TSG-RAN Meeting #15
Cheju, Korea, 5 - 8 March 2002

TSGRP#15(02) 0192

Title: **Change requests for WI "Iur Neighbouring cell reporting Efficiency Optimisation"**

Source: **TSG-RAN WG3**

RP_Num	Tdoc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	Workitem
RP-020192	R3-020747	25.423	553	1	Rel-5	Introduction of cell capability container over Iur	B	4.3.0	RANimp-RRMopt-ncr

3GPP TSG-RAN3 Meeting #27 ***Tdoc R3-020747***
Orlando, Florida, USA, 18th – 22nd February 2002

CR-Form-v5

CHANGE REQUEST

⌘ **25.423** **CR** **553** ⌘ **rev** **1** ⌘ Current version: **4.3.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network **X** Core Network ☐

Title:	⌘	Introduction of cell capability container over Iur
Source:	⌘	R-WG3
Work item code:	⌘	RANimp-RRMopt-ncr
Date:	⌘	2002-February
Category:	⌘	**B**
Release:	⌘	REL5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change: ⌘ Several functionalities were approved to be included in Rel-5. In order to have different release nodes in one UTRAN, it is a good idea to introduce a "functionality Support Indicator" over Iur. With this indicator, SRNC can know the capability of the cell controlled by another RNC. However, it is not reasonable to introduce each indicator directly because one indicator requires one protocol container, i.e. four bytes. Therefore, it is proposed to introduce Cell Capability Container. This container is defined as BIT SRTING type. It is also proposed that bit "1" indicates that the cell can support the corresponding functionality. This CR is handling an optimisation for Rel-5 and later neighbouring cell capabilities.

Summary of change: ⌘ Rev.1

- In Neighbouring Cell Handling paragraphs, tagging was removed.
- Spelling error of BIT STRING was corrected.
- Delayed Activation Support Indicator was added to each *Cell Capability Container* IE.
- Identifiers were allocated.

Rev.0

Cell Capability Container IE was added to;

- UPLINK SIGNALLING TRANSFER INDICATION message,
- *Neighbouring FDD Cell Information* IE,
- *Neighbouring TDD Cell Information* IE,
- *Neighbouring TDD Cell Information LCR* IE.

This container is BIT STRING type (32 bits seems enough) and each bit is corresponding to individual functionality, e.g. the first bit is corresponding to functionality "A", the second bit is corresponding to functionality "B" and so on.

Consequences if ⌘ If this CR is not approved, unnecessary bytes are required when introduceing a

not approved:	functionality support indicator. Impact Analysis: Impact assessment towards the previous version of the specification (same release): As this CR handles a modification that is due to appear in the first version of the Release 5 specification, there is no previous version (same release) of the specification to consider. Compatibility Analysis towards previous release: This CR has no impact because Cell Capability Container was introduced in backward compatible way.

Clauses affected:	⌘	8.2.1.2, 8.3.1.2, 8.3.2.1, 9.1.24.1, 9.1.24.2, 9.2.1.41B, 9.2.1.41D, 9.2.1.72, 9.3.3, 9.3.4 and 9.3.6.
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	If this CR is approved, Rel-5 CR requiring a functionality support indicator needs to consider Cell Capability Container.

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at:
http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.1 Uplink SignallingTransfer

8.2.1.1 General

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

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

8.2.1.2 Successful Operation

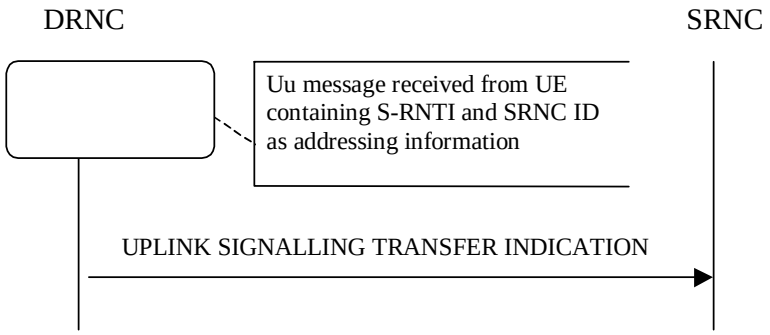

Figure 1: Uplink Signalling Transfer procedure, Successful Operation

When the DRNC receives an Uu message on the CCCH 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.

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

The DRNC shall include in the message the C-RNTI that it allocates to identify the UE in the radio interface in the accessed cell. If there is no valid C-RNTI for the UE in the accessed cell , the DRNS shall allocate a new C-RNTI for the UE. If the DRNS allocates a new C-RNTI it shall also release any C-RNTI previously allocated for the UE.

If the DRNS has any RACH, [FDD - CPCH], and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell, the DRNS shall release these RACH, [FDD - CPCH,] and/or FACH resources.

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

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

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

The DRNC shall include [FDD - the *Cell Capability Container FDD* IE], [3.84Mcps TDD - the *Cell Capability Container TDD* IE] and/or [1.28Mcps TDD - the *Cell Capability Container TDD LCR* IE] in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports any functionalities listed in [FDD - 9.2.1.xx], [3.84Mcps TDD - 9.2.1.yy] and [1.28 Mcps - TDD 9.2.1.zz].

<Not affected part is omitted>

8.3.1 Radio Link Setup

8.3.1.1 General

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

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

8.3.1.2 Successful Operation

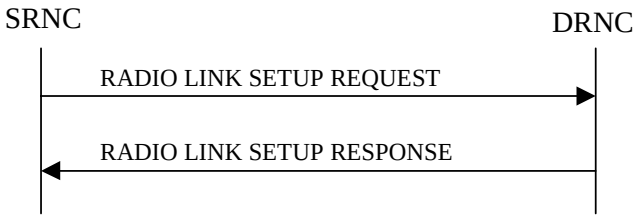

Figure 5: Radio Link Setup procedure: Successful Operation

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

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

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

If no *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message, the DRNC shall assign a new D-RNTI for this UE.

Transport Channels Handling:

DCH(s):

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

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

[FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [4]. 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. [4].]

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

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

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

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

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

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

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

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

DSCH(s):

If the *DSCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall establish the requested DSCHs [FDD - on the RL indicated by the PDSCH RL ID IE]. In addition, the DRNC shall send a valid set of *DSCH Scheduling Priority* IE and *MAC-c/sh SDU Length* IE parameters to the SRNC in the message RADIO LINK SETUP RESPONSE message.

[TDD - USCH(s)]:

[TDD – The DRNS shall use the list of RB Identities in the *RB Info* IE in the *USCH information* IE to map each *RB Identity* IE to the corresponding USCH.]

Physical Channels Handling:

[FDD - Compressed Mode]:

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

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

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

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

- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the DRNS shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

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

[FDD - DL Code Information]:

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

General:

[FDD - If the *Propagation Delay* IE is included, the DRNS may use this information to speed up the detection of UL synchronisation on the Uu interface.]

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

Radio Link Handling:

Diversity Combination Control:

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

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that the RL is combined with another RL RL for all RLs but the first RL. In this case the Reference *RL ID* IE shall be included to indicate with which RL the combination is performed. The Reference *RL ID* IE shall not be included for the first 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 and USCH of the RL.]

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

[FDD-Transmit Diversity]:

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

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

DL Power Control:

[FDD - If both the *Initial DL TX Power* IE and *Uplink SIR Target* IE are included in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value. If the value of the *Initial DL TX Power* IE is outside the configured DL TX power range, the DRNS shall apply these constrains when setting the initial DL TX power. The DRNS shall also include the configured DL TX

power range defined by *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power IE* or lower than indicated by the *Minimum DL TX Power IE* on any DL DPCH of the RL except during compressed mode, when the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

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

[FDD - If the *Primary CPICH Ec/No* IE 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 [3.84Mcps TDD - *DL Time Slot ISCP Info* IE] and/or the [1.28Mcps TDD - *DL Time Slot ISCP Info LCR* IE] are present, the DRNC should use the indicated values 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 on the Uu interface for the concerning RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10] subclause 5.2.1.2) and the power control procedure (see 8.3.7).]

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

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

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

Neighbouring Cell Handling:

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

- The DRNC shall include the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include the *Frame Offset* IE, *Primary CPICH Power* IE, *Cell Individual Offset* IE, *STTD Support Indicator* IE, *Closed Loop Mode1 Support Indicator* IE and *Closed Loop Mode2 Support Indicator* IE in the *Neighbouring FDD Cell Information* IE, and the *Frame Offset* IE, *Cell Individual Offset* IE, *DPCH Constant Value* IE and the *PCCPCH Power* IE in the *Neighbouring TDD Cell Information* IE.

- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include the *CN PS Domain Identifier* IE and/or *CN CS Domain Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.

- [FDD - The DRNC shall include the *DPC Mode Change Support Indicator* IE if the DRNC is aware that the neighbouring cell supports DPC mode change.]

- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionalities listed in 9.2.1.xx, 9.2.1.yy and 9.2.1.zz.

For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK SETUP RESPONSE message the restriction state of those cells, otherwise *Restriction state indicator* IE may be absent. The DRNC shall include the *Restriction state indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.

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

<Not affected part is omitted>

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

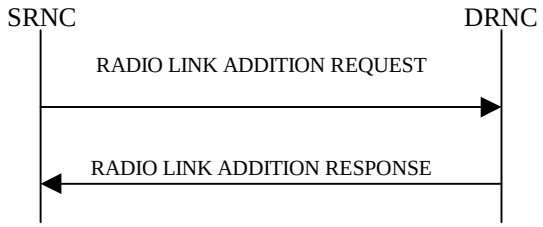

Figure 7: Radio Link Addition procedure: Successful Operation

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

Transport Channel Handling:

DSCH:

[TDD - If the radio link to be added includes a DSCH, the DRNC shall send a set of valid *DSCH Scheduling Priority* IE and *MAC-c/sh SDU Length* IE parameters to the SRNC in the message RADIO LINK ADDITION RESPONSE message.]

Physical Channels Handling:

[FDD-Compressed Mode]:

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Active Pattern Sequence Information* IE, the DRNS shall use the information to activate the indicated (all ongoing) Transmission

Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* IE refers to the latest passed CFN with that value. The DRNS shall treat the received *TGCFN* IEs as follows:]

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

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

- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information* IE, the DRNS shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN* IE for the Transmission Gap Pattern Sequence.]

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

[FDD - If some Transmission Gap Pattern sequences using SF/2 method are initialised in the DRNS, DRNS shall include the *Transmission Gap Pattern Sequence Scrambling Code Information IE* in the RADIO LINK ADDITION RESPONSE message to indicate the Scrambling code change method that it selects for each channelisation code.]

[FDD-DL Code Information]:

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

General:

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

Radio Link Handling:

Diversity Combination Control:

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

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* IE 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.

[FDD - In the case of combining one or more RLs being established by this procedure, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message with the *Diversity Indication* IE that the RL is combined with another RL for all RLs but the first RL. In this case the Reference RL ID shall be included to indicate one of the other RLs being established by this procedure that the new RL is combined with. The Reference *RL ID* IE shall not be included for the first of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

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* IE that no combining is done. 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, [TDD – and DSCH, USCH] of the RL in the RADIO LINK ADDITION RESPONSE message.

In case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be included for only one of the DCHs in the set of co-ordinated DCHs.

If the DRNS need to limit the user rate in the uplink of a DCH already when starting to utilise a new Radio Link, the DRNC shall include the *Allowed UL Rate* IE of the *Allowed Rate Information* IE in the *DCH Information Response* IE for this DCH in the RADIO LINK ADDITION RESPONSE message for this Radio Link.

If the DRNS need to limit the user rate in the downlink of a DCH already when starting to utilise a new Radio Link, the DRNC shall include the *Allowed DL Rate* IE of the *Allowed Rate Information* IE in the *DCH Information Response* IE for this DCH in the RADIO LINK ADDITION RESPONSE message for this Radio Link.

[FDD-Transmit Diversity]:

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

[FDD – If the cell in which the RL is being added is capable to provide Close loop Tx diversity, the DRNC shall 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.]

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

DL Power Control:

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

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

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

[TDD – The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RL. No 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 - If the *DPC Mode* IE is present in the RADIO LINK ADDITION REQUEST message, the DRNC shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK ADDITION REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

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

The DRNC shall provide the configured *Maximum DL TX Power* IE and *Minimum DL TX Power* IE for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power IE* or lower than indicated by the *Minimum DL TX Power IE* on any DL DPCH of the RL [FDD – except during compressed mode, when the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k].

DL Code Information:

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.

Neighbouring Cell Handling:

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

- The DRNC shall include the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include the *Frame Offset* IE, *Primary CPICH Power* IE, *Cell Individual Offset* IE, *STTD Support Indicator* IE, *Closed Loop Mode1 Support Indicator* IE and *Closed Loop Mode2 Support Indicator* IE in the *Neighbouring FDD Cell Information* IE, and the *Frame Offset* IE, *Cell Individual Offset* IE, *DPCH Constant Value* IE and the *PCCPCH Power* IE in the *Neighbouring TDD Cell Information* IE.

- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include the *CN PS Domain Identifier* IE and/or *CN CS Domain Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.

- [FDD - The DRNC shall include the *DPC Mode Change Support Indicator* IE if the DRNC is aware that the neighbouring cell supports DPC mode change.]

- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionalities listed in 9.2.1.xx, 9.2.1.yy and 9.2.1.zz.

For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK SETUP RESPONSE message the restriction state of those cells, otherwise *Restriction state indicator* IE may be absent. The DRNC shall include the *Restriction state indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.

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

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

<Not affected part is omitted>

9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
UC-Id	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	O		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
Propagation Delay	M		9.2.2.33		YES	ignore
STTD Support Indicator	M		9.2.2.45		YES	ignore
Closed Loop Mode1 Support Indicator	M		9.2.2.2		YES	ignore
Closed Loop Mode2 Support Indicator	M		9.2.2.3		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
DPC Mode Change Support Indicator	O		9.2.2.56		YES	ignore
Cell Capability Container FDD	O		9.2.2.xx		YES	ignore
Cell Capability Container TDD	O		9.2.3.xx		YES	ignore
Cell Capability Container TDD LCR	O		9.2.3.xx		YES	ignore

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
UC-Id	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	O		9.2.1.5A		YES	Ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
Rx Timing Deviation	M		9.2.3.7A		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
Cell Capability Container FDD	O		9.2.2.xx		YES	ignore
Cell Capability Container TDD	O		9.2.3.xx		YES	ignore
Cell Capability Container TDD LCR	O		9.2.3.xx		YES	ignore

<Not affected part is omitted>

9.2.1.xx Cell Capability Container FDD

The Cell Capability Container FDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container FDD			BIT STRTING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Flexible Hard Split Support Indicator The second bit: Delayed Activation Support Indicator Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

9.2.1.yy Cell Capability Container TDD

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container TDD			BIT STRTING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

9.2.1.zz Cell Capability Container TDD LCR

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

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container TDD LCR			BIT STRTING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

<Not affected part is omitted>

9.2.1.41B Neighbouring FDD Cell Information

The *Neighbouring FDD Cell Information* IE provides information for FDD cells that are a neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Neighbouring FDD Cell Information		*1..<maxnoofFDDneighbours>*			–	
>C-Id	M		9.2.1.6		–	
>UL UARFCN	M		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	–	
>DL UARFCN	M		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	–	
>Frame Offset	O		9.2.1.30		–	
>Primary Scrambling Code	M		9.2.1.45		–	
>Primary CPICH Power	O		9.2.1.44		–	
>Cell Individual Offset	O		9.2.1.7		–	
>Tx Diversity Indicator	M		9.2.2.50			
>STTD Support Indicator	O		9.2.2.45		–	
>Closed Loop Mode1 Support Indicator	O		9.2.2.2		–	
>Closed Loop Mode2 Support Indicator	O		9.2.2.3		–	
>Restriction State Indicator	O		9.2.1.48C		YES	ignore
>DPC Mode Change Support Indicator	O		9.2.2.56		YES	ignore
>Cell Capability Container FDD	O		9.2.2.xx		YES	ignore

<Not affected part is omitted>

9.2.1.41D Neighbouring TDD Cell Information

The *Neighbouring TDD Cell Information* IE provides information for 3.84Mcps TDD cells that are a neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information		*1..<maxnooofTDDneighbours>*			–	
>C-Id	M		9.2.1.6		–	
>UARFCN	M		9.2.1.66	Corresponds to Nt in ref. [7]	–	
>Frame Offset	O		9.2.1.30		–	
>Cell Parameter ID	M		9.2.1.8		–	
>Sync Case	M		9.2.1.54		–	
>Time Slot	C-Case1		9.2.1.56		–	
>SCH Time Slot	C-Case2		9.2.1.51		–	
>SCTD Indicator	M		9.2.1.78		–	
>Cell Individual Offset	O		9.2.1.7		–	
>DPCH Constant Value	O		9.2.1.23		–	
>PCCPCH Power	O		9.2.1.43		–	
>Restriction State Indicator	O		9.2.1.48C		YES	ignore
>Cell Capability Container TDD	O		9.2.3.xx		YES	ignore

<Not affected part is omitted>

9.2.1.72 Neighbouring TDD Cell Information LCR

The *Neighbouring TDD Cell Information LCR* IE provides information for 1.28Mcps TDD cells that are a neighbouring cells to a cell in the DRNC.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Neighbouring TDD Cell Information LCR		*1..<maxnoofLCRTDDneighbours>*			–	
>C-Id	M		9.2.1.6		–	
>UARFCN	M		9.2.1.66	Corresponds to Nt in ref. [7]	–	
>Frame Offset	O		9.2.1.30		–	
>Cell Parameter ID	M		9.2.1.8		–	
>SCTD Indicator	M		9.2.1.78		–	
>Cell Individual Offset	O		9.2.1.7		–	
>DPCH Constant Value	O		9.2.1.23		–	
>PCCPCH Power	O		9.2.1.43		–	
>Restriction State Indicator	O		9.2.1.48C		–	
>Cell Capability Container TDD LCR	O		9.2.3.xx		YES	ignore

<Not affected part is omitted>

9.3.3 PDU Definitions

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

RNSAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    Active-Pattern-Sequence-Information,
    AllocationRetentionPriority,
    AllowedQueuingTime,
    Allowed-Rate-Information,
    AlphaValue,
    BLER,
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    Closedlooptimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellParameterID,
    ChipOffset,
    CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
```

```
    CommonMeasurementValueInformation,
    CongestionCause,
    CriticalityDiagnostics,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-FDD-Information,
    DCH-ID,
    DCH-InformationResponse,
    DCH-TDD-Information,
    DL-DPCH-SlotFormat,
    DL-TimeslotISCP,
    DL-Power,
    DL-ScramblingCode,
    DL-Timeslot-Information,
    DL-TimeslotLCR-Information,
    DL-TimeSlot-ISCP-Info,
    DL-TimeSlot-ISCP-LCR-Information,
    DPC-Mode,
    DPC-Mode-Change-SupportIndicator,
    DPCH-ID,
    DRACControl,
    DRXCycleLengthCoefficient,
    DedicatedMeasurementType,
    DedicatedMeasurementValue,
    DedicatedMeasurementValueInformation,
    DiversityControlField,
    DiversityMode,
    DSCH-FDD-Information,
    DSCH-FDD-InformationResponse,
    DSCH-FlowControlInformation,
    DSCH-FlowControlItem,
    DSCH-TDD-Information,
    DSCH-ID,
    SchedulingPriorityIndicator,
    EnhancedDSCHPC,
    EnhancedDSCHPCCounter,
    EnhancedDSCHPCIndicator,
    EnhancedDSCHPCWnd,
    EnhancedDSCHPowerOffset,
    FACH-FlowControlInformation,
    FDD-DCHs-to-Modify,
    FDD-DL-ChannelisationCodeNumber,
    FDD-DL-CodeInformation,
    FDD-S-CCPCH-Offset,
    FDD-TPC-DownlinkStepSize,
    FirstRLS-Indicator,
    FNReportingIndicator,
    FrameHandlingPriority,
    FrameOffset,
    GA-AccessPointPosition,
    GA-Cell,
```

```
    GA-CellAdditionalShapes,
    IMSI,
    InformationExchangeID,
    InformationReportCharacteristics,
    InformationType,
    InnerLoopDLPCStatus,
    L3-Information,
    LimitedPowerIncrease,
    MaximumAllowedULTxPower,
    MaxNrDLPhysicalchannels,
    MaxNrOfUL-DPCHs,
    MaxNrTimeslots,
    MaxNrULPhysicalchannels,
    MeasurementFilterCoefficient,
    MeasurementID,
    MidambleAllocationMode,
    MidambleShiftAndBurstType,
    MidambleShiftLCR,
    MinimumSpreadingFactor,
    MinUL-ChannelisationCodeLength,
    MultiplexingPosition,
    NeighbouringFDDCellMeasurementInformation,
    NeighbouringTDDCellMeasurementInformation,
    Neighbouring-GSM-CellInformation,
    Neighbouring-UMTS-CellInformation,
    NrOfDLchannelisationcodes,
    PagingCause,
    PagingRecordType,
    PDSCHCodeMapping,
    PayloadCRC-PresenceIndicator,
    PCCPCH-Power,
    PC-Preamble,
    Permanent-NAS-UE-Identity,
    PowerAdjustmentType,
    PowerOffset,
    PrimaryCCPCH-RSCP,
    PrimaryCPICH-EcNo,
    PrimaryCPICH-Power,
    PrimaryScramblingCode,
    PropagationDelay,
    PunctureLimit,
    QE-Selector,
    RANAP-RelocationInformation,
    RB-Info,
    RL-ID,
    RL-Set-ID,
    RNC-ID,
    RepetitionLength,
    RepetitionPeriod,
    ReportCharacteristics,
    Received-total-wide-band-power,
```

```
    RequestedDataValue,
    RequestedDataValueInformation,
    RxTimingDeviationForTA,
    S-FieldLength,
    S-RNTI,
    SCH-TimeSlot,
    SAI,
    SFN,
    Secondary-CCPCH-Info,
    Secondary-CCPCH-Info-TDD,
    Secondary-LCR-CCPCH-Info-TDD,
    SpecialBurstScheduling,
    SSDT-CellID,
    SSDT-CellID-Length,
    SSDT-Indication,
    SSDT-SupportIndicator,
    STTD-Indicator,
    STTD-SupportIndicator,
    AdjustmentPeriod,
    ScaledAdjustmentRatio,
    MaxAdjustmentStep,
    SecondaryCCPCH-SlotFormat,
    SRB-Delay,
    SyncCase,
    SynchronisationConfiguration,
    TDD-ChannelisationCode,
    TDD-DCHs-to-Modify,
    TDD-DL-Code-Information,
    TDD-DPCHOffset,
    TDD-PhysicalChannelOffset,
    TDD-TPC-DownlinkStepSize,
    TDD-ChannelisationCodeLCR,
    TDD-DL-Code-LCR-Information,
    TDD-UL-Code-Information,
    TDD-UL-Code-LCR-Information,
    TFCI-Coding,
    TFCI-Presence,
    TFCI-SignallingMode,
    TimeSlot,
    TimeSlotLCR,
    TimingAdvanceApplied,
    ToAWE,
    ToAWS,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    Transmission-Gap-Pattern-Sequence-Information,
    TransportFormatManagement,
    TransportFormatSet,
    TransportLayerAddress,
```

```
    TrCH-SrcStatisticsDescr,
    TSTD-Indicator,
    TSTD-Support-Indicator,
    UARFCN,
    UC-ID,
    UL-DPCCH-SlotFormat,
    UL-SIR,
    UL-FP-Mode,
    UL-PhysCH-SF-Variation,
    UL-ScramblingCode,
    UL-Timeslot-Information,
    UL-TimeslotLCR-Information,
    UL-TimeSlot-ISCP-Info,
    UL-TimeSlot-ISCP-LCR-Info,
    URA-ID,
    URA-Information,
    USCH-ID,
    USCH-Information
FROM RNSAP-IEs

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

    maxNoOfDSCHs,
    maxNoOfUSCHs,
    maxNrOfCCTrCHs,
    maxNrOfDCHs,
    maxNrOfTS,
    maxNrOfDPCHs,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfULTs,
    maxNrOfDLTs,
    maxNoOfDSCHsLCR,
    maxNoOfUSCHsLCR,
    maxNrOfCCTrCHsLCR,
    maxNrOfTsLCR,
    maxNrOfDLTsLCR,
    maxNrOfULTsLCR,
```

```
    maxNrOfDPCHsLCR,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfMeasNCell,

    id-Active-Pattern-Sequence-Information,
    id-AdjustmentRatio,
    id-AllowedQueuingTime,
    id-BindingID,
    id-C-ID,
    id-C-RNTI,
    id-CFN,
    id-CFNReportingIndicator,
    id-CN-CS-DomainIdentifier,
    id-CN-PS-DomainIdentifier,
    id-Cause,
    id-CauseLevel-RL-AdditionFailureFDD,
    id-CauseLevel-RL-AdditionFailureTDD,
    id-CauseLevel-RL-ReconfFailure,
    id-CauseLevel-RL-SetupFailureFDD,
    id-CauseLevel-RL-SetupFailureTDD,
    id-CCTrCH-InformationItem-RL-FailureInd,
    id-CCTrCH-InformationItem-RL-RestoreInd,
    id-CellCapabilityContainer-FDD,
    id-CellCapabilityContainer-TDD,
    id-CellCapabilityContainer-TDD-LCR,
    id-ClosedLoopMode1-SupportIndicator,
    id-ClosedLoopMode2-SupportIndicator,
    id-CNOriginatedPage-PagingRqst,
    id-CommonMeasurementAccuracy,
    id-CommonMeasurementObjectType-CM-Rprt,
    id-CommonMeasurementObjectType-CM-Rqst,
    id-CommonMeasurementObjectType-CM-Rsp,
    id-CommonMeasurementType,
    id-CongestionCause,
    id-CriticalityDiagnostics,
    id-D-RNTI,
    id-D-RNTI-ReleaseIndication,
    id-DCHs-to-Add-FDD,
    id-DCHs-to-Add-TDD,
    id-DCH-DeleteList-RL-ReconfPrepFDD,
    id-DCH-DeleteList-RL-ReconfPrepTDD,
    id-DCH-DeleteList-RL-ReconfRqstFDD,
    id-DCH-DeleteList-RL-ReconfRqstTDD,
    id-DCH-FDD-Information,
    id-DCH-TDD-Information,
    id-FDD-DCHs-to-Modify,
    id-TDD-DCHs-to-Modify,
    id-DCH-InformationResponse,
    id-DCH-Rate-InformationItem-RL-CongestInd,
    id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD,
```

```
    id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationDeleteItem-RL-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-InformationAddList-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-FDD-DL-CodeInformation,
    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-InformationAddListIE-RL-ReconfReadyTDD,
    id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
    id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
    id-DL-Physical-Channel-Information-RL-SetupRqstTDD,
    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-DPC-Mode,
    id-DPC-Mode-Change-SupportIndicator,
    id-DSCHs-to-Add-FDD,
    id-DSCHs-to-Add-TDD,
    id-DSCH-DeleteList-RL-ReconfPrepTDD,
    id-DSCH-Delete-RL-ReconfPrepFDD,
    id-DSCH-FDD-Information,
    id-DSCH-InformationListIE-RL-AdditionRspTDD,
    id-DSCH-InformationListIEs-RL-SetupRspTDD,
    id-DSCH-TDD-Information,
    id-DSCH-FDD-InformationResponse,
    id-DSCH-ModifyList-RL-ReconfPrepTDD,
    id-DSCH-Modify-RL-ReconfPrepFDD,
    id-DSCHsToBeAddedOrModified-FDD,
    id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
    id-EnhancedDSCHPC,
    id-EnhancedDSCHPCIndicator,
    id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
```

```
    id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
    id-GA-Cell,
    id-GA-CellAdditionalShapes,
    id-IMSI,
    id-InformationExchangeID,
    id-InformationExchangeObjectType-InfEx-Rprt,
    id-InformationExchangeObjectType-InfEx-Rqst,
    id-InformationExchangeObjectType-InfEx-Rsp,
    id-InformationReportCharacteristics,
    id-InformationType,
    id-InnerLoopDLPCStatus,
    id-L3-Information,
    id-AdjustmentPeriod,
    id-MaxAdjustmentStep,
    id-MeasurementFilterCoefficient,
    id-MeasurementID,
    id-PagingArea-PagingRqst,
    id-Permanent-NAS-UE-Identity,
    id-FACH-FlowControlInformation,
    id-PowerAdjustmentType,
    id-PropagationDelay,
    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-RL-CongestInd,
    id-RL-InformationItem-DM-Rprt,
    id-RL-InformationItem-DM-Rqst,
    id-RL-InformationItem-DM-Rsp,
    id-RL-InformationItem-RL-PreemptRequiredInd,
    id-RL-InformationItem-RL-SetupRqstFDD,
    id-RL-InformationList-RL-CongestInd,
    id-RL-InformationList-RL-AdditionRqstFDD,
    id-RL-InformationList-RL-DeletionRqst,
    id-RL-InformationList-RL-PreemptRequiredInd,
    id-RL-InformationList-RL-ReconfPrepFDD,
    id-RL-InformationResponse-RL-AdditionRspTDD,
    id-RL-InformationResponse-RL-ReconfReadyTDD,
    id-RL-InformationResponse-RL-ReconfRspTDD,
    id-RL-InformationResponse-RL-SetupRspTDD,
    id-RL-InformationResponseItem-RL-AdditionRspFDD,
    id-RL-InformationResponseItem-RL-ReconfReadyFDD,
    id-RL-InformationResponseItem-RL-ReconfRspFDD,
    id-RL-InformationResponseItem-RL-SetupRspFDD,
```

```
    id-RL-InformationResponseList-RL-AdditionRspFDD,
    id-RL-InformationResponseList-RL-ReconfReadyFDD,
    id-RL-InformationResponseList-RL-ReconfRspFDD,
    id-RL-InformationResponseList-RL-SetupRspFDD,
    id-RL-ReconfigurationFailure-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-ReportCharacteristics,
    id-Reporting-Object-RL-FailureInd,
    id-Reporing-Object-RL-RestoreInd,
    id-RxTimingDeviationForTA,
    id-S-RNTI,
    id-SAI,
    id-SFN,
    id-SFNReportingIndicator,
    id-SRNC-ID,
    id-SSDT-CellIDforEDSCHPC,
    id-STTD-SupportIndicator,
    id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-timeSlot-ISCP,
    id-TransportBearerID,
    id-TransportBearerRequestIndicator,
    id-TransportLayerAddress,
    id-UC-ID,
    id-Transmission-Gap-Pattern-Sequence-Information,
    id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
    id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
    id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationModifyList-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-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-InformationAddListIE-RL-ReconfReadyTDD,
    id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
    id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
    id-UL-Physical-Channel-Information-RL-SetupRqstTDD,
    id-UL-SIRTarget,
    id-URA-Information,
    id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
    id-USCHs-to-Add,
    id-USCH-DeleteList-RL-ReconfPrepTDD,
    id-USCH-InformationListIE-RL-AdditionRspTDD,
    id-USCH-InformationListIEs-RL-SetupRspTDD,
    id-USCH-Information,
    id-USCH-ModifyList-RL-ReconfPrepTDD,
    id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
    id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD,
    id-RL-LCR-InformationResponse-RL-SetupRspTDD,
    id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
    id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
    id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
    id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
    id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD,
    id-USCH-LCR-InformationListIEs-RL-SetupRspTDD,
    id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD,
    id-RL-LCR-InformationResponse-RL-AdditionRspTDD,
    id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
    id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
    id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
    id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
    id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD,
    id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD,
    id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
    id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
    id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
    id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
    id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
    id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
    id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD,
    id-TSTD-Support-Indicator-RL-SetupRqstTDD

FROM RNSAP-Constants;
```

<Not affected part is omitted>

```
-- **************************************************************
--
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
--
```

```
-- **************************************************************

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

UplinkSignallingTransferIndicationFDD-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-PropagationDelay        CRITICALITY ignore  TYPE PropagationDelay    PRESENCE mandatory  } |
    { ID id-STTD-SupportIndicator              CRITICALITY ignore  TYPE STTD-SupportIndicator  PRESENCE mandatory } |
    { ID id-ClosedLoopMode1-SupportIndicator   CRITICALITY ignore  TYPE ClosedLoopMode1-SupportIndicator  PRESENCE mandatory } |
    { ID id-ClosedLoopMode2-SupportIndicator   CRITICALITY ignore  TYPE ClosedLoopMode2-SupportIndicator  PRESENCE mandatory } |
    { ID id-L3-Information             CRITICALITY ignore  TYPE L3-Information            PRESENCE mandatory   } |
    { ID id-CN-PS-DomainIdentifier          CRITICALITY ignore  TYPE CN-PS-DomainIdentifier      PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier          CRITICALITY ignore  TYPE CN-CS-DomainIdentifier      PRESENCE optional } |
    { ID id-URA-Information                 CRITICALITY ignore  TYPE URA-Information               PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes         CRITICALITY ignore  EXTENSION   GA-CellAdditionalShapes     PRESENCE optional }|
    { ID id-DPC-Mode-Change-SupportIndicator    CRITICALITY ignore  EXTENSION       DPC-Mode-Change-SupportIndicator     PRESENCE optional }|
    { ID id-CellCapabilityContainer-FDD     CRITICALITY ignore  EXTENSION   CellCapabilityContainer-FDD    PRESENCE optional }|
    { ID id-CellCapabilityContainer-TDD     CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD    PRESENCE optional }|
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD-LCR     PRESENCE optional },
    ...
}

-- **************************************************************
--
-- UPLINK SIGNALLING TRANSFER INDICATION TDD
--
-- **************************************************************

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

UplinkSignallingTransferIndicationTDD-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-RxTimingDeviationForTA          CRITICALITY ignore  TYPE RxTimingDeviationForTA PRESENCE mandatory } |
    { ID id-L3-Information               CRITICALITY ignore  TYPE L3-Information             PRESENCE mandatory   } |
    { ID id-CN-PS-DomainIdentifier          CRITICALITY ignore  TYPE CN-PS-DomainIdentifier       PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier          CRITICALITY ignore  TYPE CN-CS-DomainIdentifier       PRESENCE optional } |
    { ID id-URA-Information                 CRITICALITY ignore  TYPE URA-Information                 PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes         CRITICALITY ignore  EXTENSION   GA-CellAdditionalShapes     PRESENCE optional }|
    { ID id-CellCapabilityContainer-FDD     CRITICALITY ignore  EXTENSION   CellCapabilityContainer-FDD    PRESENCE optional }|
    { ID id-CellCapabilityContainer-TDD     CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD    PRESENCE optional }|
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD-LCR      PRESENCE optional },
    ...
}
```

<Not affected part is omitted>

9.3.4 Information Element Definitions

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

RNSAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxCodeNumComp-1,
    maxNrOfFACHs,
    maxFACHCountPlus1,
    maxIBSEG,
    maxNoOfDSCHs,
    maxNoOfUSCHs,
    maxNoTFCIGroups,
    maxNoCodeGroups,
    maxNrOfDCHs,
    maxNrOfDL-Codes,
    maxNrOfDLTs,
```

```
    maxNrOfDLTsLCR,
    maxNrOfDPCHs,
    maxNrOfDPCHsLCR,
    maxNrOfErrors,
    maxNrOfFDDNeighboursPerRNC,
    maxNrOfMACcshSDU-Length,
    maxNrOfNeighbouringRNCs,
    maxNrOfTDDNeighboursPerRNC,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfTS,
    maxNrOfULTs,
    maxNrOfULTsLCR,
    maxNrOfGSMNeighboursPerRNC,
    maxRateMatching,
    maxNrOfPoints,
    maxNoOfRB,
    maxNrOfTFCs,
    maxNrOfTFs,
    maxCTFC,
    maxRNCinURA-1,
    maxNrOfSCCPCHs,
    maxTFCI1Combs,
    maxTFCI2Combs,
    maxTFCI2Combs-1,
    maxTGPS,
    maxTTI-Count,
    maxNoGPSTypes,
    maxNoSat,

    id-Allowed-Rate-Information,
    id-CellCapabilityContainer-FDD,
    id-CellCapabilityContainer-TDD,
    id-CellCapabilityContainer-TDD-LCR,
    id-DPC-Mode-Change-SupportIndicator,
    id-Guaranteed-Rate-Information,
    id-Load-Value,
    id-Load-Value-IncrDecrThres,
    id-Neighbouring-GSM-CellInformation,
    id-Neighbouring-UMTS-CellInformationItem,
    id-neighbouring-LCR-TDD-CellInformation,
    id-OnModification,
    id-Received-Total-Wideband-Power-Value,
    id-Received-Total-Wideband-Power-Value-IncrDecrThres,
    id-SFNSFNMeasurementThresholdInformation,
    id-Transmitted-Carrier-Power-Value,
    id-Transmitted-Carrier-Power-Value-IncrDecrThres,
    id-TUTRANGPSMeasurementThresholdInformation,
    id-UL-Timeslot-ISCP-Value,
    id-UL-Timeslot-ISCP-Value-IncrDecrThres,
    maxNrOfLevels,
    maxNrOfMeasNCell,
```

```
    maxNrOfMeasNCell–1,
    id-MessageStructure,
    id-EnhancedDSCHPC,
    id-RestrictionStateIndicator,
    id-Rx-Timing-Deviation-Value-LCR,
    id-TypeOfError
FROM RNSAP-Constants

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

    ProtocolIE-Single-Container{},
    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-IES,
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;
```

<Not affected part is omitted>

```
CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

C-ID                    ::= INTEGER (0..65535)
```

<Not affected part is omitted>

```
Neighbouring-FDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem

Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
    c-ID                                C-ID,
```

```
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power      OPTIONAL,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator,
    sTTD-SupportIndicator               STTD-SupportIndicator   OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RestrictionStateIndicator               CRITICALITY ignore          EXTENSION RestrictionStateIndicator   PRESENCE optional }|
    { ID id-DPC-Mode-Change-SupportIndicator    CRITICALITY ignore      EXTENSION   DPC-Mode-Change-SupportIndicator     PRESENCE optional }|
    { ID id-CellCapabilityContainer-FDD         CRITICALITY ignore      EXTENSION   CellCapabilityContainer-FDD          PRESENCE optional },
    ...
}

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-ID                               UC-ID,
    uARFCN                              UARFCN,
    primaryScramblingCode               PrimaryScramblingCode,
    iE-Extensions                       ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    ...
}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }}

Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-GSM-CellInformation    CRITICALITY ignore  TYPE    Neighbouring-GSM-CellInformationIEs  PRESENCE mandatory }
}

Neighbouring-GSM-CellInformationIEs ::= SEQUENCE ( SIZE (1..maxNrOfGSMNeighboursPerRNC,...)) OF Neighbouring-GSM-CellInformationItem

Neighbouring-GSM-CellInformationItem ::= SEQUENCE {
    cGI                                 CGI,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    bSIC                                BSIC,
    band-Indicator                      Band-Indicator,
    bCCH-ARFCN                          BCCH-ARFCN,
    iE-Extensions                       ProtocolExtensionContainer { { Neighbouring-GSM-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}
```

```
Neighbouring-GSM-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-TDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Neighbouring-TDD-CellInformationItem

Neighbouring-TDD-CellInformationItem ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE shall be present if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE shall be present if Sync Case = Case2 -- ,
    sCTD-Indicator          SCTD-Indicator,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power            OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { Neighbouring-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RestrictionStateIndicator               CRITICALITY ignore          EXTENSION RestrictionStateIndicator   PRESENCE optional }|
    { ID id-CellCapabilityContainer-TDD             CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD       PRESENCE optional },
    ...
}

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-ID                               UC-ID,
    uARFCN                              UARFCN,
    cellParameterID                     CellParameterID,
    timeSlot                            TimeSlot                    OPTIONAL,
    midambleShiftAndBurstType           MidambleShiftAndBurstType   OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    ...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-LCR-TDD-CellInformation ::= SEQUENCE (SIZE (1.. maxNrOfLCRTDDNeighboursPerRNC,...)) OF Neighbouring-LCR-TDD-CellInformationItem

Neighbouring-LCR-TDD-CellInformationItem ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
```

```
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    sCTD-Indicator          SCTD-Indicator,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power            OPTIONAL,
    restrictionStateIndicator       RestrictionStateIndicator       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore  EXTENSION   CellCapabilityContainer-TDD-LCR      PRESENCE optional },
    ...
}

NrOfDLchannelisationcodes   ::= INTEGER (1..8)

NrOfTransportBlocks         ::= INTEGER (0..512)
```

<Not affected part is omitted>

9.3.6 Constant Definitions

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

RNSAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

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

```
id-commonTransportChannelResourcesInitialisation           ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease                  ProcedureCode ::= 1
id-compressedModeCommand                                   ProcedureCode ::= 2
id-downlinkPowerControl                                    ProcedureCode ::= 3
id-downlinkPowerTimeslotControl                            ProcedureCode ::= 4
id-downlinkSignallingTransfer                              ProcedureCode ::= 5
id-errorIndication                                         ProcedureCode ::= 6
id-dedicatedMeasurementFailure                             ProcedureCode ::= 7
id-dedicatedMeasurementInitiation                          ProcedureCode ::= 8
id-dedicatedMeasurementReporting                           ProcedureCode ::= 9
id-dedicatedMeasurementTermination                         ProcedureCode ::= 10
id-paging                                                  ProcedureCode ::= 11
id-physicalChannelReconfiguration                          ProcedureCode ::= 12
id-privateMessage                                          ProcedureCode ::= 13
id-radioLinkAddition                                       ProcedureCode ::= 14
id-radioLinkCongestion                                     ProcedureCode ::= 34
id-radioLinkDeletion                                       ProcedureCode ::= 15
id-radioLinkFailure                                        ProcedureCode ::= 16
id-radioLinkPreemption                                     ProcedureCode ::= 17
id-radioLinkRestoration                                    ProcedureCode ::= 18
id-radioLinkSetup                                          ProcedureCode ::= 19
id-relocationCommit                                        ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation        ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit              ProcedureCode ::= 22
id-synchronisedRadioLinkReconfigurationPreparation         ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration                  ProcedureCode ::= 24
id-uplinkSignallingTransfer                                ProcedureCode ::= 25
id-commonMeasurementFailure                                ProcedureCode ::= 26
id-commonMeasurementInitiation                             ProcedureCode ::= 27
id-commonMeasurementReporting                              ProcedureCode ::= 28
id-commonMeasurementTermination                            ProcedureCode ::= 29
id-informationExchangeFailure                              ProcedureCode ::= 30
id-informationExchangeInitiation                           ProcedureCode ::= 31
id-informationReporting                                    ProcedureCode ::= 32
id-informationExchangeTermination                          ProcedureCode ::= 33

-- **************************************************************
--
-- Lists
--
-- **************************************************************

maxCodeNumComp-1                        INTEGER ::= 255
maxRateMatching                         INTEGER ::= 256
maxNoCodeGroups                         INTEGER ::= 256
maxNoOfDSCHs                            INTEGER ::= 10
maxNoOfDSCHsLCR                         INTEGER ::= 10
maxNoOfRB                               INTEGER ::= 32
maxNoOfUSCHs                            INTEGER ::= 10
maxNoOfUSCHsLCR                         INTEGER ::= 10
maxNoTFCIGroups                         INTEGER ::= 256
```

```
maxNrOfTFCs                          INTEGER ::= 1024
maxNrOfTFs                           INTEGER ::= 32
maxNrOfCCTrCHs                       INTEGER ::= 16
maxNrOfCCTrCHsLCR                    INTEGER ::= 16
maxNrOfDCHs                          INTEGER ::= 128
maxNrOfDL-Codes                      INTEGER ::= 8
maxNrOfDPCHs                         INTEGER ::= 240
maxNrOfDPCHsLCR                      INTEGER ::= 240
maxNrOfErrors                        INTEGER ::= 256
maxNrOfMACcshSDU-Length              INTEGER ::= 16
maxNrOfPoints                        INTEGER ::= 15
maxNrOfRLs                           INTEGER ::= 16
maxNrOfRLSets                        INTEGER ::= maxNrOfRLs
maxNrOfRLs-1                         INTEGER ::= 15  -- maxNrOfRLs – 1
maxNrOfRLs-2                         INTEGER ::= 14  -- maxNrOfRLs – 2
maxNrOfULTs                          INTEGER ::= 15
maxNrOfULTsLCR                       INTEGER ::= 6
maxNrOfDLTs                          INTEGER ::= 15
maxNrOfDLTsLCR                       INTEGER ::= 6
maxRNCinURA-1                        INTEGER ::= 15
maxTTI-Count                         INTEGER ::= 4
maxCTFC                              INTEGER ::= 16777215
maxNrOfNeighbouringRNCs              INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC           INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC           INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC           INTEGER ::= 256
maxNrOfFACHs                         INTEGER ::= 8
maxNrOfLCRTDDNeighboursPerRNC        INTEGER ::= 256
maxFACHCountPlus1                    INTEGER ::= 10
maxIBSEG                             INTEGER ::= 16
maxNrOfSCCPCHs                       INTEGER ::= 8
maxTFCI1Combs                        INTEGER ::= 512
maxTFCI2Combs                        INTEGER ::= 1024
maxTFCI2Combs-1                      INTEGER ::= 1023
maxTGPS                              INTEGER ::= 6
maxNrOfTS                            INTEGER ::= 15
maxNrOfLevels                        INTEGER ::= 256
maxNrOfTsLCR                         INTEGER ::= 6
maxNoSat                             INTEGER ::= 16
maxNoGPSTypes                        INTEGER ::= 8
maxNrOfMeasNCell                     INTEGER ::= 96
maxNrOfMeasNCell-1                   INTEGER ::= 95  -- maxNrOfMeasNCell – 1

-- **************************************************************
--
-- IEs
--
-- **************************************************************

id-AllowedQueuingTime                                              ProtocolIE-ID ::= 4
id-Allowed-Rate-Information                                        ProtocolIE-ID ::= 42
```

```
id-BindingID                                                    ProtocolIE-ID ::= 5
id-C-ID                                                         ProtocolIE-ID ::= 6
id-C-RNTI                                                       ProtocolIE-ID ::= 7
id-CFN                                                          ProtocolIE-ID ::= 8
id-CN-CS-DomainIdentifier                                       ProtocolIE-ID ::= 9
id-CN-PS-DomainIdentifier                                       ProtocolIE-ID ::= 10
id-Cause                                                        ProtocolIE-ID ::= 11
id-CriticalityDiagnostics                                       ProtocolIE-ID ::= 20
id-D-RNTI                                                       ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication                                     ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD                                              ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD                                              ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD                              ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD                              ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD                              ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD                              ProtocolIE-ID ::= 33
id-DCH-FDD-Information                                          ProtocolIE-ID ::= 34
id-DCH-TDD-Information                                          ProtocolIE-ID ::= 35
id-FDD-DCHs-to-Modify                                           ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify                                           ProtocolIE-ID ::= 40
id-DCH-InformationResponse                                      ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd                       ProtocolIE-ID ::= 38
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD                ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD                ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD             ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD                    ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD               ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD                ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD                   ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD                ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD             ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD                    ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation                                       ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD                         ProtocolIE-ID ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD                          ProtocolIE-ID ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD                         ProtocolIE-ID ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD                   ProtocolIE-ID ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD                    ProtocolIE-ID ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD                       ProtocolIE-ID ::= 64
id-DLReferencePower                                             ProtocolIE-ID ::= 67
id-DLReferencePowerList-DL-PC-Rqst                              ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst                      ProtocolIE-ID ::= 69
id-DPC-Mode                                                     ProtocolIE-ID ::= 12
id-DRXCycleLengthCoefficient                                    ProtocolIE-ID ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt                       ProtocolIE-ID ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst                       ProtocolIE-ID ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp                        ProtocolIE-ID ::= 73
id-DedicatedMeasurementType                                     ProtocolIE-ID ::= 74
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD            ProtocolIE-ID ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD            ProtocolIE-ID ::= 83
id-Guaranteed-Rate-Information                                  ProtocolIE-ID ::= 41
```

```
id-IMSI                                                  ProtocolIE-ID ::= 84
id-L3-Information                                        ProtocolIE-ID ::= 85
id-AdjustmentPeriod                                      ProtocolIE-ID ::= 90
id-MaxAdjustmentStep                                     ProtocolIE-ID ::= 91
id-MeasurementFilterCoefficient                          ProtocolIE-ID ::= 92
id-MessageStructure                                      ProtocolIE-ID ::= 57
id-MeasurementID                                         ProtocolIE-ID ::= 93
id-Neighbouring-GSM-CellInformation                      ProtocolIE-ID ::= 13
id-Neighbouring-UMTS-CellInformationItem                 ProtocolIE-ID ::= 95
id-PagingArea-PagingRqst                                 ProtocolIE-ID ::= 102
id-FACH-FlowControlInformation                           ProtocolIE-ID ::= 103
id-Permanent-NAS-UE-Identity                             ProtocolIE-ID ::= 17
id-PowerAdjustmentType                                   ProtocolIE-ID ::= 107
id-RANAP-RelocationInformation                           ProtocolIE-ID ::= 109
id-RL-Information-PhyChReconfRqstFDD                     ProtocolIE-ID ::= 110
id-RL-Information-PhyChReconfRqstTDD                     ProtocolIE-ID ::= 111
id-RL-Information-RL-AdditionRqstFDD                     ProtocolIE-ID ::= 112
id-RL-Information-RL-AdditionRqstTDD                     ProtocolIE-ID ::= 113
id-RL-Information-RL-DeletionRqst                        ProtocolIE-ID ::= 114
id-RL-Information-RL-FailureInd                          ProtocolIE-ID ::= 115
id-RL-Information-RL-ReconfPrepFDD                       ProtocolIE-ID ::= 116
id-RL-Information-RL-RestoreInd                          ProtocolIE-ID ::= 117
id-RL-Information-RL-SetupRqstFDD                        ProtocolIE-ID ::= 118
id-RL-Information-RL-SetupRqstTDD                        ProtocolIE-ID ::= 119
id-RL-InformationItem-RL-CongestInd                      ProtocolIE-ID ::= 55
id-RL-InformationItem-DM-Rprt                            ProtocolIE-ID ::= 120
id-RL-InformationItem-DM-Rqst                            ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp                             ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd              ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRqstFDD                    ProtocolIE-ID ::= 123
id-RL-InformationList-RL-CongestInd                      ProtocolIE-ID ::= 56
id-RL-InformationList-RL-AdditionRqstFDD                 ProtocolIE-ID ::= 124
id-RL-InformationList-RL-DeletionRqst                    ProtocolIE-ID ::= 125
id-RL-InformationList-RL-PreemptRequiredInd              ProtocolIE-ID ::= 1
id-RL-InformationList-RL-ReconfPrepFDD                   ProtocolIE-ID ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD              ProtocolIE-ID ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD              ProtocolIE-ID ::= 128
id-RL-InformationResponse-RL-SetupRspTDD                 ProtocolIE-ID ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD          ProtocolIE-ID ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD          ProtocolIE-ID ::= 131
id-RL-InformationResponseItem-RL-ReconfRspFDD            ProtocolIE-ID ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD             ProtocolIE-ID ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD          ProtocolIE-ID ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD          ProtocolIE-ID ::= 135
id-RL-InformationResponseList-RL-ReconfRspFDD            ProtocolIE-ID ::= 136
id-RL-InformationResponse-RL-ReconfRspTDD                ProtocolIE-ID ::= 28
id-RL-InformationResponseList-RL-SetupRspFDD             ProtocolIE-ID ::= 137
id-RL-ReconfigurationFailure-RL-ReconfFail               ProtocolIE-ID ::= 141
id-RL-Set-InformationItem-DM-Rprt                        ProtocolIE-ID ::= 143
id-RL-Set-InformationItem-DM-Rqst                        ProtocolIE-ID ::= 144
id-RL-Set-InformationItem-DM-Rsp                         ProtocolIE-ID ::= 145
```

```
id-RL-Set-Information-RL-FailureInd                                 ProtocolIE-ID ::= 146
id-RL-Set-Information-RL-RestoreInd                                 ProtocolIE-ID ::= 147
id-ReportCharacteristics                                            ProtocolIE-ID ::= 152
id-Reporting-Object-RL-FailureInd                                   ProtocolIE-ID ::= 153
id-Reporing-Object-RL-RestoreInd                                    ProtocolIE-ID ::= 154
id-S-RNTI                                                           ProtocolIE-ID ::= 155
id-SAI                                                              ProtocolIE-ID ::= 156
id-SRNC-ID                                                          ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD           ProtocolIE-ID ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD              ProtocolIE-ID ::= 160
id-TransportBearerID                                                ProtocolIE-ID ::= 163
id-TransportBearerRequestIndicator                                  ProtocolIE-ID ::= 164
id-TransportLayerAddress                                            ProtocolIE-ID ::= 165
id-TypeOfError                                                      ProtocolIE-ID ::= 140
id-UC-ID                                                            ProtocolIE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD                        ProtocolIE-ID ::= 167
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 169
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD                        ProtocolIE-ID ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD                        ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD                   ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD                    ProtocolIE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD                    ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD                       ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD                             ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD                             ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD                              ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD                       ProtocolIE-ID ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD                        ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD                           ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD                   ProtocolIE-ID ::= 183
id-UL-SIRTarget                                                     ProtocolIE-ID ::= 184
id-URA-Information                                                  ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD         ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD            ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD            ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information                              ProtocolIE-ID ::= 193
id-AdjustmentRatio                                                  ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD                                 ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD                                 ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure                                      ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD                                    ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD                                    ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD                 ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD                 ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD                   ProtocolIE-ID ::= 212
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD                ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD                ProtocolIE-ID ::= 214
```

```
id-DSCHs-to-Add-TDD                                                ProtocolIE-ID ::= 215
id-DSCHs-to-Add-FDD                                                ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD                                ProtocolIE-ID ::= 217
id-DSCH-Delete-RL-ReconfPrepFDD                                    ProtocolIE-ID ::= 218
id-DSCH-FDD-Information                                            ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD                        ProtocolIE-ID ::= 220
id-DSCH-InformationListIEs-RL-SetupRspTDD                          ProtocolIE-ID ::= 221
id-DSCH-TDD-Information                                            ProtocolIE-ID ::= 222
id-DSCH-FDD-InformationResponse                                    ProtocolIE-ID ::= 223
id-DSCH-Information-RL-SetupRqstFDD                                ProtocolIE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD                                ProtocolIE-ID ::= 227
id-DSCH-Modify-RL-ReconfPrepFDD                                    ProtocolIE-ID ::= 228
id-DSCHsToBeAddedOrModified-FDD                                    ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD                   ProtocolIE-ID ::= 230
id-EnhancedDSCHPC                                                  ProtocolIE-ID ::= 29
id-EnhancedDSCHPCIndicator                                         ProtocolIE-ID ::= 34
id-GA-Cell                                                         ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes                                         ProtocolIE-ID ::= 3
id-SSDT-CellIDforEDSCHPC                                           ProtocolIE-ID ::= 35
id-Transmission-Gap-Pattern-Sequence-Information                   ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 257
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD                ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD                ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD                ProtocolIE-ID ::= 260
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD                ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD                ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD                ProtocolIE-ID ::= 263
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD               ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD               ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD        ProtocolIE-ID ::= 266
id-USCHs-to-Add                                                    ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD                                ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD                        ProtocolIE-ID ::= 269
id-USCH-InformationListIEs-RL-SetupRspTDD                          ProtocolIE-ID ::= 270
id-USCH-Information                                                ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD                                ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD                   ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD                 ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD                 ProtocolIE-ID ::= 275
id-ClosedLoopMode1-SupportIndicator                                ProtocolIE-ID ::= 276
id-ClosedLoopMode2-SupportIndicator                                ProtocolIE-ID ::= 277
id-STTD-SupportIndicator                                           ProtocolIE-ID ::= 279
id-CFNReportingIndicator                                           ProtocolIE-ID ::= 14
id-CNOriginatedPage-PagingRqst                                     ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus                                             ProtocolIE-ID ::= 24
id-PropagationDelay                                                ProtocolIE-ID ::= 25
id-RxTimingDeviationForTA                                          ProtocolIE-ID ::= 36
id-timeSlot-ISCP                                                   ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd                            ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd                            ProtocolIE-ID ::= 16
```

```
id-CommonMeasurementAccuracy                                    ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt                          ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst                          ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp                           ProtocolIE-ID ::= 283
id-CommonMeasurementType                                        ProtocolIE-ID ::= 284
id-CongestionCause                                              ProtocolIE-ID ::= 18
id-SFN                                                          ProtocolIE-ID ::= 285
id-SFNReportingIndicator                                        ProtocolIE-ID ::= 286
id-InformationExchangeID                                        ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt                     ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst                     ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp                      ProtocolIE-ID ::= 290
id-InformationReportCharacteristics                             ProtocolIE-ID ::= 291
id-InformationType                                              ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation                         ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD             ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD                    ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD               ProtocolIE-ID ::= 75
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD                   ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD               ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD                   ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD                   ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD                   ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD          ProtocolIE-ID ::= 81
id-RL-LCR-InformationResponse-RL-AdditionRspTDD                 ProtocolIE-ID ::= 86
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD            ProtocolIE-ID ::= 87
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD                ProtocolIE-ID ::= 88
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD            ProtocolIE-ID ::= 89
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD                ProtocolIE-ID ::= 94
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD                ProtocolIE-ID ::= 96
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD                ProtocolIE-ID ::= 97
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD           ProtocolIE-ID ::= 98
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD      ProtocolIE-ID ::= 100
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD           ProtocolIE-ID ::= 101
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD      ProtocolIE-ID ::= 104
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD           ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD           ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD                        ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRqstTDD                       ProtocolIE-ID ::= 139
id-RestrictionStateIndicator                                    ProtocolIE-ID ::= 142
id-Load-Value                                                   ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres                                     ProtocolIE-ID ::= 234
id-OnModification                                               ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value                          ProtocolIE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres            ProtocolIE-ID ::= 237
id-SFNSFNMeasurementThresholdInformation                        ProtocolIE-ID ::= 238
id-Transmitted-Carrier-Power-Value                              ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres                ProtocolIE-ID ::= 240
id-TUTRANGPSMeasurementThresholdInformation                     ProtocolIE-ID ::= 241
id-UL-Timeslot-ISCP-Value                                       ProtocolIE-ID ::= 242
id-UL-Timeslot-ISCP-Value-IncrDecrThres                         ProtocolIE-ID ::= 243
```

```
id-Rx-Timing-Deviation-Value-LCR                                ProtocolIE-ID ::= 293
id-DPC-Mode-Change-SupportIndicator                             ProtocolIE-ID ::= 19
id-CellCapabilityContainer-FDD                                  ProtocolIE-ID ::= 300
id-CellCapabilityContainer-TDD                                  ProtocolIE-ID ::= 301
id-CellCapabilityContainer-TDD-LCR                              ProtocolIE-ID ::= 302

END
```