= ENUMERATED {
    rl,
    rls,
    all-rl,
    all-rls,
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    ...
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue     SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP               RSCP-Value, -- TDD only
    ...
}

DiversityControlField   ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode           ::= ENUMERATED {
    none,
    sTTD,
    closedLoopMode1,
    closedLoopMode2
}

DL-DPCH-SlotFormat      ::= INTEGER (0..16)

DL-SIRTarget            ::= UL-SIR

DL-Power                ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

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,
    ...
}

DPCH-ID                 ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-3210..3110)
-- Unit dBm, Step 1dBm

```

```
DRACControl ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (2..12)

D-FieldLength ::= ENUMERATED {
    v1,
    v2
}

-- E
```

```
•
•
•
Several IEs are omitted.
•
•
•
```

**3GPP TSG-RA WG3 Meeting #13
Hawaii, USA, 22-26 May 2000**

Document R3-001502

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

<h2 style="margin: 0;">CHANGE REQUEST</h2>		<small>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</small>
25.423	CR	127r1
		Current Version: 3.1.0
<small>GSM (AA.BB) or 3G (AA.BBB) specification number ↑</small>		<small>↑ CR number as allocated by MCC support team</small>
For submission to: TSG RAN #8	for approval <input checked="" type="checkbox"/>	strategic <input type="checkbox"/>
<small>list expected approval meeting # here ↑</small>	for information <input type="checkbox"/>	non-strategic <input type="checkbox"/> <small>(for SMG use only)</small>

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** May 2000

Subject: Reference for the limited power increase algorithm

Work item:

Category:	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

Reason for change: This CR proposes to align Limited Power Increase procedure with WG1 TS 25.214.

Clauses affected: 9.2.1.40 Limited Power Increase

Other specs affected:	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:	
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Other comments:



help.doc

<----- double-click here for help and instructions on how to create a CR.

9.2.1.40 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 ~~not increase the DL power of the RL if it exceeds by more than *Power_Raise_Limit* dB the averaged DL power used in the last *DL_power_averaging_window_size* timeslots of the same RL.~~ use the limited power increase algorithm as specified in [10], Chapter 5.2.

~~*Power_Raise_Limit* and *DL_power_averaging_window_size* are parameters configured in the DRNS.~~

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Limited Power Increase			ENUMERATED(Used, Not used ,)	

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423 CR 128r2

Current Version: **3.1.0.**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**
 list expected approval meeting # here ↑

for approval
 For information

Strategic
 non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
 (at least one should be marked with an X)

Source: R-WG3 **Date:** May , 2000

Subject: Handling of measurements non available

Work item:

Category:	F Correction	<input checked="" type="checkbox"/>	Release:	Phase 2	<input type="checkbox"/>
(only one category shall be marked with an X)	A Corresponds to a correction in an earlier release	<input type="checkbox"/>		Release 96	<input type="checkbox"/>
	B Addition of feature	<input type="checkbox"/>		Release 97	<input type="checkbox"/>
	C Functional modification of feature	<input type="checkbox"/>		Release 98	<input type="checkbox"/>
	D Editorial modification	<input type="checkbox"/>		Release 99	<input checked="" type="checkbox"/>
				Release 00	<input type="checkbox"/>

Reason for change:

It was noted during WG3#12 discussion that current specification does not describe what shall be reported in Dedicated Measurement Report messages when measured value is temporarily not available during a periodic measurement.

With this CR we would like to propose that 'Measurement not Available' shall be reported when there is no valid measurement available.

Also new cause value "Measurement Temporarily not Available" is proposed to be added as one cause value to the Dedicated Measurement Failure message.

Clauses affected:

- 8.3.12 Measurements Reporting
- 9.1.31 Dedicated Measurement Report
- 9.2.1 Common Parameters
- 9.2.1.5 Cause
- 9.3.3 PDU definitions
- 9.3.4 Information Element Definitions
- 9.3.6 Constant Definitions

Other specs affected:

Other 3G core specifications	<input type="checkbox"/>	→ List of CRs:	
Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
MS test specifications	<input type="checkbox"/>	→ List of CRs:	
BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
O&M specifications	<input type="checkbox"/>	→ List of CRs:	

Other comments:

8.3.11 Measurement Initiation

[Editor's note: According to TSGR#5 (99)564, the following measurements shall also be considered:

- * Time of Arrival
- * Frequency Offset
- * Round Trip Time
- * RX Timing Deviation

Whether these measurements shall be dedicated or common measurements have so far not been considered by TSG RAN WG3 and are thus not incorporated.]

8.3.11.1 General

This procedure is used by an SRNS to request the initiation of measurements in a DRNS.

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

The Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.11.2 Successful Operation

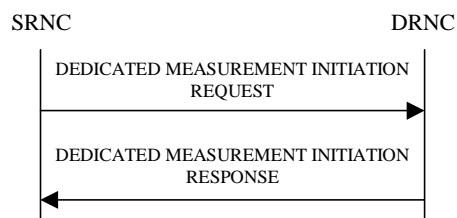


Figure 1: Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the SRNC to the DRNC.

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

If the *Dedicated Measurement Object* IE is set to "RL", the measurement reports shall give the measurement result for each of the indicated Radio Links.

[FDD - If the *Dedicated Measurement Object* IE is set to "RLS", the measurement reports shall give the measurement result for each of the indicated Radio Link Sets.]

If the *Dedicated Measurement Object* IE is set to "ALL RL", the measurement reports shall give the measurement result for each of the current and future Radio Links within the UE Context.

[FDD - If the *Dedicated Measurement Object* IE is set to "ALL RLS", the measurement reports shall give the measurement result for each of the existing and future Radio Link Sets within the UE Context.]

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed.

If the *Report Characteristics* IE is set to 'On-Demand', the DRNS shall report the measurement result immediately.

If the *Report Characteristics* IE is set to 'Periodic', the DRNS shall periodically initiate a Measurement Report procedure for this measurement, with the requested report periodicity.

If the *Report Characteristics* IE is set to 'Event A', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the DRNS shall initiate a Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises more than the requested threshold within the requested time.

If the *Report Characteristics* IE is set to 'Event D', the DRNS shall initiate a Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time.

If the *Report Characteristics* IE is set to 'Event E', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). The DRNS shall also initiate a Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (Report B). If the *Report Periodicity* IE is provided, the DRNS shall initiate Measurement Reporting procedures periodically, with the requested frequency, between Report A and Report B. If 'Measurement Threshold 2' is not present, the DRNS shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, 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 a Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). The DRNS shall also initiate a Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (Report B). If the *Report Periodicity* IE is provided, the DRNS shall initiate Measurement Reporting procedures periodically, with the requested frequency, between Report A and Report B. If 'Measurement Threshold 2' is not present, the DRNS shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the DRNC shall use the value zero as hysteresis times for both Report A and Report B.

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 a Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements

a = one divided by 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 initialize the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

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 measurement request.

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

8.3.11.3 Unsuccessful Operation

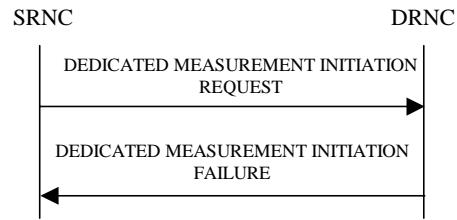


Figure 2: Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement can not be initiated, the DRNC shall send a DEDICATED MEASUREMENT INITIATION FAILURE message. The message shall include the same Measurement Id that was used in the DEDICATED MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

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

8.3.12 Measurements Reporting

8.3.12.1 General

This procedure is used by the DRNS to report results of measurements requested by the SRNS with the Measurement Initiation procedure.

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

The DRNC may initiate the Measurement Reporting procedure at any time after establishing a Radio Link.

8.3.12.2 Successful Operation

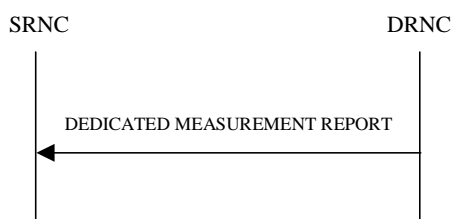


Figure 3: Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the DRNS shall initiate a Measurement Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Dedicated Measurement Id* IE shall be set to the Dedicated Measurement Id provided by the SRNS when initiating the measurement with the Measurement Initiation procedure.

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

9.1.31 DEDICATED MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	ignore
Transaction Id	M				-	
Measurement Id	M				YES	ignore
CHOICE <i>Dedicated Measurement Object Type</i>				Dedicated Measurement Object Type the measurement was initiated with	YES	ignore
>"RL" or "ALL RL"						
>>RL Information		1..<maxnoofRLs>			EACH	ignore
>>>RL-Id	M				-	
>>>DPCH Id	O				-	
>>>CHOICE <i>Measurement Availability Indicator</i>						
>>>>"Measurement Available"					YES	ignore
>>>>Dedicated Measurement Value	M				-	
>>>>"Measurement not Available"		NULL			YES	ignore
>"RLS" or "ALL RLS"					-	
>>RL Set Information		1..<maxnoofRLSets>			-	
>>>RL Set ID	M				-	
>>>CHOICE <i>Measurement Availability Indicator</i>						
>>>>"Measurement Available"					YES	ignore
>>>>Dedicated Measurement Value	M				-	
>>>>"Measurement not Available"		NULL				
CFN	O			Dedicated Measurement Time Reference	YES	ignore

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.

9.2.1.5 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 <i>cause group</i>				
> <i>Radio Network Layer</i>				
>>Radio Network Layer Cause	M		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, Macrodiversity Combining Not Possible, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, <u>Measurement Temporarily not Available</u> , Unspecified,...)	
> <i>Transport Layer</i>				
>>Transport Layer Cause	M		ENUMERATED (Transport link failure, Transmission port not available, Unspecified,...)	
> <i>Protocol</i>				
>>Protocol Cause			ENUMERATED (Transaction not Allowed, Transfer Syntax Error, Abstract Syntax Error (Reject), Abstract Syntax Error (Ignore and Notify), Message not Compatible with Receiver State, Semantic Error, Unspecified,...)	
> <i>Misc</i>				
>>Miscellaneous Cause	M		ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,...)	

9.2.1.x Measurement Availability Indicator

Indicates if measurement is available or not.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>Measurement Availability Indicator</u>			<u>ENUMERATED (measurement available, measurement not available)</u>	

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
```

DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,

```
ReportCharacteristics,  
S-FieldLength,  
S-RNTI,  
SCH-TimeSlot,  
SAI,  
SN,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
ScaledMaxAdjustmentPeriod,  
ScaledMaxAdjustmentStep,  
ScramblingCodeChange,  
SecondaryCCPCH-SlotFormat,  
SyncCase,  
TDD-ChannelisationCode,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TGD,  
TGL,  
TimeSlot,  
ToAWE,  
ToAWS,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TxDiversityIndicator,  
UARFCN,  
UC-ID,  
UL-DeltaSIR,  
UL-DeltaSIRAfter,  
UL-DL-CompressedModeSelection,  
UL-DPCCH-SlotFormat,  
UL-InterferenceLevel,  
UL-SIR,  
UL-FP-Mode,  
UL-ScramblingCode,  
URA-ID  
FROM RNSAP-IEs  
  
PrivateIE-Container{ },  
ProtocolExtensionContainer{ },
```

```
ProtocolIE-ContainerList {},
ProtocolIE-ContainerPair {},
ProtocolIE-ContainerPairList {},
ProtocolIE-Container {},
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRRLs,
maxNrOfRRLSets,
maxNrOfRRLs-1,
maxNrOfRRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,
id-CriticalityDiagnostics,
id-D-RNTI,
```

id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,

```

id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,
id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementAvailableItem-DedicatedMeasurementReport,
id-MeasurementnotAvailableItem-DedicatedMeasurementReport,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
.
.
.

```

```

-- *****
--
-- Common Container List
--
-- *****

```

```

DPCH-IE-ContainerList      { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IESetParam } }
RL-IE-ContainerList0      { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IESetParam } }
RL-IE-ContainerList1      { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IESetParam } }
RL-IE-ContainerList1-1    { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IESetParam } }
RL-IE-ContainerList0-1    { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IESetParam } }
RL-IE-ContainerList0-2    { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IESetParam } }
RL-Set-IE-ContainerList   { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IESetParam } }
CCTrCH-IE-ContainerList0  { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IESetParam } }
CCTrCH-IE-ContainerList1  { RNSAP-PROTOCOL-IES : IESetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IESetParam } }

```

```

-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

DedicatedMeasurementReport ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementReport-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}          OPTIONAL,
    ...
}

DedicatedMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore TYPE MeasurementID          PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rprt PRESENCE mandatory } |
    { ID id-CFN                    CRITICALITY ignore TYPE CFN                    PRESENCE optional },
    ...
}

DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
    rLs          RL-DM-Rprt,
    rLS          RL-Set-DM-Rprt,
    allRL        AllRL-DM-Rprt,
    allRLS       AllRL-Set-DM-Rprt,
    ...
}

RL-DM-Rprt ::= ProtocolIE-Container {{ RLIE-DM-Rprt }}

RLIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
    { ID id-RLItem-DM-Rprt          CRITICALITY ignore          TYPE          RLItem-DM-Rprt          PRESENCE          mandatory },
    ...
}

RLItem-DM-Rprt ::= SEQUENCE {
    rL-InformationList-DM-Rprt      RL-InformationList-DM-Rprt,
    iE-Extensions                   ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rprt ::= ProtocolIE-Container {{ RL-SetIE-DM-Rprt }}

RL-SetIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-SetItem-DM-Rprt      CRITICALITY ignore          TYPE          RL-SetItem-DM-Rprt      PRESENCE mandatory },
    ...
}

```

```

}

RL-SetItem-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 ::= {
    ...
}

AllRL-DM-Rprt ::= ProtocolIE-Container {{ AllRLIE-DM-Rprt }}

AllRLIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
    { ID id-AllRLItem-DM-Rprt          CRITICALITY ignore      TYPE      AllRLItem-DM-Rprt          PRESENCE mandatory },
    ...
}

AllRLItem-DM-Rprt ::= SEQUENCE {
    rL-InformationList-DM-Rprt      RL-InformationList-DM-Rprt,
    iE-Extensions                    ProtocolExtensionContainer { { AllRLItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

AllRLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-Set-DM-Rprt ::= ProtocolIE-Container {{ AllRL-SetIE-DM-Rprt }}

AllRL-SetIE-DM-Rprt RNSAP-PROTOCOL-IES ::= {
    { ID id-AllRL-SetItem-DM-Rprt      CRITICALITY ignore      TYPE      AllRL-SetItem-DM-Rprt      PRESENCE mandatory },
    ...
}

AllRL-SetItem-DM-Rprt ::= SEQUENCE {
    rL-Set-InformationList-DM-Rprt    RL-Set-InformationList-DM-Rprt,
    iE-Extensions                    ProtocolExtensionContainer { { AllRL-SetItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

AllRL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rprt          ::= RL-IE-ContainerList1 { {RL-Information-DM-Rprt-IEs} }

RL-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt  CRITICALITY ignore      TYPE      RL-InformationItem-DM-Rprt      PRESENCE mandatory },
    ...
}

```



```

}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID                OPTIONAL,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    measurementAvailabilityIndicator MeasurementAvailabilityIndicator-DedicatedMeasurementReport,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rprt          ::= RL-Set-IE-ContainerList { {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,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    measurementAvailabilityIndicator MeasurementAvailabilityIndicator-DedicatedMeasurementReport,
    iE-Extensions            ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MeasurementAvailabilityIndicatorItem-DedicatedMeasurementReport ::= CHOICE {
    measurementAvailable MeasurementAvailable-DedicatedMeasurementReport,
    measurementnotAvailable MeasurementnotAvailable-DedicatedMeasurementReport,
    ...
}

MeasurementAvailable-DedicatedMeasurementReport ::= ProtocolIE-Container {{ MeasurementAvailableIE-DedicatedMeasurementReport }}

MeasurementAvailableIE-DedicatedMeasurementReport RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementAvailableItem-DedicatedMeasurementReport          CRITICALITY ignore TYPE MeasurementAvailableItem-DedicatedMeasurementReport          PRECENCE mandatory},
    ...
}

MeasurementAvailableItem-DedicatedMeasurementReport ::= SEQUENCE {
    dedicatedmeasurementValue DedicatedMeasurementValue,
    ie-Extensions ProtocolExtensionContainer { { MeasurementAvailableItem-DedicatedMeasurementReport-ExtTIEs} }          OPTIONAL,

```

```
    ...
  }
  MeasurementAvailableItem-DedicatedMeasurementReport-ExTIEs RNSAP-PRTOCOL-EXTENSIONS ::= {
    ...
  }
  MeasurementnotAvailable-DedicatedMeasurementReport ::= ProtocolIE-Container {{ MeasurementnotAvailableIE-DedicatedMeasurementReport }}
  MeasurementnotAvailableIE-DedicatedMeasurementReport RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementnotAvailableItem-DedicatedMeasurementReport CRITICALITY ignore TYPE MeasurementnotAvailableItem-DedicatedMeasurementReport
      PRECENCE mandatory},
    ...
  }
  MeasurementnotAvailableItem-DedicatedMeasurementReport ::= NULL
  DedicatedMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
  }
```

9.3.4 Information Element Definitions

```
-- *****
--
-- Information Element Definitions
--
-- *****

-- 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 {
    transaction-not-allowed,
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    ...
}

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,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,

```

```
    measurement-temporarily-not-available,
    unspecified,
    ...
}

CauseTransport ::= ENUMERATED {
    transmission-link-failure,
    transmission-port-not-available,
    unspecified,
    ...
}

-- M

MaxNrOfUL-DPCHs          ::= INTEGER (1..6)

MAC-c-SDU-Length        ::= INTEGER (1..5000)

MaximumAllowedULTxPower ::= INTEGER (-50..33)

MeasurementAvailabilityIndicator ::= ENUMERATED(
    measurementAvailable,
    measurementnotAvailable
)

MeasurementFilterCoefficient ::= INTEGER (1..256)
-- Measurement Filter Coefficient to be used for measurement

MeasurementID           ::= INTEGER (0..1048575)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

ScaledMaxAdjustmentPeriod ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep  ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

MeasurementChangeTime   ::= INTEGER (1..6000)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unis 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                SIR-Value-IncrDecrThres,
    sir-error          SIR-Error-Value-IncrDecrThres,
    transmitted-code-power Transmitted-Code-Power-Value-IncrDecrThres,
    rscp               RSCP-Value-IncrDecrThres,
    ...
}

MeasurementThreshold ::= CHOICE {
    sir                SIR-Value,
    sir-error          SIR-Error-Value,
    transmitted-code-power Transmitted-Code-Power-Value,
    rscp               RSCP-Value,
    ...
}

MidambleShift ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

-- N
```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
id-commonTransportChannelResourcesRelease                INTEGER ::= 2
id-compressedModeCancellationFDD                        INTEGER ::= 3
id-compressedModeCommitFDD                              INTEGER ::= 4
id-compressedModePrepareFDD                             INTEGER ::= 5
id-downlinkPowerControl                                 INTEGER ::= 6
id-downlinkSignallingTransfer                           INTEGER ::= 7
id-errorIndication                                      INTEGER ::= 8
id-measurementFailure                                   INTEGER ::= 9
id-measurementInitiation                                INTEGER ::= 10
id-measurementReporting                                  INTEGER ::= 11
id-measurementTermination                               INTEGER ::= 12
id-pagingRequest                                        INTEGER ::= 13
id-physicalChannelReconfiguration                       INTEGER ::= 14
id-privateMessage                                       INTEGER ::= 15
id-radioLinkAddition                                    INTEGER ::= 16
id-radioLinkDeletion                                    INTEGER ::= 17
id-radioLinkFailure                                     INTEGER ::= 18
id-radioLinkRestoration                                 INTEGER ::= 19
id-radioLinkSetup                                       INTEGER ::= 20
id-srnsRelocationCommit                                 INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation      INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare          INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration              INTEGER ::= 25
id-uplinkSignallingTransfer                             INTEGER ::= 26

-- *****
--

```

```
-- Extension constants
--
-- *****

maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions        INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535

-- *****

--
-- Lists
--
-- *****

maxRateMatching              INTEGER ::= 10
maxNrOfTFCs                  INTEGER ::= 10
maxNrOfTFs                    INTEGER ::= 10
maxNrOfCCTrCHs               INTEGER ::= 10
maxNrOfDCHs                   INTEGER ::= 10
maxNrOfDL-Codes               INTEGER ::= 10
maxNrOfDPCHs                  INTEGER ::= 10
maxNrOfErrors                 INTEGER ::= 10
maxNrOfMACcSDU-Length        INTEGER ::= 10
maxNrOfRLs                     INTEGER ::= 10
maxNrOfRLSets                 INTEGER ::= 10
maxNrOfRLs-1                  INTEGER ::= 10
maxNrOfRLs-2                  INTEGER ::= 10
maxNrOfSCCPCHs                INTEGER ::= 10
maxNrOfULTs                    INTEGER ::= 15
maxNrOfCMPatterns             INTEGER ::= 8
maxRNCinURA                  INTEGER ::= 10
maxTTI-Count                  INTEGER ::= 10
maxCTFC-1                     INTEGER ::= 10
maxNrOfNeighbouringRNCs       INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC    INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC    INTEGER ::= 10
maxFACHCountPlus1             INTEGER ::= 10
maxIBSEG                       INTEGER ::= 16

-- *****

--
-- IEs
--
-- *****

id-AllRLItem-DM-Rprt          INTEGER ::= 0
id-AllRLItem-DM-Rsp           INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt      INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp       INTEGER ::= 3
id-AllowedQueueingTime        INTEGER ::= 4
```

id-BindingID
 id-C-ID
 id-C-RNTI
 id-CFN
 id-CN-CS-DomainIdentifier
 id-CN-PS-DomainIdentifier
 id-Cause
 id-CellItem-PagingRqst
 id-CM-PatternInformationItem-CompressedModePrep
 id-CM-PatternInformationList-CompressedModePrep
 id-CombiningItem-RL-AdditionFailureFDD
 id-CombiningItem-RL-AdditionRspFDD
 id-CombiningItem-RL-AdditionRspTDD
 id-CombiningItem-RL-SetupFailureFDD
 id-CombiningItem-RL-SetupRspFDD
 id-CriticalityDiagnostics
 id-D-RNTI
 id-D-RNTI-ReleaseIndication
 id-DCH-AddListIE-RL-ReconfReadyFDD
 id-DCH-AddListIE-RL-ReconfReadyTDD
 id-DCH-AddListIE-RL-ReconfRsp
 id-DCH-AddList-RL-ReconfPrepFDD
 id-DCH-AddList-RL-ReconfPrepTDD
 id-DCH-AddList-RL-ReconfRqstFDD
 id-DCH-AddList-RL-ReconfRqstTDD
 id-DCH-DeleteList-RL-ReconfPrepFDD
 id-DCH-DeleteList-RL-ReconfPrepTDD
 id-DCH-DeleteList-RL-ReconfRqstFDD
 id-DCH-DeleteList-RL-ReconfRqstTDD
 id-DCH-Information-RL-SetupRqstFDD
 id-DCH-InformationList-RL-SetupRqstTDD
 id-DCH-ModifyListIE-RL-ReconfReadyFDD
 id-DCH-ModifyListIE-RL-ReconfReadyTDD
 id-DCH-ModifyListIE-RL-ReconfRsp
 id-DCH-ModifyList-RL-ReconfPrepFDD
 id-DCH-ModifyList-RL-ReconfPrepTDD
 id-DCH-ModifyList-RL-ReconfRqstFDD
 id-DCH-ModifyList-RL-ReconfRqstTDD
 id-DCH-InformationResponseListIE-RL-SetupRspTDD
 id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD
 id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD
 id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD
 id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD
 id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD
 id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD
 id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD
 id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD
 id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD
 id-DL-CCTrCH-InformationList-RL-SetupRqstTDD
 id-DL-CodeInformationListIE-PhyChReconfRqstFDD
 id-DL-CodeInformationListIE-RL-AdditionFailureFDD

INTEGER ::= 5
 INTEGER ::= 6
 INTEGER ::= 7
 INTEGER ::= 8
 INTEGER ::= 9
 INTEGER ::= 10
 INTEGER ::= 11
 INTEGER ::= 12
 INTEGER ::= 13
 INTEGER ::= 14
 INTEGER ::= 15
 INTEGER ::= 16
 INTEGER ::= 17
 INTEGER ::= 18
 INTEGER ::= 19
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 INTEGER ::= 42
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 INTEGER ::= 45
 INTEGER ::= 46
 INTEGER ::= 47
 INTEGER ::= 48
 INTEGER ::= 49
 INTEGER ::= 50
 INTEGER ::= 51
 INTEGER ::= 52
 INTEGER ::= 53
 INTEGER ::= 54
 INTEGER ::= 55

id-DL-CodeInformationListIE-RL-AdditionRspFDD	INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD	INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD	INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
id-DL-SIRTarget	INTEGER ::= 66
id-DLReferencePower	INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
<u>id-MeasurementAvailableItem-DedicatedMeasurementReport</u>	<u>INTEGER ::= xx</u>
<u>id-MeasurementnotAvailableItem-DedicatedMeasurementReport</u>	<u>INTEGER ::= xx</u>
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
.	
.	
.	

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423

CR

133r2

Current Version: **3.1.0.**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG-RAN #8**

list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects:

(at least one should be marked with an X)

(U)SIM

ME

UTRAN / Radio

Core Network

Source:

R-WG3

Date:

May, 2000

Subject:

LCS support on Iur.

Work item:

Category:

(only one category shall be marked with an X)

- F Correction
- A Corresponds to a correction in an earlier release
- B Addition of feature
- C Functional modification of feature
- D Editorial modification

Release:

- Phase 2
- Release 96
- Release 97
- Release 98
- Release 99
- Release 00

Reason for change:

CR133r2: Indentation corrected in Uplink Signalling Transfer Indication.

CR133r1:

The 3G TS 23.003: "Universal Graphical Area Description (GAD)" has been added to the list of references. The reference now uses the reference tag. The changes are highlighted in yellow.

UTRAN access point is removed from the Uplink Signalling Transfer message.

UTRAN Access Point is renamed to UTRAN Access Point Position.

It is clarified that LCS data shall be provided to the SRNC, when LCS is activated in the DRNS. This change is highlighted in yellow.

CR133:

This CR proposes to introduce LCS information (geographical co-ordinates of the cell and the UTRAN access point) on Iur in order to support cell- and RTT based positioning methods in R99. Support for RTT measurements already exists on Iur and Iub.

The same LCS information should be provided by the DRNS to the SRNS in both dedicated- and common channel state. In dedicated channel state the information is proposed to be included in the RL SETUP-/RL ADDITION RESPONSE messages, and in common channel in the UPLINK SIGNALLING TRANSFER message.

In dedicated channel state it would be possible for the SRNS to request on demand the DRNS to provide LCS information in the RL SETUP-/RL ADDITION REQUEST. However, since there are no means for the SRNS to perform such a request in common channel state the proposed solution is to always include the LCS information (as optional parameters) in the above mentioned messages for both dedicated- and common channel state.

Clauses affected: 2, 8.2.1.2, 8.3.1.2, 8.3.2.2, 9.1.4.1, 9.1.4.2, 9.1.7.1, 9.1.7.2, 9.3.3, 9.3.4, 9.3.6

Other specs affected:

Other 3G core specifications
Other GSM core specifications
MS test specifications
BSS test specifications
O&M specifications

→ List of CRs:
→ List of CRs:
→ List of CRs:
→ List of CRs:
→ List of CRs:

Other comments:

--



help.doc

<----- [double-click here for help and instructions on how to create a CR.](#)

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.

- [1] 3G TS 23.003: "Numbering, addressing and identification".
- [2] 3G TS 25.413: "UTRAN Iu Interface RANAP Signalling".
- [3] 3G TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for DCH Data Streams".
- [4] 3G TS 25.427: "UTRAN Iur and Iub Interface User Plane Protocols for DCH Data Streams".
- [5] 3G TS xx.yyy: "Specification containing different Identifiers for UMTS (to be identified)".
- [6] 3G TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception"
- [7] 3G TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [8] 3G TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)".
- [9] 3G TS 25.212: "Multiplexing and Channel Coding (FDD)
- [10] UMTS 25.214, Physical Layer Procedures (FDD)".
- [11] 3G TS 25.215: "Physical Layer – Measurements (FDD)".
- [12] 3G TS 25.221: "Physical Channels and Mapping of Transport Channels onto Physical Channels (TDD)".
- [13] 3G TS 25.223: "Spreading and Modulation (TDD)".
- [14] 3G TS 25.225: "Physical Layer – Measurements (TDD)".
- [15] 3G TS 25.304: "UE Procedures in Idle Mode"
- [16] 3G TS 25.331: "RRC Protocol Specification".
- [17] 3G TS 25.402: "Synchronisation in UTRAN, Stage 2".
- [18] X.680 (12/94): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [19] ITU-T Recommendation X.681 (12/94): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [20] ITU-T Recommendation X.691 (12/94): "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [23] 3G TS 23.003: "Universal Graphical Area Description (GAD)".

[Editor's note: The dating of reference [20] needs to be verified. It has been included from the ITU-T list of recommendations in force. The dating of the reference is FFS.]

[Editor's note: The reference [5] needs to be identified. Until then the description of the parameters CN PS Domain Identifier, CN CS Domain Identifier, and CRNC ID contains more information than otherwise may be needed.]

8.2 Basic Mobility Procedures

8.2.1 Uplink Signalling Transfer

8.2.1.2 Successful Operation

When the DRNC receives an Uu message on the CCCH where 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.

The DRNC shall include in the message the URA Identity of the URA where the Uu message was received, an indication on whether or not the accessed cell belongs to multiple URAs, and the RNC Identity of all other RNCs that are having at least one cell within the URA where the Uu message was received.

The DRNC shall include in the message the C-RNTI that it allocates to identify the UE in the radio interface. When DRNC allocates a new C-RNTI to the UE, it releases the old one.

If the message received from the UE was the first message from that UE in the DRNC, the DRNC shall include the D-RNTI 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 where the Uu message was received in the UPLINK SIGNALLING TRANSFER INDICATION message.

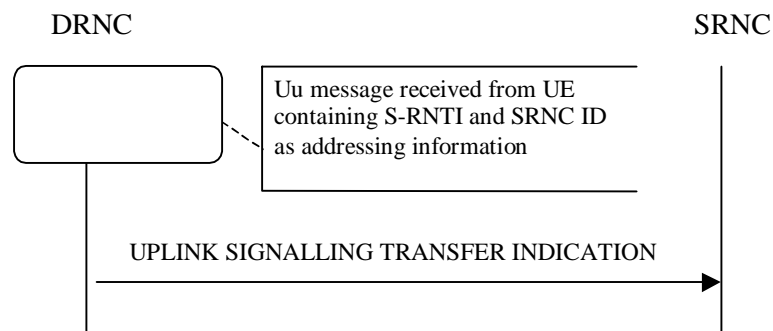


Figure 1: Uplink Signalling Transfer procedure, Successful Operation

8.3 DCH procedures

8.3.1 Radio Link Setup

8.3.1.2 Successful Operation

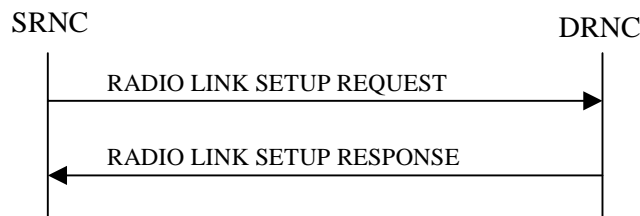


Figure 2: Radio Link Setup procedure: Successful Operation

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 RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the *QE-Selector* is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates 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 or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

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

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the Diversity Indication that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include 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 SETUP RESPONSE message.]

[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 of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

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

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

Depending on local configuration in the DRNS, it may include the geographical co-ordinates of the cell and the UTRAN access point position for each of the established RLs in the RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

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

8.3.2 Radio Link Addition

8.3.2.2 Successful Operation

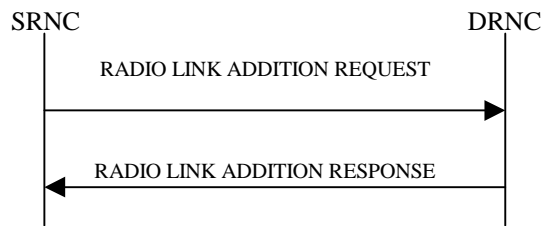


Figure 3: Radio Link Addition procedure: Successful Operation

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

Upon reception, 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 Diversity Control Field 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), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

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

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

[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 the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

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

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

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

[FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK ADDITION RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK ADDITION

REQUEST message requested SSTD activation and the RADIO LINK ADDITION RESPONSE message indicates that the SSTD capability is supported for this RL, SSTD is activated in the DRNS.]

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink 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.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

Depending on local configuration in the DRNS, it may include the geographical co-ordinates of the cell and the UTRAN access point position for each of the added RLs in the RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control IE* was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

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

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	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1..<maxno ofRLs>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>Cell GAI	O				–	
>UTRAN Access Point Position	O				–	
>UL Interference Level	M				–	
> Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $T_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>> FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>> Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>> Segment Information		1.. <maxIBSEG>			–	
>>>>IB_SG POS	M				–	
> DL Code Information		1.. <maxnoofDLCodes>			–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	C-NotFirstRL				–	
>CHOICE <i>diversity Indication</i>						
>>Combining					YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>RL ID	M			Reference RL ID for the combining	–	
>>Non Combining or IE not present				"IE not present" is equivalent to "First RL".	YES	ignore
>>>DCH Information Response		0..<maxno ofDCHs>		Only one DCH per set of co-ordinated DCHs shall be included	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		0..<maxno of neighbourin gRNCs>			EACH	ignore
>> RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxno ofFDDneig hbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxno ofTDDneig hbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		YES	ignore
Downlink SIR Target	M		Uplink SIR		YES	ignore
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
NotFirstRL	The IE is present only if the RL is not the first RL in the RL Information
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell.
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		1			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>Cell GAI	O				–	
>UTRAN Access Point Position	O				–	
>UL Interference per Time Slot		1 .. <maxnoof ULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>UL CCTrCH Information		1..<maxno ofCCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>> DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		1..<maxno ofCCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1..<Maxno ofDPCHs>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DCH Information Response		1..<maxno ofDCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	GLOBAL	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>Neighbouring Cell Information	O	0..<maxno ofneighbouringRNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxno ofFDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Cell Individual Offset	O					
>>>Primary CPICH Power	O				–	
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxno ofTDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDPCHs	Maximum number of DPCHs for one CCTrCH.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.1.7 RADIO LINK ADDITION RESPONSE

9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		1..<maxnoof RLS-1>			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>Cell GAI	O				–	
>UTRAN Access Point Position	O				–	
>UL Interference Level	M				–	
> Secondary CCPCH Info		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S-CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>> FACH/PCH Information		1 .. <maxFACHcount+1>			–	
TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>> Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>> Segment Information		1.. <maxIBSEG>			–	
>>>>IB_SG POS	M				–	
> DL Code Information		1..<maxnoof DL Codes>			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>> <i>Combining</i>					YES	ignore
>>>RL ID	M			Reference	–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
				RL-Id		
>>Non combining					YES	ignore
>>>DCH Information Response		1..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		0..<maxnoof neighbouring RNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		0..<maxnoof FDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		0..<maxnoof TDDneighbours>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual	O				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Offset						
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.7.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		1			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>Cell GAI	Q				–	
>UTRAN Access Point Position	Q				–	
>UL Interference per Time Slot		1 .. <maxnoofULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>UL CCTrCH Information		1..<maxnoof CCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		1..<maxnoof DPCHs>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		1..<maxnoof CCTrCHs>			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		1..<maxnoof DPCHs>			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE <i>diversity indication</i>						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL	–	
>>Non combining					YES	ignore
>>>DCH Information Response		1..<maxnoof DCHs>		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>>Transport Layer Address	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		<i>0..<maxnoof neighbouringRNCs></i>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		<i>0..<maxnoof FDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu [TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd [TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		<i>0..<maxnoof TDDneighbours></i>				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt [TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1
Case2	This IE is present only if Sync Case = Case2.

Range Bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxnoOfDPCHs	Maximum number of DPCH in one CCTrCH
MaxnoofCCTrCHs	number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	ignore
Transaction ID	M				–	
UC-ID	M				YES	ignore
SAI	M				YES	ignore
Cell GAI	O				YES	ignore
C-RNTI	M				YES	ignore
S-RNTI	M				YES	ignore
D-RNTI	O				YES	ignore
L3 Information	M				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
URA ID	M				YES	ignore
Multiple URAs Indicator	M				YES	ignore
RNCs with Cells in the Accessed URA		0 .. <MaxRN CinURA- 1>			GLOBAL	ignore
>RNC-Id	M				–	

Range bound	Explanation
MaxRNCinURA	Maximum number of RNC in one URA

9.2.1.y 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. [23].

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
Cell GAI				
<u>>Geographical Coordinates</u>		<u>1..</u> <u><maxnoofPoints></u>		
<u>>>Latitude Sign</u>	<u>M</u>		<u>ENUMERATED (North, South)</u>	
<u>>>Degrees of Latitude</u>	<u>M</u>		<u>INTEGER (0...2²³-1)</u>	The IE value (N) is derived by this formula: $N \leq 2^{23} X / 90 < N+1$ X being the latitude in degree (0°.. 90°)
<u>>>Degrees of Longitude</u>	<u>M</u>		<u>INTEGER (-2²³...2²³-1)</u>	The IE value (N) is derived by this formula: $N \leq 2^{24} X / 360 < N+1$ X being the longitude in degree (-180°..+180°)

<u>Range bound</u>	<u>Explanation</u>
<u>maxnoofPoints</u>	<u>Maximum no. of points in polygon.</u>

9.2.1.z UTRAN Access Point Position

The UTRAN Access Point Position indicates the exact geographical position of the base station antenna.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>
<u>UTRAN Access Point Position</u>				
<u>>Latitude Sign</u>	<u>M</u>		<u>ENUMERATED (North, South)</u>	
<u>>Degrees of Latitude</u>	<u>M</u>		<u>INTEGER (0...2²³-1)</u>	<u>The IE value (N) is derived by this formula: N ≤ 2²³ X / 90 < N+1 X being the latitude in degree (0°.. 90°)</u>
<u>>Degrees of Longitude</u>	<u>M</u>		<u>INTEGER (-2²³...2²³-1)</u>	<u>The IE value (N) is derived by this formula: N ≤ 2²⁴ X / 360 < N+1 X being the longitude in degree (-180°..+180°)</u>

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
    DPCHConstantValue,
```

DPOCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
GA-AccessPointPosition,
GA-Cell,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,

```
S-FieldLength,  
S-RNTI,  
SCH-TimeSlot,  
SAI,  
SN,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
ScaledMaxAdjustmentPeriod,  
ScaledMaxAdjustmentStep,  
ScramblingCodeChange,  
SecondaryCCPCH-SlotFormat,  
SyncCase,  
TDD-ChannelisationCode,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TGD,  
TGL,  
TimeSlot,  
ToAWE,  
ToAWS,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TxDiversityIndicator,  
UARFCN,  
UC-ID,  
UL-DeltaSIR,  
UL-DeltaSIRAfter,  
UL-DL-CompressedModeSelection,  
UL-DPCCH-SlotFormat,  
UL-InterferenceLevel,  
UL-SIR,  
UL-FP-Mode,  
UL-ScramblingCode,  
URA-ID  
FROM RNSAP-IEs  
  
PrivateIE-Container{},  
ProtocolExtensionContainer{},  
ProtocolIE-ContainerList{},  
ProtocolIE-ContainerPair{},  
ProtocolIE-ContainerPairList{}
```

```
ProtocolIE-Container{} ,
RNSAP-PRIVATE-IES,
RNSAP-PROTOCOL-EXTENSION,
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-IES-PAIR
FROM RNSAP-Containers
```

```
maxNrOfCCTrCHs,
maxNrOfDCHs,
maxNrOfDL-Codes,
maxNrOfDPCHs,
maxNrOfMACcSDU-Length,
maxNrOfRLs,
maxNrOfRLSets,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfSCCPCHs,
maxNrOfULTs,
maxNrOfCMPatterns,
maxRNCinURA,
maxNrOfNeighbouringRNCs,
maxNrOfFDDNeighboursPerRNC,
maxNrOfTDDNeighboursPerRNC,
maxFACHCountPlus1,
maxIBSEG,
```

```
id-AllRLItem-DM-Rprt,
id-AllRLItem-DM-Rsp,
id-AllRL-SetItem-DM-Rprt,
id-AllRL-SetItem-DM-Rsp,
id-AllowedQueuingTime,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CellItem-PagingRqst,
id-CM-PatternInformationItem-CompressedModePrep,
id-CM-PatternInformationList-CompressedModePrep,
id-CombiningItem-RL-AdditionFailureFDD,
id-CombiningItem-RL-AdditionRspFDD,
id-CombiningItem-RL-AdditionRspTDD,
id-CombiningItem-RL-SetupFailureFDD,
id-CombiningItem-RL-SetupRspFDD,
id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
```

id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,
id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,

id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
id-GA-AccessPointPosition,
id-GA-Cell,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD,
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,

id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,

```

id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-SIRTarget,
id-URA-ID,
id-URAItem-PagingRqst,
id-UnsuccessfulRL-InformationResponse,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

```

```

-- *****
--
-- Common Container List
--
-- *****

```

```

DPCH-IE-ContainerList      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs, { IEsSetParam } }
RL-IE-ContainerList0      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1      { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs, { IEsSetParam } }
RL-IE-ContainerList1-1    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-1    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1, { IEsSetParam } }
RL-IE-ContainerList0-2    { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2, { IEsSetParam } }
RL-Set-IE-ContainerList   { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets, { IEsSetParam } }
CCTrCH-IE-ContainerList0  { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs, { IEsSetParam } }
CCTrCH-IE-ContainerList1  { RNSAP-PROTOCOL-IES : IEsSetParam } ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs, { IEsSetParam } }

```

[CR writer's comment: Unmodified message modules are not included in the CR.]

```

-- *****
--
-- 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          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier    CRITICALITY ignore TYPE CN-PS-DomainIdentifier    PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier    CRITICALITY ignore TYPE CN-CS-DomainIdentifier    PRESENCE optional } |
    { 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-DL-SIRTarget          CRITICALITY ignore TYPE DL-SIRTarget          PRESENCE optional } |
    { ID id-CriticalityDiagnostics    CRITICALITY ignore TYPE CriticalityDiagnostics    PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= RL-IE-ContainerList1 { {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-ID,
    rL-Set-ID      RL-Set-ID,
    sAI            SAI,
    gA-Cell        GA-Cell    OPTIONAL,
    gA-AccessPointPosition    GA-AccessPointPosition    OPTIONAL,
    ul-InterferenceLevel    UL-InterferenceLevel,
    secondary-CCPCH-Info    Secondary-CCPCH-Info-RL-SetupRspFDD    OPTIONAL,
    dl-CodeInformation    DL-CodeInformationList-RL-SetupRspFDD,
    diversityIndication    DiversityIndication-RL-SetupRspFDD,
    sSDT-SupportIndicator    SSDT-SupportIndicator,
    maxUL-SIR        UL-SIR,
    minUL-SIR        UL-SIR,
    maximumAllowedULTxPower    MaximumAllowedULTxPower,
    neighbouring-CellInformation    Neighbouring-CellInformationList-RL-SetupRsp    OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }    OPTIONAL,
    ...
}

```

```

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-SetupRspFDD ::= SEQUENCE {
    fdd-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                    TFCS,
    secondaryCCPCH-SlotFormat   SecondaryCCPCH-SlotFormat,
    tFCI-Presence              TFCI-Presence OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition       MultiplexingPosition,
    sTTD-Indicator            STTD-Indicator,
    fach-PCH-InformationList   Fach-PCH-InformationList-RL-SetupRspFDD,
    schedulingInformation      SchedulingInformation-RL-SetupRspFDD,
    iE-Extensions              ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Fach-PCH-InformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxFachCountPlus1)) OF Fach-PCH-InformationItem-RL-SetupRspFDD

Fach-PCH-InformationItem-RL-SetupRspFDD ::= SEQUENCE {
    transportFormatSet        TransportFormatSet,
    iE-Extensions             ProtocolExtensionContainer { { Fach-PCH-InformationItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

Fach-PCH-InformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-Rep                 IB-SG-REP,
    segmentInformationList    SegmentInformationList-RL-SetupRspFDD,
    iE-Extensions             ProtocolExtensionContainer { { SchedulingInformation-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

SchedulingInformation-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-SetupRspFDD

SegmentInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-POS                 IB-SG-POS,
    iE-Extensions             ProtocolExtensionContainer { { SegmentInformationItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

SegmentInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-SetupRspFDD

DL-CodeInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-SetupRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupRspFDD }}

DiversityIndicationIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-SetupRspFDD  CRITICALITY ignore TYPE      DiversityIndicationItem-RL-SetupRspFDD  PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-SetupRspFDD ::= CHOICE {
    combining                Combining-RL-SetupRspFDD,
    nonCombiningOrIENotPresent  NonCombiningOrIENotPresen-RL-SetupRspFDD,
    ...
}

Combining-RL-SetupRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupRspFDD }}

CombiningIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-SetupRspFDD  CRITICALITY ignore  TYPE CombiningItem-RL-SetupRspFDD PRESENCE mandatory },
    ...
}

CombiningItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrIENotPresen-RL-SetupRspFDD ::= ProtocolIE-Container {{ NonCombiningOrIENotPresenIE-RL-SetupRspFDD }}

NonCombiningOrIENotPresenIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningOrIENotPresenItem-RL-SetupRspFDD  CRITICALITY ignore  TYPE      NonCombiningOrIENotPresenItem-RL-SetupRspFDD  PRESENCE
    mandatory },

```

```

}
...
}
NonCombiningOrIENotPresenItem-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-SetupRspFDD      DCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}
NonCombiningOrIENotPresenItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
DCH-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupRspFDD
DCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions         ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}
DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
Neighbouring-CellInformationList-RL-SetupRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-SetupRsp }}
Neighbouring-CellInformationItemIE-RL-SetupRsp RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-CellInformationItem-RL-SetupRsp CRITICALITY ignore TYPE Neighbouring-CellInformationItem-RL-SetupRsp PRESENCE mandatory },
    ...
}
Neighbouring-CellInformationItem-RL-SetupRsp ::= SEQUENCE {
    rNC-ID                RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-SetupRsp OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
    ...
}
Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
Per-FDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-SetupRsp
Per-FDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {

```

```

c-ID                C-ID,
uARFCNforNu        UARFCN,
uARFCNforNd        UARFCN,
frameOffset        FrameOffset        OPTIONAL,
primaryScramblingCode PrimaryScramblingCode,
primaryCPICH-Power PrimaryCPICH-Power  OPTIONAL,
cellIndividualOffset CellIndividualOffset OPTIONAL,
txDiversityIndicator TxDiversityIndicator  OPTIONAL,
sTTD-SupportIndicator STTD-SupportIndicator  OPTIONAL,
closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator  OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator  OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs } } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-SetupRsp

Per-TDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
c-ID                C-ID,
uARFCNforNt        UARFCN,
frameOffset        FrameOffset        OPTIONAL,
cellParameterID    CellParameterID,
syncCase           SyncCase,
timeSlot           TimeSlot           OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sSCH-TimeSlot      SCH-TimeSlot      OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset CellIndividualOffset  OPTIONAL,
dPCHConstantValue  DPCHConstantValue  OPTIONAL,
pCCPCH-Power       PCCPCH-Power       OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs } } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {

```

```

    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupResponseTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}}
    ...
}

RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE optional } |
  { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
  { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE mandatory } |
  { ID id-UL-SIRTarget           CRITICALITY ignore TYPE UL-SIR                PRESENCE mandatory } |
  { ID id-DL-SIRTarget           CRITICALITY ignore TYPE DL-SIRTarget          PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  sAI                  SAI,
  gA-Cell              GA-Cell OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
  ul-InterferencePerTimeslot UL-InterferenceList-RL-SetupRspTDD,
  maxUL-SIR            UL-SIR,
  minUL-SIR            UL-SIR,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  ul-CCTrCHInformation UL-CCTrCHInformationList-RL-SetupRspTDD,
  dl-CCTrCHInformation DL-CCTrCHInformationList-RL-SetupRspTDD,
  dCH-InformationResponse DCH-InformationResponseList-RL-SetupRspTDD,
  neighbouring-CellInformationList Neighbouring-CellInformationList-RL-SetupRsp OPTIONAL,
  -- note: refer to "Neighbouring-CellInformationList-RL-SetupRsp" in the "RL Seup Response FDD
  iE-Extensions          ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-InterferenceList-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-SetupRspTDD

UL-InterferenceItem-RL-SetupRspTDD ::= SEQUENCE {
  timeSlot            TimeSlot,
  ul-InterferenceLevel UL-InterferenceLevel,
  iE-Extensions          ProtocolExtensionContainer { { UL-InterferenceItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-InterferenceItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

```



```

UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-SetupRspTDD    PRESENCE mandatory },
  ...
}

UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD

UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  ul-DPCH-Information    UL-DPCH-InformationList-RL-SetupRspTDD,
  iE-Extensions        ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {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 {
  dPCH-ID          DPCH-ID,
  tDD-ChannelisationCode    TDD-ChannelisationCode,
  burstType          BurstType,
  midambleShift      MidambleShift,
  timeSlot          TimeSlot,
  tDD-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
  repetitionPeriod    RepetitionPeriod,
  repetitionLength    RepetitionLength,
  tFCI-Presence      TFCI-Presence,
  iE-Extensions        ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-SetupRspTDD    PRESENCE mandatory },
  ...
}

DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD

DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {

```

```

    cCtRCH-ID                CCTrCH-ID,
    dl-DPCH-InformationList  DL-DPCH-InformationList-RL-SetupRspTDD,
    IE-Extensions           ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {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 {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode,
    burstType              BurstType,
    midambleShift          MidambleShift,
    timeSlot               TimeSlot,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod       RepetitionPeriod,
    repetitionLength       RepetitionLength,
    tFCI-Presence          TFCI-Presence,
    IE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Container {{DCH-InformationResponseListIEs-RL-SetupRspTDD}}

DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponseListIE-RL-SetupRspTDD  CRITICALITY ignore   TYPE DCH-InformationResponseListIE-RL-SetupRspTDD   PRESENCE
    mandatory },
    ...
}

DCH-InformationResponseListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupRspTDD

DCH-InformationResponseItem-RL-SetupRspTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID,
    transportLayerAddress TransportLayerAddress,
    IE-Extensions          ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```
DCH-InformationResponseItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

```
RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

```

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}    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 ::= RL-IE-ContainerList1-1 { {RL-InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
    CRITICALITY ignore    TYPE RL-InformationResponseItem-RL-AdditionRspFDD    PRESENCE mandatory },
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    sAI                  SAI,
    gA-Cell              GA-Cell    OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition    OPTIONAL,
    ul-InterferenceLevel    UL-InterferenceLevel,
    secondary-CCPCH-Info    Secondary-CCPCH-Info-RL-AdditionRspFDD    OPTIONAL,
    dl-CodeInformation      DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication      DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator    SSDT-SupportIndicator,
    minUL-SIR              UL-SIR,
    maxUL-SIR              UL-SIR,
    maximumAllowedULTxPower    MaximumAllowedULTxPower,
    neighbouring-CellInformation    Neighbouring-CellInformationList-RL-SetupRsp    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }    OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset      FDD-S-CCPCH-Offset,
    dl-ScramblingCode        DL-ScramblingCode,

```

```

fDD-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
dl-TFCS                               TFCS,
secondaryCCPCH-SlotFormat             SecondaryCCPCH-SlotFormat,
tFCI-Presence                         TFCI-Presence OPTIONAL,
-- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
multiplexingPosition                 MultiplexingPosition,
sTTD-Indicator                        STTD-Indicator,
fACH-PCH-InformationList              FACH-PCH-InformationList-RL-AdditionRspFDD,
schedulingInformation                 SchedulingInformation-RL-AdditionRspFDD,
iE-Extensions                         ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-AdditionRspFDD

FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
transportFormatSet                    TransportFormatSet,
iE-Extensions                         ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
...
}

FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
iB-SG-Rep                             IB-SG-REP,
segmentInformationList                 SegmentInformationList-RL-AdditionRspFDD,
iE-Extensions                         ProtocolExtensionContainer { { SchedulingInformation-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
...
}

SchedulingInformation-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-AdditionRspFDD

SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
iB-SG-POS                             IB-SG-POS,
iE-Extensions                         ProtocolExtensionContainer { { SegmentInformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
...
}

SegmentInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}

```

```

DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CodeInformationListIE-RL-AdditionRspFDD  CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionRspFDD  PRESENCE mandatory },
  ...
}

DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionRspFDD

DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
  dl-ScramblingCode          DL-ScramblingCode,
  fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
  iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionRspFDD }}

DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DiversityIndicationItem-RL-AdditionRspFDD  CRITICALITY ignore TYPE DiversityIndicationItem-RL-AdditionRspFDD  PRESENCE mandatory },
  ...
}

DiversityIndicationItem-RL-AdditionRspFDD ::= CHOICE {
  combining                  Combining-RL-AdditionRspFDD,
  nonCombining               NonCombining-RL-AdditionRspFDD,
  ...
}

Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}

CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-AdditionRspFDD  CRITICALITY ignore TYPE CombiningItem-RL-AdditionRspFDD  PRESENCE mandatory },
  ...
}

CombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  iE-Extensions              ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}

NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-NonCombiningItem-RL-AdditionRspFDD CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspFDD PRESENCE mandatory },
    ...
}

NonCombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionRspFDD DCH-InformationResponseList-RL-AdditionRspFDD,
    iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspFDD

DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-ID DCH-ID,
    bindingID BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRsp

Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
    rNC-ID RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRsp

Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID C-ID,
    uARFCNforNu UARFCN,
    uARFCNforNd UARFCN,
    frameOffset FrameOffset OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,

```

```

cellIndividualOffset      CellIndividualOffset      OPTIONAL,
txDiversityIndicator      TxDiversityIndicator      OPTIONAL,
sTTD-SupportIndicator     STTD-SupportIndicator     OPTIONAL,
closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRsp

Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
c-ID                      C-ID,
uARFCNforNt              UARFCN,
frameOffset              FrameOffset      OPTIONAL,
cellParameterID         CellParameterID,
syncCase                SyncCase,
timeSlot                TimeSlot      OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot            SCH-TimeSlot      OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset    CellIndividualOffset OPTIONAL,
dPCHConstantValue      DPCHConstantValue OPTIONAL,
pCCPCH-Power           PCCPCH-Power,
iE-Extensions          ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
protocolIEs              ProtocolIE-Container      {{RadioLinkAdditionResponseTDD-IEs}},
protocolExtensions      ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}
...
}

RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {

```



```

    { ID id-RL-InformationResponse-RL-AdditionRspTDD
      CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics
      CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
  }

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  sAI SAI,
  gA-Cell GA-Cell OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
  ul-InteferencePerTimeslot UL-InterferenceList-RL-AdditionRspTDD,
  ul-CCTrCHInformation UL-CCTrCHInformationList-RL-AdditionRspTDD,
  dl-CCTrCHInformation DL-CCTrCHInformationList-RL-AdditionRspTDD,
  diversityIndication DiversityIndication-RL-AdditionRspTDD,
  minUL-SIR UL-SIR,
  maxUL-SIR UL-SIR,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  neighbouring-CellInformationList Neighbouring-CellInformationList-RL-AdditionRspTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-InterferenceList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-AdditionRspTDD

UL-InterferenceItem-RL-AdditionRspTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  ul-InterferenceLevel UL-InterferenceLevel,
  iE-Extensions ProtocolExtensionContainer { { UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-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 {
  cCCTrCH-ID CCTrCH-ID,
  ul-DPCH-Information UL-DPCH-InformationList-RL-AdditionRspTDD,

```

```

    iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode,
    burstType              BurstType,
    midambleShift          MidambleShift,
    timeSlot               TimeSlot,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod       RepetitionPeriod,
    repetitionLength       RepetitionLength,
    tFCI-Presence          TFCI-Presence,
    iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}

DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD PRESENCE
    mandatory },
    ...
}

DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD

DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cTrCH-ID                CCTrCH-ID,
    dl-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRspTDD,
    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
  dPCH-ID                DPCH-ID,
  tDD-ChannelisationCode TDD-ChannelisationCode,
  burstType              BurstType,
  midambleShift          MidambleShift,
  timeSlot               TimeSlot,
  tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod       RepetitionPeriod,
  repetitionLength       RepetitionLength,
  tFCI-Presence          TFCI-Presence,
  iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-AdditionRspTDD ::= ProtocolIE-Container {{DiversityIndicationIE-RL-AdditionRspTDD}}

DiversityIndicationIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DiversityIndicationItem-RL-AdditionRspTDD  CRITICALITY ignore   TYPE DiversityIndicationItem-RL-AdditionRspTDD  PRESENCE mandatory },
  ...
}

DiversityIndicationItem-RL-AdditionRspTDD ::= CHOICE {
  combining      Combining-RL-AdditionRspTDD,
  nonCombining  NonCombining-RL-AdditionRspTDD,
  ...
}

Combining-RL-AdditionRspTDD ::= ProtocolIE-Container {{CombiningIE-RL-AdditionRspTDD}}

CombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-AdditionRspTDD  CRITICALITY ignore   TYPE CombiningItem-RL-AdditionRspTDD  PRESENCE mandatory },
  ...
}

CombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombining-RL-AdditionRspTDD ::= ProtocolIE-Container {{NonCombiningIE-RL-AdditionRspTDD}}

NonCombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionRspTDD CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspTDD PRESENCE mandatory },
    ...
}

NonCombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionRspFDD DCH-InformationResponseList-RL-AdditionRspFDD,
    iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspTDD

DCH-InformationResponseItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-ID DCH-ID,
    bindingID BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRspTDD

Neighbouring-CellInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    rNC-ID RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
Per-FDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRspTDD
```

```
Per-FDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  c-ID                C-ID,
  uARFCNforNu         UARFCN,
  uARFCNforNg         UARFCN,
  frameOffset         FrameOffset          OPTIONAL,
  primaryScramblingCode PrimaryScramblingCode,
  primaryCPICH-Power PrimaryCPICH-Power    OPTIONAL,
  cellIndividualOffset CellIndividualOffset  OPTIONAL,
  txDiversityIndicator TxDiversityIndicator  OPTIONAL,
  sTTD-SupportIndicator STTD-SupportIndicator  OPTIONAL,
  closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator  OPTIONAL,
  closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator  OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
  ...
}
```

```
Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Per-TDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRspTDD
```

```
Per-TDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  c-ID                C-ID,
  uARFCNforNt         UARFCN,
  frameOffset         FrameOffset          OPTIONAL,
  cellParameterID     CellParameterID,
  syncCase            SyncCase,
  timeSlot            TimeSlot            OPTIONAL
  -- This IE is present only if Sync Case = Case1 -- ,
  sCH-TimeSlot        SCH-TimeSlot        OPTIONAL
  -- This IE is present only if Sync Case = Case2 -- ,
  cellIndividualOffset CellIndividualOffset  OPTIONAL,
  dPCHConstantValue   DPCHConstantValue    OPTIONAL,
  pCCPCH-Power        PCCPCH-Power,
  iE-Extensions       ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
  ...
}
```

```
Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```

-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION
--
-- *****

UplinkSignallingTransferIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{UplinkSignallingTransferIndication-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{UplinkSignallingTransferIndication-Extensions}} OPTIONAL,
    ...
}

UplinkSignallingTransferIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID                CRITICALITY ignore TYPE UC-ID                PRESENCE mandatory } |
    { ID id-SAI                  CRITICALITY ignore TYPE SAI                  PRESENCE mandatory } |
    { 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-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-ID              CRITICALITY ignore TYPE URA-ID              PRESENCE mandatory } |
    { ID id-MultipleURAsIndicator CRITICALITY ignore TYPE MultipleURAsIndicator PRESENCE mandatory } |
    { ID id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind CRITICALITY ignore TYPE RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind PRESENCE optional },
    ...
}

RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind ::= SEQUENCE (SIZE (0..maxRNCinURA)) OF RNCsWithCellsInTheAccessedURA-Item-UL-ST-Ind

RNCsWithCellsInTheAccessedURA-Item-UL-ST-Ind ::= SEQUENCE {
    rNC-ID                      RNC-ID,
    iE-Extensions               ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind-ExtIEs} } OPTIONAL,
    ...
}

RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UplinkSignallingTransferIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

9.3.4 Information Element Definitions

```

-- *****
--
-- Information Element Definitions
--
-- *****

RNSAP-IEs -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxNrOfErrors,
    maxRateMatching,
    maxNrOfPoints,
    maxNrOfTFCS,
    maxNrOfTFs,
    maxCTFC-1,
    maxTTI-Count
FROM RNSAP-Constants

    Criticality,
    ProcedureCode,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

AllocationRetentionPriority ::= FrameHandlingPriority

AllowedQueuingTime ::= INTEGER (0..60)
-- seconds

-- B

BetaCD ::= INTEGER (0..15)

BindingID ::= OCTET STRING (SIZE (1..4,...))

BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BurstType ::= ENUMERATED {

```

```
    type1 (1),
    type2 (2)
}

-- 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 {
    transaction-not-allowed,
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    ...
}

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,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    unspecified,
    ...
}

CauseTransport ::= ENUMERATED {
    transmission-link-failure,
    transmission-port-not-available,
```



```
    unspecified,  
    ...  
}  
  
C-ID ::= INTEGER (0..65535)  
  
CCTrCH-ID ::= INTEGER (0..15)  
  
CellIndividualOffset ::= INTEGER (-20..20)  
  
CellParameterID ::= INTEGER (0..127)  
  
CFN ::= INTEGER (0..255)  
  
CFNOffset ::= INTEGER (0..255)  
  
ChannelCodingType ::= ENUMERATED {  
    no-coding,  
    convolutional-coding,  
    turbo-coding  
}  
  
ChipOffset ::= INTEGER (0..38399)  
  
ClosedLoopModel-SupportIndicator ::= ENUMERATED {  
    closedLoop-Model-Supported,  
    closedLoop-Model-not-Supported  
}  
  
ClosedLoopMode2-SupportIndicator ::= ENUMERATED {  
    closedLoop-Mode2-Supported,  
    closedLoop-Mode2-not-Supported  
}  
  
CodingRate ::= ENUMERATED {  
    half,  
    third  
}  
  
CompressedModeMethod ::= ENUMERATED {  
    none,  
    puncturing,  
    half-SF,  
    higher-Layer-Schduling  
}  
  
CRC-Size ::= ENUMERATED {  
    v0,  
    v8,  
    v12,  
    v16,  
    v24  
}
```

```

CriticalityDiagnostics ::= SEQUENCE {
    procedureCode          ProcedureCode          OPTIONAL,
    triggeringMessage      TriggeringMessage      OPTIONAL,
    criticalityResponse    Criticality            OPTIONAL,
    transactionID         TransactionID          OPTIONAL,
    iEsCriticalityResponses CriticalityDiagnostics-IE-List,
    iE-Extensions         ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        criticalityResponse    Criticality,
        iE-ID                 ProtocolIE-ID,
        repetitionNumber       RepetitionNumber    OPTIONAL,
        iE-Extensions         ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
        ...
    }

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CTFC ::= INTEGER (0..maxCTFC-1)

CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID    PLMN-ID,
    lAC       LAC,
    iE-Extensions    ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID    PLMN-ID,
    lAC       LAC,
    rAC       RAC,
    iE-Extensions    ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

C-RNTI ::= INTEGER (0..65535)

```

```
-- D

DCH-CombinationInd      ::= INTEGER (0..255)

DCH-ID                  ::= INTEGER (0..255)

DedicatedMeasurementObjectType ::= ENUMERATED {
    rl,
    rls,
    all-rl,
    all-rls,
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    ...
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue    SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP              RSCP-Value, -- TDD only
    ...
}

DiversityControlField  ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode          ::= ENUMERATED {
    none,
    sTTD,
    closedLoopMode1,
    closedLoopMode2
}

DL-DPCH-SlotFormat     ::= INTEGER (0..16)

DL-SIRTarget           ::= UL-SIR

DL-Power               ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

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,
    ...
}

DPCH-ID                    ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-32..31)
-- Unit dBm, Step 1dBm

DRACControl      ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (2..12)

D-FieldLength ::= ENUMERATED {
    v1,
    v2
}

-- E

EventA ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
    ...
}

EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventB ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
    ...
}

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,
    iE-Extensions                          ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
    ...
}

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,
    iE-Extensions                          ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
    ...
}

EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- F

FACH-InitialWindowSize ::= INTEGER { unlimited(255) } (0..255)

```

```

-- Number of frames MAC-c SDUs.
-- 255 = Unlimited number of FACH data frames

FDD-DL-ChannelisationCodeNumber ::= INTEGER (0..255)

FDD-S-CCPCH-Offset ::= INTEGER (0..149)

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    ...
}

FACH-PriorityIndicator ::= INTEGER { lowest(0), highest(15) } (0..15)

FrameHandlingPriority ::= INTEGER { lowest(0), highest(15) } (0..15)

FrameOffset ::= INTEGER (0..255)
-- Frames

-- G

GapPositionMode ::= ENUMERATED {
    fixed,
    flexible
}

GapPeriod ::= INTEGER (0..255)

GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
    SEQUENCE {
        geographicalCoordinate GeographicalCoordinate,
        iE-Extensions ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
        ...
    }

GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-AccessPoint ::= 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),
iE-Extensions     ProtocolExtensionContainer { {GeographicalCoordinate-ExtIEs} } OPTIONAL,
...
}

GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

-- H
```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitiationFDD          INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD          INTEGER ::= 1
id-commonTransportChannelResourcesRelease                INTEGER ::= 2
id-compressedModeCancellationFDD                        INTEGER ::= 3
id-compressedModeCommitFDD                              INTEGER ::= 4
id-compressedModePrepareFDD                             INTEGER ::= 5
id-downlinkPowerControl                                 INTEGER ::= 6
id-downlinkSignallingTransfer                            INTEGER ::= 7
id-errorIndication                                      INTEGER ::= 8
id-measurementFailure                                   INTEGER ::= 9
id-measurementInitiation                                INTEGER ::= 10
id-measurementReporting                                  INTEGER ::= 11
id-measurementTermination                               INTEGER ::= 12
id-pagingRequest                                        INTEGER ::= 13
id-physicalChannelReconfiguration                       INTEGER ::= 14
id-privateMessage                                       INTEGER ::= 15
id-radioLinkAddition                                    INTEGER ::= 16
id-radioLinkDeletion                                    INTEGER ::= 17
id-radioLinkFailure                                     INTEGER ::= 18
id-radioLinkRestoration                                 INTEGER ::= 19
id-radioLinkSetup                                       INTEGER ::= 20
id-srnsRelocationCommit                                 INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation      INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit           INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare          INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration               INTEGER ::= 25
id-uplinkSignallingTransfer                             INTEGER ::= 26

-- *****
--
-- Extension constants
--

```



```
-- *****
maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions        INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535
```

```
-- *****
--
-- Lists
--
-- *****
```

```
maxRateMatching              INTEGER ::= 10
maxNrOfTFCs                  INTEGER ::= 10
maxNrOfTFs                    INTEGER ::= 10
maxNrOfCCTrCHs               INTEGER ::= 10
maxNrOfDCHs                   INTEGER ::= 10
maxNrOfDL-Codes               INTEGER ::= 10
maxNrOfDPCHs                  INTEGER ::= 10
maxNrOfErrors                  INTEGER ::= 10
maxNrOfMACcSDU-Length         INTEGER ::= 10
maxNrOfPoints                 INTEGER ::= 15
maxNrOfRLs                    INTEGER ::= 10
maxNrOfRLSets                 INTEGER ::= 10
maxNrOfRLs-1                  INTEGER ::= 10
maxNrOfRLs-2                  INTEGER ::= 10
maxNrOfSCCPCHs                INTEGER ::= 10
maxNrOfULTs                    INTEGER ::= 15
maxNrOfCMPatterns             INTEGER ::= 8
maxRNCinURA                  INTEGER ::= 10
maxTTI-Count                  INTEGER ::= 10
maxCTFC-1                     INTEGER ::= 10
maxNrOfNeighbouringRNCs       INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC    INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC    INTEGER ::= 10
maxFACHCountPlus1             INTEGER ::= 10
maxIBSEG                       INTEGER ::= 16
```

```
-- *****
--
-- IEs
--
-- *****
```

```
id-AllRLItem-DM-Rprt          INTEGER ::= 0
id-AllRLItem-DM-Rsp           INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt      INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp       INTEGER ::= 3
id-AllowedQueuingTime         INTEGER ::= 4
id-BindingID                   INTEGER ::= 5
id-C-ID                        INTEGER ::= 6
```

id-C-RNTI	INTEGER ::= 7
id-CFN	INTEGER ::= 8
id-CN-CS-DomainIdentifier	INTEGER ::= 9
id-CN-PS-DomainIdentifier	INTEGER ::= 10
id-Cause	INTEGER ::= 11
id-CellItem-PagingRqst	INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep	INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep	INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD	INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD	INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD	INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD	INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD	INTEGER ::= 19
id-CriticalityDiagnostics	INTEGER ::= 20
id-D-RNTI	INTEGER ::= 21
id-D-RNTI-ReleaseIndication	INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD	INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD	INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp	INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD	INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD	INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD	INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD	INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD	INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD	INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD	INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD	INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD	INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD	INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD	INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp	INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD	INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD	INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD	INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD	INTEGER ::= 42
id-DCH-InformationResponseListIE-RL-SetupRspTDD	INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD	INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD	INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD	INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD	INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD	INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD	INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 59

id-DL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 65
id-DL-SIRTarget	INTEGER ::= 66
id-DLReferencePower	INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst	INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	INTEGER ::= 69
id-DRXCycleLengthCoefficient	INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	INTEGER ::= 73
id-DedicatedMeasurementType	INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD	INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD	INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD	INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD	INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD	INTEGER ::= 79
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspFDD	INTEGER ::= 80
id-FACH-InfoForOptionals-CCPCH-CTCH-ResourceRspTDD	INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD	INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD	INTEGER ::= 83
id-IMSI	INTEGER ::= 84
id-L3-Information	INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD	INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD	INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 89
id-MaxAdjustmentPeriod	INTEGER ::= 90
id-MaxAdjustmentStep	INTEGER ::= 91
id-MeasurementFilterCoefficient	INTEGER ::= 92
id-MeasurementID	INTEGER ::= 93
id-MultipleURAsIndicator	INTEGER ::= 94
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD	INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp	INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD	INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD	INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD	INTEGER ::= 99
id-NonCombiningOrIENotPresentItem-RL-SetupFailureFDD	INTEGER ::= 100
id-NonCombiningOrIENotPresentItem-RL-SetupRspFDD	INTEGER ::= 101
id-PagingArea-PagingRqst	INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD	INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD	INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD	INTEGER ::= 105
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD	INTEGER ::= 106
id-PowerAdjustmentType	INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst	INTEGER ::= 108
id-RANAP-RelocationInformation	INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD	INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD	INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD	INTEGER ::= 112

id-RL-Information-RL-AdditionRqstTDD	INTEGER ::= 113
id-RL-Information-RL-DeletionRqst	INTEGER ::= 114
id-RL-Information-RL-FailureInd	INTEGER ::= 115
id-RL-Information-RL-ReconfPrepFDD	INTEGER ::= 116
id-RL-Information-RL-RestoreInd	INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD	INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD	INTEGER ::= 119
id-RL-InformationItem-DM-Rprt	INTEGER ::= 120
id-RL-InformationItem-DM-Rqst	INTEGER ::= 121
id-RL-InformationItem-DM-Rsp	INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD	INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD	INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst	INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD	INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	INTEGER ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp	INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	INTEGER ::= 135
id-RL-InformationResponseList-RL-ReconfRsp	INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD	INTEGER ::= 137
id-RLItem-DM-Rprt	INTEGER ::= 138
id-RLItem-DM-Rqst	INTEGER ::= 139
id-RLItem-DM-Rsp	INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail	INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail	INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt	INTEGER ::= 143
id-RL-Set-InformationItem-DM-Rqst	INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp	INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd	INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd	INTEGER ::= 147
id-RL-SetItem-DM-Rprt	INTEGER ::= 148
id-RL-SetItem-DM-Rqst	INTEGER ::= 149
id-RL-SetItem-DM-Rsp	INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind	INTEGER ::= 151
id-ReportCharacteristics	INTEGER ::= 152
id-Reporting-Object-RL-FailureInd	INTEGER ::= 153
id-Reporting-Object-RL-RestoreInd	INTEGER ::= 154
id-S-RNTI	INTEGER ::= 155
id-SAI	INTEGER ::= 156
id-SRNC-ID	INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD	INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 162
id-TransportBearerID	INTEGER ::= 163
id-TransportBearerRequestIndicator	INTEGER ::= 164
id-TransportLayerAddress	INTEGER ::= 165

id-UC-ID	INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD	INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD	INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD	INTEGER ::= 169
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD	INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	INTEGER ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	INTEGER ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	INTEGER ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	INTEGER ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	INTEGER ::= 182
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD	INTEGER ::= 183
id-UL-SIRTarget	INTEGER ::= 184
id-URA-ID	INTEGER ::= 185
id-URAIItem-PagingRqst	INTEGER ::= 186
id-UnsuccessfulRL-InformationResponse	INTEGER ::= 187
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	INTEGER ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	INTEGER ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	INTEGER ::= 190
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD	INTEGER ::= 191
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD	INTEGER ::= 192
<u>id-GA-Cell</u>	<u>INTEGER ::= 193</u>
<u>id-GA-AccessPointPosition</u>	<u>INTEGER ::= 194</u>

END

[CR writer's comment: End of modifications to ASN.1 part.]

CHANGE REQUEST		Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.
25.423	CR	138
GSM (AA.BB) or 3G (AA.BBB) specification number ↑		↑ CR number as allocated by MCC support team
For submission to: TSG RAN #8 <small>list expected approval meeting # here</small>		Current Version: 3.1.0
for approval <input checked="" type="checkbox"/>		strategic <input type="checkbox"/>
for information <input type="checkbox"/>		non-strategic <input type="checkbox"/>
		(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: R-WG3 **Date:** April 2000

Subject: Structure of Chapter 9.1 in RNSAP

Work item:

Category:	F Correction <input type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input checked="" type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
------------------	--	-----------------	--

(only one category shall be marked with an X)

Reason for change:

In the current xxxAP specifications the structure of chapter 9.1 is not aligned. Some specifications have a subchapter structure and some others do not. Some specifications have a table of all xxxAP messages and some others do not.

To unify the structure of chapter 9.1 this CR changes the structure to be:

- 9.1 Message Functional Definition and Content
 - 9.1.1 General
 - 9.1.2 Message Contents
 - 9.1.2.1 Presence
 - 9.1.2.2 Criticality
 - 9.1.3 <First Message>

Where chapter 9.1.1 shall not include any table of messages.

Clauses affected: 9.1.1

Other specs	Other 3G core specifications	<input checked="" type="checkbox"/>	→ List of CRs:	25.413 CR121, 25.419 CR001, 25.433 CR160
affected:	Other GSM core specifications	<input type="checkbox"/>	→ List of CRs:	
	MS test specifications	<input type="checkbox"/>	→ List of CRs:	
	BSS test specifications	<input type="checkbox"/>	→ List of CRs:	
	O&M specifications	<input type="checkbox"/>	→ List of CRs:	

Other comments:

9.1 Message Functional Definition and Content

9.1.1 General

This subclause defines the structure of the messages required for the RNSAP protocols.

All the RNSAP messages are listed in the following table:

Message name	Reference
RADIO-LINK-SETUP-REQUEST	9-1.3
RADIO-LINK-SETUP-RESPONSE	9-1.4
RADIO-LINK-SETUP-FAILURE	9-1.5
RADIO-LINK-ADDITION-REQUEST	9-1.6
RADIO-LINK-ADDITION-RESPONSE	9-1.7
RADIO-LINK-ADDITION-FAILURE	9-1.8
RADIO-LINK-DELETION-REQUEST	9-1.9
RADIO-LINK-DELETION-RESPONSE	9-1.10
RADIO-LINK-RECONFIGURATION-PREPARE	9-1.11
RADIO-LINK-RECONFIGURATION-READY	9-1.12
RADIO-LINK-RECONFIGURATION-COMMIT	9-1.13
RADIO-LINK-RECONFIGURATION-FAILURE	9-1.14
RADIO-LINK-RECONFIGURATION-CANCEL	9-1.15
RADIO-LINK-RECONFIGURATION-REQUEST	9-1.16
RADIO-LINK-RECONFIGURATION-RESPONSE	9-1.17
RADIO-LINK-FAILURE-INDICATION	9-1.18
RADIO-LINK-RESTORE-INDICATION	9-1.19
DL-POWER-CONTROL-REQUEST	9-1.20
PHYSICAL-CHANNEL-RECONFIGURATION-REQUEST	9-1.21
PHYSICAL-CHANNEL-RECONFIGURATION-COMMAND	9-1.22
PHYSICAL-CHANNEL-RECONFIGURATION-FAILURE	9-1.23
UPLINK-SIGNALLING-TRANSFER-INDICATION	9-1.24
DOWNLINK-SIGNALLING-TRANSFER-REQUEST	9-1.25
RELOCATION-COMMIT	9-1.26
PAGING-REQUEST	9-1.27
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9.1.2 Message Contents

9.1.2.1 Presence

An information element can be of the following *types*:

M	The information element is mandatory, i.e. always present in the message
O	The information element is optional, i.e. may or may not be present in the message independently on the presence or value of other information elements in the same message
C#	The presence of the information element is conditional to the presence or to the value of another information element, as reported in the table below the message containing the explanation of the condition.

In case of an information element group, the group is preceded by a name for the info group (in bold). It is also indicated how many times a group may be repeated in the message and whether the group is conditional. 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 a criticality information applied to it. Following cases are possible:

-	No criticality information is applied explicitly.
YES	Criticality information is applied. 'YES' is usable only for non-repeatable information elements.
GLOBAL	The information element and all its repetitions together have one common criticality information. 'GLOBAL' is usable only for repeatable information elements.
EACH	Each repetition of the information element has its own criticality information. It is not allowed to assign different criticality values to the repetitions. 'EACH' is usable only for repeatable information elements.

TSG-RAN Working Group 3 Meeting #13
Hawaii, USA, 22nd – 26th May 2000

Document **R3-001638**

e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.423

CR

140 R1

Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **TSG RAN #8**

list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects:

(at least one should be marked with an X)

(U)SIM

ME

UTRAN / Radio

Core Network

Source:

R-WG3

Date:

April 2000

Subject:

Clarification of Transformation of Tabular Format Choices based on IEs to ASN.1 Choices

Work item:

Category:

(only one category shall be marked with an X)

F Correction

A Corresponds to a correction in an earlier release

B Addition of feature

C Functional modification of feature

D Editorial modification

Release:

Phase 2

Release 96

Release 97

Release 98

Release 99

Release 00

Reason for change:

In the current RNSAP specification there are some cases where an IE and the choice based on the IE in the Tabular Format is transformed into only a choice in the ASN.1. This applies to the following IEs:

- Diversity Indication (RL SETUP RESPONSE [FDD], RL SETUP FAILURE [FDD], RL ADDITION RESPONSE, and RL ADDITION FAILURE [FDD])
- Dedicated Measurement Object Type (DEDICATED MEASUREMENT INITIATION REQUEST)

This CR clarifies the transformation of the above IEs by adding a comment into the PDU definition module.

Clauses affected:

9.3.3

Other specs affected:

Other 3G core specifications

Other GSM core specifications

MS test specifications

BSS test specifications

O&M specifications

→ List of CRs:

→ List of CRs:

→ List of CRs:

→ List of CRs:

→ List of CRs:

Other comments:

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

.
.
.
Skipped parts of the ASN.1 module.
.
.
.

-- *****
--
-- 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          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier    CRITICALITY ignore TYPE CN-PS-DomainIdentifier    PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier    CRITICALITY ignore TYPE CN-CS-DomainIdentifier    PRESENCE optional } |
    { 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-DL-SIRTarget          CRITICALITY ignore TYPE DL-SIRTarget          PRESENCE optional } |
    { ID id-CriticalityDiagnostics    CRITICALITY ignore TYPE CriticalityDiagnostics    PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= RL-IE-ContainerList1 { {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-ID,
    rL-Set-ID            RL-Set-ID,
    sAI                  SAI,
    ul-InterferenceLevel UL-InterferenceLevel,
    secondary-CCPCH-Info Secondary-CCPCH-Info-RL-SetupRspFDD OPTIONAL,
    dl-CodeInformation   DL-CodeInformationList-RL-SetupRspFDD,
    diversityIndication DiversityIndication-RL-SetupRspFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    sSDT-SupportIndicator SSDT-SupportIndicator,
    maxUL-SIR             UL-SIR,
    minUL-SIR             UL-SIR,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    neighbouring-CellInformation Neighbouring-CellInformationList-RL-SetupRsp OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-SetupRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset    FDD-S-CCPCH-Offset,
    dl-ScramblingCode     DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS               TFCS,
    secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
    tFCI-Presence         TFCI-Presence OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition  MultiplexingPosition,
    sTTD-Indicator        STTD-Indicator,
    fACH-PCH-InformationList FACH-PCH-InformationList-RL-SetupRspFDD,
    schedulingInformation SchedulingInformation-RL-SetupRspFDD,
    iE-Extensions         ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-SetupRspFDD

FACH-PCH-InformationItem-RL-SetupRspFDD ::= SEQUENCE {
    transportFormatSet    TransportFormatSet,
    iE-Extensions         ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-Rep                IB-SG-REP,
    segmentInformationList    SegmentInformationList-RL-SetupRspFDD,
    iE-Extensions            ProtocolExtensionContainer { { SchedulingInformation-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

SchedulingInformation-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-SetupRspFDD

SegmentInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-POS                IB-SG-POS,
    iE-Extensions            ProtocolExtensionContainer { { SegmentInformationItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

SegmentInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-SetupRspFDD

DL-CodeInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    dl-ScramblingCode        DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    iE-Extensions            ProtocolExtensionContainer { {DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-SetupRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupRspFDD }}

DiversityIndicationIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-SetupRspFDD CRITICALITY ignore TYPE DiversityIndicationItem-RL-SetupRspFDD PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-SetupRspFDD ::= CHOICE {
    combining                Combining-RL-SetupRspFDD,
    nonCombiningOrIENotPresent NonCombiningOrIENotPresen-RL-SetupRspFDD,
    ...
}

```

```

}

Combining-RL-SetupRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupRspFDD }}

CombiningIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE CombiningItem-RL-SetupRspFDD PRESENCE mandatory },
  ...
}

CombiningItem-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions  ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrIEnotPresen-RL-SetupRspFDD ::= ProtocolIE-Container {{ NonCombiningOrIEnotPresenIE-RL-SetupRspFDD }}

NonCombiningOrIEnotPresenIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE NonCombiningOrIEnotPresenItem-RL-SetupRspFDD PRESENCE
  mandatory },
  ...
}

NonCombiningOrIEnotPresenItem-RL-SetupRspFDD ::= SEQUENCE {
  dCH-InformationResponse-RL-SetupRspFDD   DCH-InformationResponseList-RL-SetupRspFDD OPTIONAL,
  iE-Extensions                             ProtocolExtensionContainer { { NonCombiningOrIEnotPresenItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningOrIEnotPresenItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupRspFDD

DCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
  dCH-ID          DCH-ID,
  bindingID       BindingID,
  transportLayerAddress TransportLayerAddress,
  iE-Extensions  ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

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```
Neighbouring-CellInformationList-RL-SetupRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-CellInformationItemIE-RL-SetupRsp }}
```

```
Neighbouring-CellInformationItemIE-RL-SetupRsp RNSAP-PROTOCOL-IES ::= {  
  { ID id-Neighbouring-CellInformationItem-RL-SetupRsp CRITICALITY ignore TYPE Neighbouring-CellInformationItem-RL-SetupRsp PRESENCE  
    mandatory },  
  ...  
}
```

```
Neighbouring-CellInformationItem-RL-SetupRsp ::= SEQUENCE {  
  rNC-ID RNC-ID,  
  cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,  
  cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,  
  per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-SetupRsp OPTIONAL,  
  per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-SetupRsp OPTIONAL,  
  iE-Extensions ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,  
  ...  
}
```

```
Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
Per-FDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-SetupRsp
```

```
Per-FDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {  
  c-ID C-ID,  
  uARFCNforNu UARFCN,  
  uARFCNforNd UARFCN,  
  frameOffset FrameOffset OPTIONAL,  
  primaryScramblingCode PrimaryScramblingCode,  
  primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,  
  cellIndividualOffset CellIndividualOffset OPTIONAL,  
  txDiversityIndicator TxDiversityIndicator OPTIONAL,  
  sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,  
  closedLoopMode1-SupportIndicator ClosedLoopMode1-SupportIndicator OPTIONAL,  
  closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,  
  iE-Extensions ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,  
  ...  
}
```

```
Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {  
  ...  
}
```

```
Per-TDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-SetupRsp
```

```
Per-TDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {  
  c-ID C-ID,  
  uARFCNforNt UARFCN,  
  frameOffset FrameOffset OPTIONAL,  
  ...  
}
```

```

cellParameterID          CellParameterID,
syncCase                 SyncCase,
timeSlot                 TimeSlot          OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot            SCH-TimeSlot      OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset    CellIndividualOffset  OPTIONAL,
dPCHConstantValue      DPCHConstantValue  OPTIONAL,
pCCPCH-Power           PCCPCH-Power      OPTIONAL,
iE-Extensions          ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

.
.
.
Skipped parts of the ASN.1 module.
.
.
.

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponseList-RL-
SetupFailureFDD PRESENCE mandatory } |
    { ID id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD CRITICALITY ignore TYPE SuccessfulRL-InformationResponseList-RL-
SetupFailureFDD PRESENCE optional } |
    { ID id-UL-SIRTarget    CRITICALITY ignore TYPE UL-SIR          PRESENCE optional } |
    { ID id-DL-SIRTarget    CRITICALITY ignore TYPE DL-SIRTarget    PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

```

```

}
...
}
UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList1-1 { {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,
  iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList0-1 { {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 ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  SAI SAI,
  ul-InterferenceLevel UL-InterferenceLevel,
  dl-CodeInformation DL-CodeInformationList-RL-SetupFailureFDD,
  diversityIndication DiversityIndication-RL-SetupFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  sSDT-SupportIndicator SSDT-SupportIndicator,
  maxUL-SIR UL-SIR,
  minUL-SIR UL-SIR,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  neighbouring-CellInformationList Neighbouring-CellInformationList-RL-SetupFailureFDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
}

DL-CodeInformationList-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-SetupFailureFDD }}

DL-CodeInformationListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CodeInformationListIE-RL-SetupFailureFDD   CRITICALITY ignore   TYPE DL-CodeInformationListIE-RL-SetupFailureFDD   PRESENCE mandatory
},
  ...
}

DL-CodeInformationListIE-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-SetupFailureFDD

DL-CodeInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
  dl-ScramblingCode          DL-ScramblingCode,
  fDD-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
  iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CodeInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupFailureFDD }}

DiversityIndicationIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DiversityIndicationItem-RL-SetupFailureFDD   CRITICALITY ignore TYPE      DiversityIndicationItem-RL-SetupFailureFDD   PRESENCE mandatory },
  ...
}

DiversityIndicationItem-RL-SetupFailureFDD ::= CHOICE {
  combining          Combining-RL-SetupFailureFDD,
  nonCombiningOrIENotPresent      NonCombiningOrIENotPresen-RL-SetupFailureFDD,
  ...
}

Combining-RL-SetupFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupFailureFDD }}

CombiningIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-SetupFailureFDD   CRITICALITY ignore   TYPE CombiningItem-RL-SetupFailureFDD   PRESENCE mandatory },
  ...
}

CombiningItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID              RL-ID,
  iE-Extensions      ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

```

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```
CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrIENotPresen-RL-SetupFailureFDD ::= ProtocolIE-Container {{ NonCombiningOrIENotPresenIE-RL-SetupFailureFDD }}

NonCombiningOrIENotPresenIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningOrIENotPresenItem-RL-SetupFailureFDD    CRITICALITY ignore    TYPE    NonCombiningOrIENotPresenItem-RL-SetupFailureFDD    PRESENCE
    mandatory },
    ...
}

NonCombiningOrIENotPresenItem-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-SetupFailureFDD    DCH-InformationResponseList-RL-SetupFailureFDD    OPTIONAL,
    IE-Extensions    ProtocolExtensionContainer { { NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningOrIENotPresenItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupFailureFDD

DCH-InformationResponseItem-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-ID    DCH-ID,
    bindingID    BindingID,
    transportLayerAddress    TransportLayerAddress,
    IE-Extensions    ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-
CellInformationItemIE-RL-SetupFailureFDD }}

Neighbouring-CellInformationItemIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-CellInformationItem-RL-SetupFailureFDD    CRITICALITY ignore    TYPE    Neighbouring-CellInformationItem-RL-SetupFailureFDD
    PRESENCE    mandatory },
    ...
}

Neighbouring-CellInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    rNC-ID    RNC-ID,
    cN-PS-DomainIdentifier    CN-PS-DomainIdentifier    OPTIONAL,
    cN-CS-DomainIdentifier    CN-CS-DomainIdentifier    OPTIONAL,
    per-FDD-Cell-InformationList    Per-FDD-Cell-InformationList-RL-SetupFailureFDD    OPTIONAL,
    per-TDD-Cell-InformationList    Per-TDD-Cell-InformationList-RL-SetupFailureFDD    OPTIONAL,
```

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```
iE-Extensions          ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

Neighbouring-CellInformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-FDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-SetupFailureFDD

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
c-ID                    C-ID,
uARFCNforNu            UARFCN,
uARFCNforNd            UARFCN,
frameOffset            FrameOffset          OPTIONAL,
primaryScramblingCode PrimaryScramblingCode,
primaryCPICH-Power    PrimaryCPICH-Power    OPTIONAL,
cellIndividualOffset  CellIndividualOffset  OPTIONAL,
txDiversityIndicator  TxDiversityIndicator  OPTIONAL,
sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
iE-Extensions          ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-SetupFailureFDD

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
c-ID                    C-ID,
uARFCNforNt            UARFCN,
frameOffset            FrameOffset          OPTIONAL,
cellParameterID        CellParameterID,
syncCase                SyncCase,
timeSlot                TimeSlot            OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot            SCH-TimeSlot        OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset    CellIndividualOffset  OPTIONAL,
dPCHConstantValue       DPCHConstantValue  OPTIONAL,
pCCPCH-Power            PCCPCH-Power,
iE-Extensions          ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
```

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```
}

RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
.
.
.
Skipped parts of the ASN.1 module.
.
.
.

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}} 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 ::= RL-IE-ContainerList1-1 { {RL-InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-AdditionRspFDD
    CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD    PRESENCE mandatory },
  ...
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  rL-Set-ID      RL-Set-ID,
  sAI            SAI,
  ul-InterferenceLevel  UL-InterferenceLevel,
  secondary-CCPCH-Info  Secondary-CCPCH-Info-RL-AdditionRspFDD    OPTIONAL,
  dl-CodeInformation  DL-CodeInformationList-RL-AdditionRspFDD,
  diversityIndication  DiversityIndication-RL-AdditionRspFDD,
  -- 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,
}
```

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```
minUL-SIR                UL-SIR,
maxUL-SIR                UL-SIR,
maximumAllowedULTxPower  MaximumAllowedULTxPower,
neighbouring-CellInformation  Neighbouring-CellInformationList-RL-SetupRsp  OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
fDD-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
dl-ScramblingCode          DL-ScramblingCode,
fDD-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
dl-TFCS                    TFCS,
secondaryCCPCH-SlotFormat  SecondaryCCPCH-SlotFormat,
tFCI-Presence              TFCI-Presence  OPTIONAL,
-- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
multiplexingPosition        MultiplexingPosition,
sTTD-Indicator             sTTD-Indicator,
fACH-PCH-InformationList   FACH-PCH-InformationList-RL-AdditionRspFDD,
schedulingInformation      SchedulingInformation-RL-AdditionRspFDD,
iE-Extensions              ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
...
}

FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-AdditionRspFDD

FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
transportFormatSet         TransportFormatSet,
iE-Extensions              ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
...
}

FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
iB-SG-Rep                  IB-SG-REP,
segmentInformationList     SegmentInformationList-RL-AdditionRspFDD,
iE-Extensions              ProtocolExtensionContainer { { SchedulingInformation-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
...
}
```

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```
SchedulingInformation-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-AdditionRspFDD

SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-POS                IB-SG-POS,
    iE-Extensions            ProtocolExtensionContainer { { SegmentInformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

SegmentInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}

DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-AdditionRspFDD    CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionRspFDD    PRESENCE mandatory },
    ...
}

DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionRspFDD

DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    dl-ScramblingCode        DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber    FDD-DL-ChannelisationCodeNumber,
    iE-Extensions            ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionRspFDD }}

DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionRspFDD    CRITICALITY ignore TYPE DiversityIndicationItem-RL-AdditionRspFDD    PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-AdditionRspFDD ::= CHOICE {
    combining                Combining-RL-AdditionRspFDD,
    nonCombining             NonCombining-RL-AdditionRspFDD,
    ...
}

Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}
```

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```
CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-AdditionRspFDD   CRITICALITY ignore   TYPE CombiningItem-RL-AdditionRspFDD   PRESENCE mandatory },
  ...
}

CombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions  ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}

NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-NonCombiningItem-RL-AdditionRspFDD   CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspFDD   PRESENCE mandatory },
  ...
}

NonCombiningItem-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-InformationResponse-RL-AdditionRspFDD  DCH-InformationResponseList-RL-AdditionRspFDD,
  iE-Extensions                               ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspFDD

DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-ID          DCH-ID,
  bindingID       BindingID,
  transportLayerAddress  TransportLayerAddress,
  iE-Extensions  ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRsp

Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
  rNC-ID          RNC-ID,
  cN-PS-DomainIdentifier  CN-PS-DomainIdentifier  OPTIONAL,
```

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```

    cN-CS-DomainIdentifier          CN-CS-DomainIdentifier    OPTIONAL,
    per-FDD-Cell-InformationList    Per-FDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    per-TDD-Cell-InformationList    Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRsp

Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNu                     UARFCN,
    uARFCNforNd                     UARFCN,
    frameOffset                    FrameOffset          OPTIONAL,
    primaryScramblingCode           PrimaryScramblingCode,
    primaryCPICH-Power              PrimaryCPICH-Power    OPTIONAL,
    cellIndividualOffset            CellIndividualOffset  OPTIONAL,
    txDiversityIndicator            TxDiversityIndicator  OPTIONAL,
    sTTD-SupportIndicator           STTD-SupportIndicator  OPTIONAL,
    closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator  OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator  OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRsp

Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                    FrameOffset          OPTIONAL,
    cellParameterID                CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot        OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset  OPTIONAL,
    dPCHConstantValue              DPCHConstantValue    OPTIONAL,
    pCCPCH-Power                   PCCPCH-Power,
    iE-Extensions                  ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

```



```

Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkAdditionResponseFDD-Extensions 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 mandatory } |
  { ID id-CriticalityDiagnostics
    CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  sAI                  SAI,
  ul-InteferencePerTimeslot
  UL-InterferenceList-RL-AdditionRspTDD,
  ul-CCTrCHInformation
  UL-CCTrCHInformationList-RL-AdditionRspTDD,
  dl-CCTrCHInformation
  DL-CCTrCHInformationList-RL-AdditionRspTDD,
  diversityIndication
  DiversityIndication-RL-AdditionRspTDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  minUL-SIR            UL-SIR,
  maxUL-SIR            UL-SIR,
  maximumAllowedULTxPower
  MaximumAllowedULTxPower,
  neighbouring-CellInformationList
  Neighbouring-CellInformationList-RL-AdditionRspTDD OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-InterferenceList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-AdditionRspTDD

```

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```
UL-InterferenceItem-RL-AdditionRspTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    ul-InterferenceLevel    UL-InterferenceLevel,
    iE-Extensions           ProtocolExtensionContainer { { UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-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,
    iE-Extensions           ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode  TDD-ChannelisationCode,
    burstType              BurstType,
    midambleShift          MidambleShift,
    timeSlot                TimeSlot,
    tDD-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tFCI-Presence           TFCI-Presence,
    iE-Extensions           ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}
```

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```
}

UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}

DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD    PRESENCE mandatory
    },
    ...
}

DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD

DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cTrCH-ID                CCTrCH-ID,
    dl-DPCH-Information     DL-DPCH-InformationList-RL-AdditionRspTDD,
    iE-Extensions           ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {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 {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode,
    burstType              BurstType,
    midambleShift          MidambleShift,
    timeSlot               TimeSlot,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionPeriod       RepetitionPeriod,
    repetitionLength       RepetitionLength,
    tFCI-Presence          TFCI-Presence,
    iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

DiversityIndication-RL-AdditionRspTDD ::= ProtocolIE-Container {{DiversityIndicationIE-RL-AdditionRspTDD}}

DiversityIndicationIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DiversityIndicationItem-RL-AdditionRspTDD  CRITICALITY ignore  TYPE DiversityIndicationItem-RL-AdditionRspTDD  PRESENCE mandatory },
  ...
}

DiversityIndicationItem-RL-AdditionRspTDD ::= CHOICE {
  combining      Combining-RL-AdditionRspTDD,
  nonCombining   NonCombining-RL-AdditionRspTDD,
  ...
}

Combining-RL-AdditionRspTDD ::= ProtocolIE-Container {{CombiningIE-RL-AdditionRspTDD}}

CombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-CombiningItem-RL-AdditionRspTDD  CRITICALITY ignore  TYPE CombiningItem-RL-AdditionRspTDD  PRESENCE mandatory },
  ...
}

CombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombining-RL-AdditionRspTDD ::= ProtocolIE-Container {{NonCombiningIE-RL-AdditionRspTDD}}

NonCombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-NonCombiningItem-RL-AdditionRspTDD  CRITICALITY ignore  TYPE NonCombiningItem-RL-AdditionRspTDD  PRESENCE mandatory },
  ...
}

NonCombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
  dCH-InformationResponse-RL-AdditionRspFDD      DCH-InformationResponseList-RL-AdditionRspFDD,
  iE-Extensions ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-InformationResponseList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspTDD

DCH-InformationResponseItem-RL-AdditionRspTDD ::= SEQUENCE {
  dCH-ID          DCH-ID,

```

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```
bindingID                BindingID,
transportLayerAddress    TransportLayerAddress,
iE-Extensions            ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
...
}

DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Neighbouring-CellInformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRspTDD

Neighbouring-CellInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
rNC-ID                    RNC-ID,
cN-PS-DomainIdentifier    CN-PS-DomainIdentifier    OPTIONAL,
cN-CS-DomainIdentifier    CN-CS-DomainIdentifier    OPTIONAL,
per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionRspTDD OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
...
}

Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-FDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionRspTDD

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
c-ID                      C-ID,
uARFCNforNu              UARFCN,
uARFCNforNd              UARFCN,
frameOffset              FrameOffset    OPTIONAL,
primaryScramblingCode    PrimaryScramblingCode,
primaryCPICH-Power       PrimaryCPICH-Power    OPTIONAL,
cellIndividualOffset     CellIndividualOffset    OPTIONAL,
txDiversityIndicator     TxDiversityIndicator    OPTIONAL,
sTTD-SupportIndicator    STTD-SupportIndicator    OPTIONAL,
closedLoopMode1-SupportIndicator ClosedLoopMode1-SupportIndicator    OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator    OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionRspTDD
```

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```
Per-TDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNt        UARFCN,
    frameOffset        FrameOffset        OPTIONAL,
    cellParameterID    CellParameterID,
    syncCase           SyncCase,
    timeSlot           TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot       SCH-TimeSlot        OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    dPCHConstantValue DPCHConstantValue   OPTIONAL,
    pCCPCH-Power       PCCPCH-Power,
    iE-Extensions      ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionResponseTDD-Extensions 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-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE UnsuccessfulRL-InformationResponseList-RL-
AdditionFailureFDD      PRESENCE mandatory } |
    { ID id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE SuccessfulRL-InformationResponseList-RL-
AdditionFailureFDD      PRESENCE optional } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional },
    ...
}

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList1-1 { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-
IEs} }

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
```

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```
{ ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD
AdditionFailureFDD PRESENCE mandatory },
...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList0-2 { {SuccessfulRL-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,
  sAI SAI,
  ul-InterferenceLevel UL-InterferenceLevel,
  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,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  neighbouring-CellInformationList Neighbouring-CellInformationList-RL-AdditionFailureFDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }}

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CodeInformationListIE-RL-AdditionFailureFDD CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionFailureFDD PRESENCE
  mandatory },
```

```

}
...
}
DL-CodeInformationListIE-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionFailureFDD

DL-CodeInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    iE-Extensions              ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionFailureFDD }}

DiversityIndicationIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionFailureFDD  CRITICALITY ignore  TYPE      DiversityIndicationItem-RL-AdditionFailureFDD  PRESENCE
mandatory },
    ...
}

DiversityIndicationItem-RL-AdditionFailureFDD ::= CHOICE {
    combining          Combining-RL-AdditionFailureFDD,
    nonCombining      NonCombining-RL-AdditionFailureFDD,
    ...
}

Combining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionFailureFDD }}

CombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionFailureFDD  CRITICALITY ignore  TYPE CombiningItem-RL-AdditionFailureFDD  PRESENCE mandatory },
    ...
}

CombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    iE-Extensions      ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionFailureFDD }}

NonCombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionFailureFDD  CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionFailureFDD  PRESENCE mandatory },

```



```

}
...
}
NonCombiningItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionFailureFDD    DCH-InformationResponseList-RL-AdditionFailureFDD,
    iE-Extensions                                     ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionFailureFDD

DCH-InformationResponseItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    bindingID             BindingID,
    transportLayerAddress TransportLayerAddress,
    iE-Extensions         ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-CellInformationList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionFailureFDD

Neighbouring-CellInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rNC-ID                RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier    OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier    OPTIONAL,
    per-FDD-Cell-InformationList Per-FDD-Cell-InformationList-RL-AdditionFailureFDD    OPTIONAL,
    per-TDD-Cell-InformationList Per-TDD-Cell-InformationList-RL-AdditionFailureFDD    OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC)) OF Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNu        UARFCN,
    uARFCNforNd        UARFCN,

```

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```
frameOffset          FrameOffset          OPTIONAL,
primaryScramblingCode PrimaryScramblingCode,
primaryCPICH-Power   PrimaryCPICH-Power   OPTIONAL,
cellIndividualOffset CellIndividualOffset OPTIONAL,
txDiversityIndicator TxDiversityIndicator OPTIONAL,
STTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
...
}

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Per-TDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC)) OF Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
c-ID                  C-ID,
uARFCNforNt          UARFCN,
frameOffset          FrameOffset          OPTIONAL,
cellParameterID      CellParameterID,
syncCase             SyncCase,
timeSlot             TimeSlot          OPTIONAL
-- This IE is present only if Sync Case = Case1 -- ,
sCH-TimeSlot         SCH-TimeSlot      OPTIONAL
-- This IE is present only if Sync Case = Case2 -- ,
cellIndividualOffset CellIndividualOffset OPTIONAL,
dPCHConstantValue    DPCHConstantValue OPTIONAL,
pCCPCH-Power         PCCPCH-Power,
iE-Extensions        ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
...
}

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

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```

```

-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****

DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
    ...
}

DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID                CRITICALITY reject TYPE MeasurementID                PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rqst CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rqst PRESENCE mandatory } |
    -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID 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 },
    ...
}

DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
    rL                RL-DM-Rqst,
    rLS               RL-Set-DM-Rqst,
    ...
}

RL-DM-Rqst ::= ProtocolIE-Container { { RLIE-DM-Rqst } }

RLIE-DM-Rqst RNSAP-PROTOCOL-IES ::= {
    { ID id-RLItem-DM-Rqst                CRITICALITY reject TYPE RLItem-DM-Rqst                PRESENCE mandatory },
    ...
}

RLItem-DM-Rqst ::= SEQUENCE {
    rL-InformationList-DM-Rqst          RL-InformationList-DM-Rqst,
    iE-Extensions                       ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rqst                ::= RL-IE-ContainerList1 { {RL-Information-DM-Rqst-IEs} }

RL-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rqst    CRITICALITY reject TYPE RL-InformationItem-DM-Rqst    PRESENCE mandatory },
    ...
}

```

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```
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rqst ::= ProtocolIE-Container { { RL-SetIE-DM-Rqst } }

RL-SetIE-DM-Rqst RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-SetItem-DM-Rqst    CRITICALITY reject  TYPE RL-SetItem-DM-Rqst    PRESENCE mandatory },
    ...
}

RL-SetItem-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-Rqst                ::= RL-Set-IE-ContainerList { {RL-Set-Information-DM-Rqst-IEs} }

RL-Set-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rqst    CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rqst    PRESENCE mandatory },
    ...
}

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    iE-Extensions            ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

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