**3GPP TSG-RAN #91 e RP-210799**

**16th March – 26th March 2021 Online**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **36.423** | **CR** | **1367** | **rev** | **8** | **Current version:** | **16.4.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | Introduction of SFN Offset per cell over X2 |
|  |  |
| ***Source to WG:*** | Ericsson, China Telecom, ZTE, Qualcomm Incorporated |
| ***Source to TSG:*** | RAN3 |
|  |  |
| ***Work item code:*** | TEI16 |  | ***Date:*** | 2021-02-23 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Lack of LTE-NR timing information causes mobility and throughput performance issues due to, e.g. error prone measurements configuration.  |
|  |  |
| ***Summary of change:*** | The offset in time of SFN0 with respect to an absolute time initialisation is signalled in microseconds, per cell, to inform the receiving node of the exact time start of neighbour cells’ SFN0**Impact Analysis:** Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because this is additional information that may be used by receiving node The impact can be considered isolated. |
|  |  |
| ***Consequences if not approved:*** | Lack of LTE-NR timing information causes mobility and throughput performance issues |
|  |  |
| ***Clauses affected:*** | 8.7.1, 8.7.2, 9.2.8, 9.2.110, 9.2.2.xx (new), 9.3.4, 9.3.5, 9.3.7 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.473 CR 0431TS 38.423 CR 0206 |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ... |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | Rev1: resubmission with added procedure text and information exchange for E-UTRARev3: resubmissionRev4: Removal of additions for neighbour informationRev5: change granularity to microseconds Rev6: change SFN Offset lengthRev7: Corrections to cover page, removal of unnecessary procedure text, ASN.1 correctionRev8: Lift the new procedure text related to SFN-Offset in 8.7.1.2 and 8.7.2.2 so it is general for both eNB and en-gNB initiated procedures. |

First Change

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## 8.7 Procedures for E-UTRAN-NR Dual Connectivity

### 8.7.1 EN-DC X2 Setup

#### 8.7.1.1 General

The purpose of the EN-DC X2 Setup procedure is to exchange application level configuration data needed for eNB and en-gNB to interoperate correctly over the X2 interface. This procedure erases any existing application level configuration data in the two nodes and replaces it by the one received. This procedure also resets the X2 interface like a Reset procedure would do.

NOTE 1: If X2-C signalling transport is shared among multiple X2-C interface instances, one EN-DC X2 Setup procedure is issued per X2-C interface instance to be setup, i.e. several X2 Setup procedures may be issued via the same TNL association after that TNL association has become operational.

NOTE 2: Exchange of application level configuration data also applies between eNB and en-gNB in case the SN (i.e. the en-gNB) does not broadcast system information other than for radio frame timing and SFN, as specified in the TS 37.340 [32]. How to use this information when this option is used is not explicitly specified.

The procedure uses non UE-associated signalling.

#### 8.7.1.2 Successful Operation



Figure 8.7.1.2-1: eNB Initiated EN-DC X2 Setup, successful operation



Figure 8.7.1.2-2: en-gNB Initiated EN-DC X2 Setup, successful operation

If case of network sharing with multiple cell ID broadcast with shared X2-C signalling transport, as specified in TS 36.300 [15], the EN-DC X2 SETUP REQUEST message and the EN-DC X2 SETUP RESPONSE message shall include the *Interface Instance Indication* IE to identify the corresponding interface instance. In the current version of this specification an eNB shall not include the *Interface Instance Indication* IE in the *Initiating NodeType* IE in the EN-DC X2 SETUP REQUEST message.

If the *SFN Offset* IE is included in the EN-DC X2 SETUP REQUEST or EN-DC X2 SETUP RESPONSE message, the receiving node shall, if supported, use this information to deduce the SFN0 time offset of the reported cell. The receiving node shall consider the received *SFN Offset* IE content valid until reception of an update of the IE for the same cell(s).

**eNB initiated EN-DC X2 Setup:**

An eNB initiates the procedure by sending the EN-DC X2 SETUP REQUEST message to a candidate en-gNB. The candidate en-gNB replies with the EN-DC X2 SETUP RESPONSE message. The initiating eNB shall transfer the complete list of its served cells to the candidate en-gNB. The candidate en-gNB shall reply with the complete list of its served cells or if supported, a partial list of its served cells together with the *Partial List Indicator* IE, according to the received information in *Cell and Capacity Assistance Information* IE in EN-DC X2 SETUP REQUEST message. If Supplementary Uplink is configured at the candidate en-gNB, the candidate en-gNB shall include in the EN-DC X2 SETUP RESPONSE message the *SUL Information* IE and the *Supported SUL band List* IE for each served cell where supplementary uplink is configured.

If the EN-DC X2 SETUP REQUEST message contains the *Protected E-UTRA Resource Indication* IE, the receiving en-gNB should take this into account for cell-level resource coordination with the eNB. The en-gNB shall consider the received *Protected E-UTRA Resource Indication* IE content valid until reception of a new update of the IE for the same eNB.

The protected resource pattern indicated in the *Protected E-UTRA Resource Indication* IE is not valid in subframes indicated by the *Reserved Subframes* IE, as well as in the non-control region of the MBSFN subframes i.e. it is valid only in the control region therein. The size of the control region of MBSFN subframes is indicated in the *Protected E-UTRA Resource Indication* IE.

If the *Partial List Indicator* IE is set to "partial" in the EN-DC X2 SETUP RESPONSE message from the en-gNB, the eNB shall, if supported, assume that the en-gNB has included in the *List of Served Cells NR* IE a partial list of cells.

If the EN-DC X2 SETUP REQUEST message contains the *TNL Transport Layer Address info* IE, the receiving en-gNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the EN-DC X2 SETUP RESPONSE message contains the *TNL Transport Layer Address info* IE, the receiving eNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the *NR Cell PRACH Configuration* IE is included in the *Served NR Cell Information* IE contained in the EN-DC X2 SETUP RESPONSE message, the eNB may store the information.

If the *CSI-RS Transmision Indication* IE is contained in the EN-DC X2 SETUP REQUEST message, the en-gNB may use this information for neighbour NR cell’s CSI-RS measurement.

If the *Intended TDD DL-UL Configuration NR* IE is contained in the *NR Neighbour Information* IE in the EN-DC X2 SETUP REQUEST message, en-gNB should take this information into account for cross-link interference management. The en-gNB shall consider the received *Intended TDD DL-UL Configuration NR* IE content valid until reception of an update of the IE for the same cell(s).

**Interaction with the eNB Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC X2 SETUP RESPONSE message to neighbouring eNBs by triggering the eNB Configuration Update procedure.

**Interaction with the EN-DC Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC X2 SETUP RESPONSE message to neighbouring en-gNBs by triggering the EN-DC Configuration Update procedure.

**en-gNB initiated EN-DC X2 Setup:**

An en-gNB initiates the procedure by sending the EN-DC X2 SETUP REQUEST message to a candidate eNB. The candidate eNB replies with the EN-DC X2 SETUP RESPONSE message. The initiating en-gNB shall transfer the complete list of its served cells or if supported, a partial list of its served cells together with the *Partial List Indicator* IE in the EN-DC X2 SETUP REQUEST message to the candidate eNB. The candidate eNB shall reply with the complete list of its served cells.

If Supplementary Uplink is configured at the en-gNB, the en-gNB shall include in the EN-DC X2 SETUP REQUEST message the *SUL Information* IE and the *Supported SUL band List* IE for each served cell where supplementary uplink is configured.

If the EN-DC X2 SETUP RESPONSE message contains the *Protected E-UTRA Resource Indication* IE, the receiving en-gNB should take this into account for cell-level resource coordination with the eNB. The en-gNB shall consider the received *Protected E-UTRA Resource Indication* IE content valid until reception of a new update of the IE for the same eNB.

If the *Partial List Indicator* IE is set to "partial" in the EN-DC X2 SETUP REQUEST message from the en-gNB, the eNB shall, if supported, assume that the en-gNB has included in the *List of Served Cells NR* IE a partial list of cells.

If the *Cell and Capacity Assistance Information* IE is present in the EN-DC X2 SETUP RESPONSE message from the eNB, the en-gNBshall, if supported, store the collected information to be used for future interface management.

If the EN-DC X2 SETUP REQUEST message contains the *TNL Transport Layer Address info* IE, the receiving eNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the EN-DC X2 SETUP RESPONSE message contains the *TNL Transport Layer Address info* IE, the receiving en-gNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the *NR Cell PRACH Configuration* IE is included in the *Served NR Cell Information* IE contained in the EN-DC X2 SETUP REQUEST message, the eNB may store the information.

If the *CSI-RS Transmision Indication* IE is contained in the EN-DC X2 SETUP REQUEST message, the eNB should take it into account when forwarding neighbour NR cell’s CSI-RS configuration.

If the *Intended TDD DL-UL Configuration NR* IE is contained in the *NR Neighbour Information* IE in the EN-DC X2 SETUP RESPONSE message, en-gNB should take this information into account for cross-link interference management. The en-gNB shall consider the received *Intended TDD DL-UL Configuration NR* IE content valid until reception of an update of the IE for the same cell(s).

**Interaction with the eNB Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC X2 SETUP REQUEST message to neighbouring eNBs by triggering the eNB Configuration Update procedure.

**Interaction with the EN-DC Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC X2 SETUP REQUEST message to neighbouring en-gNBs by triggering the EN-DC Configuration Update procedure.

#### 8.7.1.3 Unsuccessful Operation



Figure 8.7.1.3-1: eNB Initiated EN-DC X2 Setup, unsuccessful operation



Figure 8.7.1.3-2: en-gNB Initiated EN-DC X2 Setup, unsuccessful operation

If the candidate receving node cannot accept the setup it shall respond with an EN-DC X2 SETUP FAILURE message with appropriate cause value.

If the *Message Oversize Notification* IE is included in the EN-DC X2 SETUP FAILURE, the initiating node shall, if supported, deduce that the failure is due to a too large EN-DC X2 SETUP REQUEST message and ensure that the total number of served cells in following EN-DC X2 SETUP REQUEST message is equal to or lower than the value of the *Message Oversize Notification* IE.

If case of network sharing with multiple cell ID broadcast with shared X2-C signalling transport, as specified in TS 36.300 [15], the EN-DC X2 SETUP REQUEST message and the EN-DC X2 SETUP FAILURE message shall include the *Interface Instance Indication* IE to identify the corresponding interface instance.

#### 8.7.1.4 Abnormal Conditions

If the first message received for a specific TNL association is not an EN-DC X2 SETUP REQUEST, EN-DC X2 SETUP RESPONSE, or EN-DC X2 SETUP FAILURE message then this shall be treated as a logical error.

If the initiating node does not receive either EN-DC X2 SETUP RESPONSE message or EN-DC X2 SETUP FAILURE message, the initiating node may reinitiate the EN-DC X2 Setup procedure towards the same candidate node, provided that the content of the EN-DC X2 SETUP REQUEST message is identical to the content of the previously unacknowledged EN-DC X2 SETUP REQUEST message.

If the EN-DC X2 SETUP FAILURE message includes the *Time To Wait* IE the initiating node shall wait at least for the indicated time before reinitiating the EN-DC X2 Setup procedure towards the same peer node.

If the initiating node receives an EN-DC X2 SETUP REQUEST message from the peer entity on the same X2 interface:

- In case the initiating node answers with an EN-DC X2 SETUP RESPONSE message and receives a subsequent EN-DC X2 SETUP FAILURE message, the initiating node shall consider the X2 interface as non operational and the procedure as unsuccessfully terminated according to sub clause 8.7.1.3.

- In case the initiating node answers with an EN-DC X2 SETUP FAILURE message and receives a subsequent EN-DC X2 SETUP RESPONSE message, the initiating node shall ignore the EN-DC X2 SETUP RESPONSE message and consider the X2 interface as non operational.

### 8.7.2 EN-DC Configuration Update

#### 8.7.2.1 General

The purpose of the EN-DC Configuration Update procedure is to update application level configuration data needed for eNB and en-gNB to interoperate correctly over the X2 interface.

NOTE: Update of application level configuration data also applies between eNB and en-gNB in case the SN (i.e. the en-gNB) does not broadcast system information other than for radio frame timing and SFN, as specified in the TS 37.340 [32]. How to use this information when this option is used is not explicitly specified.

The procedure uses non UE-associated signalling.

#### 8.7.2.2 Successful Operation



Figure 8.7.2.2-1: eNB Initiated EN-DC Configuration Update, successful operation



Figure 8.7.2.2-2: en-gNB Initiated EN-DC Configuration Update, successful operation

If case of network sharing with multiple cell ID broadcast with shared X2-C signalling transport, as specified in TS 36.300 [15], the EN-DC CONFIGURATION UPDATE message and the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message shall include the *Interface Instance Indication* IE to identify the corresponding interface instance.

If the *SFN Offset* IE is included in the EN-DC CONFIGURATION UPDATE or EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message, the receiving node shall, if supported, use this information to update the SFN0 time offset of the reported cell.

**eNB initiated EN-DC Configuration Update:**

An eNB initiates the procedure by sending an EN-DC CONFIGURATION UPDATE message to a peer en-gNB.

After successful update of requested information, en-gNB shall reply with the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message to inform the initiating eNB that the requested update of application data was performed successfully.

If the *Cell Assistance Information* IE is present, the en-gNB shall, if supported, use it to generate the *List of Served NR Cells* IE and include the list in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message.

If the EN-DC CONFIGURATION UPDATE REQUEST message contains the Protected E-UTRA Resource Indication IE, the receiving en-gNB should take this into account for cell-level resource coordination with the eNB. The en-gNB shall consider the received Protected E-UTRA Resource Indication IE content valid until reception of a new update of the IE for the same eNB. The protected resource pattern indicated in the Protected E-UTRA Resource Indication IE is not valid in subframes indicated by the Reserved Subframes IE, as well as in the non-control region of the MBSFN subframes i.e. it is valid only in the control region therein. The size of the control region of MBSFN subframes is indicated in the Protected E-UTRA Resource Indication IE.

The eNB may initiate a further EN-DC Configuration Update procedure only after a previous EN-DC Configuration Update procedure has been completed.

If Supplementary Uplink is configured at the en-gNB, the en-gNB shall include in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message the *SUL Information* IE and the *Supported SUL band List* IE for each cell added in the Served NR Cells To Add IE and in the Served NR Cells To Modify IE.

If the EN-DC CONFIGURATION UPDATE message contains the *TNL Transport Layer Address info* IE, the receiving en-gNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message contains the *TNL Transport Layer Address info* IE, the receiving eNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the *NR Cell PRACH Configuration* IE is included in the *Served NR Cell Information* IE contained in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message, the eNB may update the information.

If the C*SI-RS Transmision Indication* IE is contained in the EN-DC CONFIGURATION UPDATE message, the en-gNB may use this information for neighbour NR cell’s CSI-RS measurement.

If the *Intended TDD DL-UL Configuration NR* IE is contained in the *NR Neighbour Information* IE in the EN-DC CONFIGURATION UPDATE message, en-gNB should take this information into account for cross-link interference management. The en-gNB shall consider the received *Intended TDD DL-UL Configuration NR* IE content valid until reception of an update of the IE for the same cell(s).

**Interaction with the eNB Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message to neighbouring eNBs by triggering the eNB Configuration Update procedure.

**Interaction with the EN-DC Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message to neighbouring en-gNBs by triggering the EN-DC Configuration Update procedure.

**en-gNB initiated EN-DC Configuration Update:**

An en-gNB initiates the procedure by sending an EN-DC CONFIGURATION UPDATE message to an eNB.

If Supplementary Uplink is configured at the en-gNB, the en-gNB shall include in the EN-DC CONFIGURATION UPDATE message the *SUL Information* IE and the *Supported SUL band List* IE for each served cell added in the Served NR Cells To Add IE and in the Served NR Cells To Modify IE.

If the Deactivation Indication IE is contained in the *Served NR Cells To Modify* IE, it indicates that the concerned NR cell was switched off to lower energy consumption, and is available for activation on request from the eNB, as described in TS 36.300 [15].

After successful update of requested information, eNB shall reply with the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message to inform the initiating en-gNB that the requested update of application data was performed successfully. In case the eNB receives an EN-DC CONFIGURATION UPDATE without any IE except for *Message Typ*eIE it shall reply with EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message without performing any updates to the existing configuration.

Upon reception of an EN-DC CONFIGURATION UPDATE message, eNB shall update the information for en-gNB as follows:

**Update of Served NR Cell Information:**

- If *Served NR Cells To Add* IE is contained in the EN-DC CONFIGURATION UPDATE message, eNB shall add cell information according to the information in the *Served NR Cell Information* IE.

- If *Served NR Cells To Modify* IE is contained in the EN-DC CONFIGURATION UPDATE message, eNB shall modify information of cell indicated by *Old NR-CGI* IE according to the information in the *Served NR Cell Information* IE.

- If *Served NR Cells To Delete* IE is contained in the EN-DC CONFIGURATION UPDATE message, eNB shall delete information of cell indicated by *Old NR-CGI* IE.

The en-gNB may initiate a further EN-DC Configuration Update procedure only after a previous EN-DC Configuration Update procedure has been completed.

If the EN-DC CONFIGURATION UPDATE message contains the *TNL Transport Layer Address info* IE, the receiving eNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message contains the *TNL Transport Layer Address info* IE, the receiving en-gNB shall, if supported, take this into account for IPSEC tunnel establishment.

If the *NR Cell PRACH Configuration* IE is included in the *Served NR Cell Information* IE contained in the EN-DC CONFIGURATION UPDATE message, the eNB may update the information.

If the *CSI-RS Transmision Indication* IE is contained in the EN-DC CONFIGURATION UPDATE message, the eNB should take it into account when forwarding neighbour NR cell’s CSI-RS configuration.

**Update of SCTP associations:**

If the *TNL Association to Add List* IE is included in the EN-DC CONFIGURATION UPDATE message, the receiving eNB shall, if supported, use it to establish the TNL association(s) with the en-gNB. The eNB shall report to the en-gNB, in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message, the successful establishment of the TNL association(s) with the en-gNB as follows:

- A list of successfully established TNL associations shall be included in the *TNL Association Setup List* IE;

- A list of TNL associations that failed to be established shall be included in the *TNL Association Failed to Setup List* IE.

If the *TNL Association to Remove List* IE is included in the EN-DC CONFIGURATION UPDATE message, the receiving eNB shall, if supported, initiate removal of the TNL association(s) indicated by the received Transport Layer information towards the en-gNB.

If the *TNL Association to Update List* IE is included in the EN-DC CONFIGURATION UPDATE message the receiving eNB shall, if supported, update the TNL association(s) indicated by the received Transport Layer information towards the en-gNB.

If the *Intended TDD DL-UL Configuration NR* IE is contained in the *NR Neighbour Information* IE in the EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message, en-gNB should take this information into account for cross-link interference management. The en-gNB shall consider the received *Intended TDD DL-UL Configuration NR* IE content valid until reception of an update of the IE for the same cell(s).

**Interaction with the eNB Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC CONFIGURATION UPDATE message to neighbouring eNBs by triggering the eNB Configuration Update procedure.

**Interaction with the EN-DC Configuration Update procedure:**

The receiving eNB may forward the *Intended TDD DL-UL Configuration NR* IE received in the *Served NR Cell Information* IE in the EN-DC CONFIGURATION UPDATE message to neighbouring en-gNBs by triggering the EN-DC Configuration Update procedure.

#### 8.7.2.3 Unsuccessful Operation



Figure 8.7.2.3-1: eNB Initiated EN-DC Configuration Update, unsuccessful operation



Figure 8.7.2.3-2: en-gNB Initiated EN-DC Configuration Update, unsuccessful operation

If the candidate receving node can not accept the update it shall respond with an EN-DC CONFIGURATION UPDATE FAILURE message and appropriate cause value.

If the EN-DC CONFIGURATION UPDATE FAILURE message includes the *Time To Wait* IE the initiating node shall wait at least for the indicated time before reinitiating the EN-DC Configuration Update procedure towards the same peer node. Both nodes shall continue to operate the X2 with their existing configuration data.

If case of network sharing with multiple cell ID broadcast with shared X2-C signalling transport, as specified in TS 36.300 [15], the EN-DC CONFIGURATION UPDATE message and the EN-DC CONFIGURATION UPDATE FAILURE message shall include the *Interface Instance Indication* IE to identify the corresponding interface instance.

#### 8.7.2.4 Abnormal Conditions

If the initiating node after initiating EN-DC Configuration Update procedure receives neither EN-DC CONFIGURATION UPDATE ACKNOWLEDGE message nor EN-DC CONFIGURATION UPDATE FAILURE message, the initiating node may reinitiate the EN-DC Configuration Update procedure towards the same candidate receving node, provided that the content of the EN-DC CONFIGURATION UPDATE message is identical to the content of the previously unacknowledged EN-DC CONFIGURATION UPDATE message.

Next Change

### 9.2.8 Served Cell Information

This IE contains cell configuration information of a cell that a neighbour eNB may need for the X2 AP interface.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
|  PCI | M |  | INTEGER (0..503, …) | Physical Cell ID | – |  |
| Cell ID | M |  | ECGI9.2.14 |  | – |  |
| TAC | M |  | OCTET STRING(2) | Tracking Area Code | – |  |
| **Broadcast PLMNs** |  | *1..<maxnoofBPLMNs>* |  | Broadcast PLMNs in SIB1 associated to the E-UTRA Cell Identity in the *Cell ID* IE. | – |  |
| >PLMN Identity | M |  | 9.2.4 |  | – |  |
| CHOICE *EUTRA-Mode-Info* | M |  |  |  | – |  |
| *>FDD* |  |  |  |  |  |  |
| **>>FDD Info** |  | *1* |  |  | – |  |
| >>>UL EARFCN | M |  | EARFCN9.2.26 | Corresponds to NUL in TS 36.104 [16] for E-UTRA operating bands for which it is defined; ignored for E-UTRA operating bands for which NUL is not defined | – |  |
| >>>DL EARFCN | M |  | EARFCN9.2.26 | Corresponds to NDL in TS 36.104 [16] | – |  |
| >>>UL Transmission Bandwidth | M |  | Transmission Bandwidth9.2.27 | Same as DL Transmission Bandwidth in this release; ignored in case UL EARFCN value is ignored | – |  |
| >>>DL Transmission Bandwidth | M |  | Transmission Bandwidth9.2.27 |  | – |  |
| >>>UL EARFCN Extension | O |  | EARFCN Extension9.2.65 | If this IE is present, the value signalled in the *UL EARFCN* IE is ignored. | YES | reject |
| >>>DL EARFCN Extension | O |  | EARFCN Extension9.2.65 | If this IE is present, the value signalled in the *DL EARFCN* IE is ignored. | YES | reject |
| >>>Offset of NB-IoT Channel Number to DL EARFCN | O |  | Offset of NB-IoT Channel Number to EARFCN9.2.94 | Corresponds to MDL in TS 36.104 [16] | YES | reject |
| >>>Offset of NB-IoT Channel Number to UL EARFCN | O |  | Offset of NB-IoT Channel Number to EARFCN9.2.94 | Corresponds to MUL in TS 36.104 [16] | YES | reject |
| >>>NRS-NSSS-PowerOffset | O |  | ENUMERATED (-3, 0, 3, …) | NRS to NSSS power ratio,as defined in TS6.213 [11]. | YES | Ignore |
| >>>NSSS-NumOccasionDifferentPrecoder | O |  | ENUMERATED (2, 4, 8, …) | The number of consecutive NSSS occasions that use different precoders for NSSS transmission, as defined in TS6.213 [11]. | YES | ignore |
| *>TDD* |  |  |  |  | – |  |
| **>>TDD Info** |  | *1* |  |  | – |  |
| >>>EARFCN | M |  | 9.2.26 | Corresponds to NDL/NUL in TS 36.104 [16] | – |  |
| >>>Transmission Bandwidth | M |  | Transmission Bandwidth9.2.27 |  | – |  |
| >>>Subframe Assignment | M |  | ENUMERATED(sa0, sa1, sa2, sa3, sa4, sa5, sa6,…) | Uplink-downlink subframe configuration information defined in TS 36.211 [10].In NB-IOT, sa0 and sa6 are not applicable. | – |  |
| **>>>Special Subframe Info** |  | *1* |  | Special subframe configuration information defined in TS 36.211 [10] | – |  |
| >>>>Special Subframe Patterns | M |  | ENUMERATED(ssp0, ssp1, ssp2, ssp3, ssp4, ssp5, ssp6, ssp7, ssp8, …) |  | – |  |
| >>>>Cyclic Prefix DL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| >>>>Cyclic Prefix UL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| **>>>Additional Special Subframe Info** | O |  |  | Special subframe configuration information defined in TS 36.211 [10]. Only for newly defined configuration of special subframe from Release 11. | YES | ignore |
| >>>>Additional Special Subframe Patterns | M |  | ENUMERATED(ssp0, ssp1, ssp2, ssp3, ssp4, ssp5, ssp6, ssp7, ssp8, ssp9, …) |  | – |  |
| >>>>Cyclic Prefix DL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| >>>>Cyclic Prefix UL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| >>>EARFCN Extension | O |  | 9.2.65 | If this IE is present, the value signalled in the *EARFCN* IE is ignored. | YES | reject |
| **>>>Additional Special Subframe Extension Info** | O |  |  | Special subframe configuration information defined in TS 36.211 [10]. Only for newly defined configuration of special subframe from Release 14. | YES | ignore |
| >>>>Additional Special Subframe Patterns Extension | M |  | ENUMERATED(ssp10, …) |  | – |  |
| >>>>Cyclic Prefix DL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| >>>>Cyclic Prefix UL | M |  | ENUMERATED(Normal, Extended,…) |  | – |  |
| >>>Offset of NB-IoT Channel Number to DL EARFCN | O |  | Offset of NB-IoT Channel Number to EARFCN9.2.94 | Corresponds to MDL in TS 36.104 [16] | YES | reject |
| >>>NB-IoT UL DL Alignment Offset | O |  | NB-IoT UL DL Alignment Offset 9.2.144 | Corresponds to the TDD-UL-DL-AlignmentOffset-NB in TS 36.331 [9]. | YES | reject |
| Number of Antenna Ports | O |  | 9.2.43 |  | YES | ignore |
| PRACH Configuration | O |  | PRACH Configuration9.2.50 |  | YES | ignore |
| **MBSFN Subframe Info** |  | *0..<maxnoofMBSFN>* |  | MBSFN subframe defined in TS 36.331 [9] | GLOBAL | ignore |
| >Radioframe Allocation Period | M |  | ENUMERATED(n1, n2, n4, n8, n16, n32, …) |  | – |  |
| >Radioframe Allocation Offset | M |  | INTEGER (0..7, ...) |  | – |  |
| >Subframe Allocation | M |  | 9.2.51 |  | – |  |
| CSG ID | O |  | 9.2.53 |  | YES | ignore |
| **MBMS Service Area Identity List** |  | *0..<maxnoofMBMSServiceAreaIdentities >* |  | Supported MBMS Service Area Identities in the cell | GLOBAL | ignore |
| >MBMS Service Area Identity |  |  | OCTET STRING(2) | MBMS Service Area Identities as defined in TS 23.003 [29] |  |  |
| MultibandInfoList | O |  | 9.2.60 |  | YES | ignore |
| FreqBandIndicatorPriority | O |  | ENUMERATED (not-broadcasted, broadcasted, ...) | This IE indicates that the eNodeB supports *FreqBandIndicationPriority*, and whether*FreqBandIndicatorPriority* is broadcasted in SIB 1 (see TS 36.331 [9]) | YES | ignore |
| BandwidthReducedSI | O |  | ENUMERATED (scheduled, ...) | This IE indicates that the SystemInformationBlockType1-BR is scheduled in the cell (see TS 36.331 [9]) | YES | ignore |
| Protected E-UTRA Resource Indication | O |  | 9.2.125 | This IE indicates which E-UTRA control/reference signal resources are protected and are not subject to E-UTRA - NR Cell Resource Coordination. | YES | ignore |
| **Broadcast PLMN Identity Info List E-UTRA** |  | *0..<maxnoofBPLMNs>* |  | This IE corresponds to the *cellAccessRelatedInfo* IE in *SIB1* as specified in TS 36.331 [9]. All PLMN Identities and associated information contained in the *cellAccessRelatedInfo* IE are included and provided in the same order as broadcast in SIB1. | YES | ignore |
| **>Broadcast PLMNs** |  | *1..<maxnoof BPLMNs>* |  | Broadcast PLMN IDs in SIB1 associated to the *E-UTRA Cell Identity* IE. | – |  |
| >>PLMN Identity | M |  | 9.2.4 |  | – |  |
| >TAC | M |  | OCTET STRING(2) |  | – |  |
| >E-UTRA Cell Identity | M |  | BIT STRING (28) |  | – |  |
| NPRACH Configuration | O |  | NPRACH Configuration9.2.170 |  | YES | ignore |
| SFN Offset | O |  | 9.2.xx |  | YES | ignore |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofBPLMNs | Maximum no. of Broadcast PLMN Ids. Value is 6. |
| maxnoofMBSFN | Maximum no. of MBSFN frame allocation with different offset. Value is 8. |
| maxnoofMBMSServiceAreaIdentities | Maximum no. of MBMS Service Area Identities. Value is 256. |

Next Change

### 9.2.110 Served NR Cell Information

This IE contains cell configuration information of an NR cell that a neighbour eNB may need for the X2 AP interface.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| NR-PCI | M |  | INTEGER (0..1007) | NR Physical Cell ID | – |  |
| Cell ID | M |  | NR CGI 9.2.111 |  | – |  |
| 5GS-TAC | O |  | OCTET STRING (3) | Broadcast 5GS Tracking Area Code.If this IE is included, the receiving node may assume that the NR cell provides 5GS service and is eligible as inter-system HO target candidate. | – |  |
| Configured TAC | O |  | OCTET STRING (2) | This is the TAC configured in the en-gNB, different from the 5GS TAC broadcast in the NR cell and enables application of Roaming and Access Restrictions for EN-DC as specified in TS 37.340 [32]. | – |  |
| **Served PLMNs** |  | *1..<maxnoofBPLMNs>* |  | Broadcast PLMNs in SIB1 associated to the NR Cell Identity in the *Cell ID* IE. If more than maxnoofBPLMNs are needed for NR, they are provided by the *Additional PLMNs* IE. | – |  |
| >PLMN Identity | M |  | 9.2.4 |  | – |  |
| CHOICE *NR-Mode-Info* | M |  |  |  | – |  |
| *>FDD* |  |  |  |  |  |  |
| **>>FDD Info** |  | *1* |  |  | – |  |
| >>>UL FreqInfo | M |  | NR Frequency Info9.2.106 |  | – |  |
| >>>DL FreqInfo | M |  | NR Frequency Info9.2.106 |  | – |  |
| >>>UL Transmission Bandwidth | M |  | NR Transmission Bandwidth9.2.114 |  | – |  |
| >>>DL Transmission Bandwidth | M |  | NR Transmission Bandwidth9.2.114 |  | – |  |
| >>>UL Carrier List | O |  | NR Carrier List9.2.168 | If included, the *UL Transmission Bandwidth* IE shall be ignored. | YES | ignore |
| >>>DL Carrier List | O |  | NR Carrier List9.2.168 | If included, the *DL Transmission Bandwidth* IE shall be ignored. | YES | ignore |
| *>TDD* |  |  |  |  |  |  |
| **>>TDD Info** |  | *1* |  |  | – |  |
| >>>NRFreqInfo | M |  | NR Frequency Info9.2.106 |  | – |  |
| >>>Transmission Bandwidth | M |  | NR Transmission Bandwidth9.2.114 |  | – |  |
| >>>TDD UL-DL Configuration Common NR | O |  | OCTET STRING | The *tdd-UL-DL-ConfigurationCommon* IE in TS 38.331 [31] | YES | ignore |
| >>>Carrier List | O |  | NR Carrier List9.2.168 | If included, the *Transmission Bandwidth* IE shall be ignored. | YES | ignore |
| >>>Intended TDD DL-UL Configuration NR | O |  | OCTET STRING | Contains the *Intended TDD DL-UL Configuration NR* IE as defined in TS 38.423 [49]. | YES | ignore |
| Measurement Timing Configuration | M |  | OCTET STRING | Contains the *MeasurementTimingConfiguration* inter-node message for the served cell, as defined in TS 38.331 [31]. | – |  |
| **Additional PLMNs** |  | *0..<maxnoofAdditionalPLMNs>* |  | Additional PLMNs in addition to the Served PLMNs | YES | reject |
| >PLMN Identity | M |  | 9.2.4 |  | – |  |
| **Broadcast PLMN Identity Info List NR** |  | *0..<maxnoofextBPLMNs>* |  | This IE corresponds to the *PLMN-IdentityInfoList* IE in *SIB1* as specified in TS 38.331 [31]. All PLMN Identities and associated information contained in the *PLMN-IdentityInfoList* IE are included and provided in the same order as broadcast in SIB1. | YES | ignore |
| **>Broadcast PLMNs** |  | *1..<maxnoofextBPLMNs>* |  | Broadcast PLMN IDs in SIB1 associated to the *NR Cell Identity* IE | – |  |
| >>PLMN Identity | M |  | 9.2.4 |  | – |  |
| >5GS-TAC | O |  | OCTET STRING (3) |  | – |  |
| >NR Cell Identity | M |  | BIT STRING (SIZE(36)) |  | – |  |
| SSB Positions In Burst | O |  | 9.2.169 |  | YES | ignore |
| NR Cell PRACH Configuration | O |  | OCTET STRING | Containing 9.3.1.139 NR Cell PRACH Configuration as of TS 38.473 [44]. | YES | ignore |
| CSI-RS Transmission Indication | O |  | ENUMERATED {activated, deactivated, ...} | This IE indicates the CSI-RS transmission status of the given cell. | YES | ignore |
| SFN Offset | O |  | 9.2.xx |  | YES | ignore |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofBPLMNs | Maximum no. of broadcast PLMN Ids. Value is 6. |
| maxnoofAdditionalPLMNs | Maximum no. additional PLMN Ids. Value is 6. |
| maxnoofextBPLMNs | Maximum no. of extended broadcast PLMN Ids. Value is 12. |

Next Change

#### 9.2.xx SFN Offset

This IE contains the time offset between an absolute time reference and the SFN0 start. The IE is calculated assuming that the SFN transmission started at the absolute time reference. The absolute time reference chosen is 1980-01-06 T00:00:19 International Atomic Time (TAI).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| SFN Time Offset | M |  | BIT STRING (SIZE(24)) | Time offset in microseconds between the absolute time reference "1980-01-06 T00:00:19 International Atomic Time (TAI)” and the SFN0 start. The maximum usable value is (1024\*10^4-1). Values higher than the maximum are discarded. |  |  |

Next Change

### 9.3.4 PDU Definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- PDU definitions for X2AP.

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

X2AP-PDU-Contents {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

eps-Access (21) modules (3) x2ap (2) version1 (1) x2ap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- IE parameter types from other modules.

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

IMPORTS

 ABSInformation,

 ABS-Status,

 AS-SecurityInformation,

 BearerType,

 Cause,

 CompositeAvailableCapacityGroup,

 Correlation-ID,

 COUNTvalue,

 CellReportingIndicator,

 AerialUEsubscriptionInformation,

 CriticalityDiagnostics,

 CRNTI,

 CSGMembershipStatus,

 CSG-Id,

 DeactivationIndication,

 DL-Forwarding,

 DynamicDLTransmissionInformation,

 E-RABsSubjectToDLDiscarding-List,

 E-RABsSubjectToEarlyStatusTransfer-List,

 ECGI,

 E-RAB-ID,

 E-RAB-Level-QoS-Parameters,

 E-RAB-List,

 EUTRANTraceID,

 GlobalENB-ID,

 GTPtunnelEndpoint,

 GUGroupIDList,

 GUMMEI,

 HandoverReportType,

 HandoverRestrictionList,

 Masked-IMEISV,

 InvokeIndication,

 LocationReportingInformation,

 LowerLayerPresenceStatusChange,

 MDT-Configuration,

 ManagementBasedMDTallowed,

 MDTPLMNList,

 Neighbour-Information,

 PCI,

 PDCP-SN,

 PLMN-Identity,

 ReceiveStatusofULPDCPSDUs,

 Registration-Request,

 RelativeNarrowbandTxPower,

 RadioResourceStatus,

 RLC-Status,

 RRCConnReestabIndicator,

 RRCConnSetupIndicator,

 UE-RLF-Report-Container,

 UEAppLayerMeasConfig,

 RRC-Context,

 ServedCell-Information,

 ServedCells,

 ShortMAC-I,

 SRVCCOperationPossible,

 SubscriberProfileIDforRFP,

 TargetCellInUTRAN,

 TargeteNBtoSource-eNBTransparentContainer,

 TimeToWait,

 TraceActivation,

 TraceDepth,

 TransportLayerAddress,

 UEAggregateMaximumBitRate,

 UE-HistoryInformation,

 UE-HistoryInformationFromTheUE,

 UE-S1AP-ID,

 UESecurityCapabilities,

 UEsToBeResetList,

 UE-X2AP-ID,

 UL-HighInterferenceIndicationInfo,

 UL-InterferenceOverloadIndication,

 HWLoadIndicator,

 S1TNLLoadIndicator,

 Measurement-ID,

 ReportCharacteristics,

 MobilityParametersInformation,

 MobilityParametersModificationRange,

 ReceiveStatusOfULPDCPSDUsExtended,

 COUNTValueExtended,

 SubframeAssignment,

 ExtendedULInterferenceOverloadInfo,

 ExpectedUEBehaviour,

 SeNBSecurityKey,

 MeNBtoSeNBContainer,

 SeNBtoMeNBContainer,

 SCGChangeIndication,

 CoMPInformation,

 ReportingPeriodicityRSRPMR,

 RSRPMRList,

 UE-RLF-Report-Container-for-extended-bands,

 ProSeAuthorized,

 CoverageModificationList,

 ReportingPeriodicityCSIR,

 CSIReportList,

 ReceiveStatusOfULPDCPSDUsPDCP-SNlength18,

 COUNTvaluePDCP-SNlength18,

 LHN-ID,

 UE-ContextKeptIndicator,

 UE-X2AP-ID-Extension,

 SIPTOBearerDeactivationIndication,

 TunnelInformation,

 V2XServicesAuthorized,

 X2BenefitValue,

 ResumeID,

 EUTRANCellIdentifier,

 MakeBeforeBreakIndicator,

 WTID,

 WT-UE-XwAP-ID,

 UESidelinkAggregateMaximumBitRate,

 SgNBSecurityKey,

 MeNBtoSgNBContainer,

 SgNBtoMeNBContainer,

 SplitSRBs,

 RRCContainer,

 SRBType,

 GlobalGNB-ID,

 GNB-ID,

 SCGConfigurationQuery,

 SplitSRB,

 NRUeReport,

 EN-DC-ResourceConfiguration,

 TAC,

 NRFreqInfo,

 NRCGI,

 NRPCI,

 NRUESecurityCapabilities,

 PDCPChangeIndication,

 ULConfiguration,

 SgNB-UE-X2AP-ID,

 SecondaryRATUsageReportList,

 ActivationID,

 MeNBResourceCoordinationInformation,

 SgNBResourceCoordinationInformation,

 NR-TxBW,

 BroadcastPLMNs-Item,

 AdditionalPLMNs-Item,

 RLCMode,

 GBR-QosInformation,

 DRB-ID,

 FiveGS-TAC,

 SULInformation,

 Packet-LossRate,

 ResourceType,

 DataTrafficResourceIndication,

 SpectrumSharingGroupID,

 RRC-Config-Ind,

 SGNB-Addition-Trigger-Ind,

 UserPlaneTrafficActivityReport,

 ERABActivityNotifyItemList,

 PDCPSnLength,

 Subscription-Based-UE-DifferentiationInfo,

 LCID,

 DuplicationActivation,

 GNBOverloadInformation,

 NewDRBIDrequest,

 DesiredActNotificationLevel,

 LocationInformationSgNB,

 LocationInformationSgNBReporting,

 EndcSONConfigurationTransfer,

 NRNeighbour-Information,

 InterfaceInstanceIndication,

 BPLMN-ID-Info-NR,

 SNtriggered,

 EPCHandoverRestrictionListContainer,

 AdditionalRRMPriorityIndex,

 RequestedFastMCGRecoveryViaSRB3,

 AvailableFastMCGRecoveryViaSRB3,

 RequestedFastMCGRecoveryViaSRB3Release,

 ReleaseFastMCGRecoveryViaSRB3,

 FastMCGRecovery,

 PartialListIndicator,

 MaximumCellListSize,

 MessageOversizeNotification,

 TNLConfigurationInfo,

 TNLA-To-Add-List,

 TNLA-To-Update-List,

 TNLA-To-Remove-List,

 TNLA-Setup-List,

 TNLA-Failed-To-Setup-List,

 RAN-UE-NGAP-ID,

 CHOinformation-REQ,

 CHOinformation-ACK,

 DAPSRequestInfo,

 DAPSResponseInfo,

 CandidateCellsToBeCancelledList,

 CHO-DC-Indicator,

 Ethernet-Type,

 NRV2XServicesAuthorized,

 NRUESidelinkAggregateMaximumBitRate,

 PC5QoSParameters,

 TargetCellInNGRAN,

 Measurement-ID-ENDC,

 Registration-Request-ENDC,

 ReportCharacteristics-ENDC,

 NRRadioResourceStatus,

 TNLCapacityIndicator,

 NRCompositeAvailableCapacityGroup,

 SSBIndex,

 TDDULDLConfigurationCommonNR,

 NRCarrierList,

 SSB-PositionsInBurst,

 NRCellPRACHConfig,

 NBIoT-RLF-Report-Container,

 PrivacyIndicator,

 UERadioCapabilityID,

 CSI-RSTransmissionIndication,

 IABNodeIndication,

 F1CTrafficContainer,

 IntendedTDD-DL-ULConfiguration-NR,

 UERadioCapability,

 SFN-Offset

FROM X2AP-IEs

 PrivateIE-Container{},

 ProtocolExtensionContainer{},

 ProtocolIE-Container{},

 ProtocolIE-ContainerList{},

 ProtocolIE-ContainerPair{},

 ProtocolIE-ContainerPairList{},

 ProtocolIE-Single-Container{},

 X2AP-PRIVATE-IES,

 X2AP-PROTOCOL-EXTENSION,

 X2AP-PROTOCOL-IES,

 X2AP-PROTOCOL-IES-PAIR

FROM X2AP-Containers

 id-ABSInformation,

 id-ActivatedCellList,

 id-BearerType,

 id-Cause,

 id-CellInformation,

 id-CellInformation-Item,

 id-CellMeasurementResult,

 id-CellMeasurementResult-NR-ENDC,

 id-CellMeasurementResult-Item,

 id-CellMeasurementResult-NR-ENDC-Item,

 id-CellMeasurementResult-E-UTRA-ENDC,

 id-CellMeasurementResult-E-UTRA-ENDC-Item,

 id-CellToReport,

 id-CellToReport-E-UTRA-ENDC,

 id-CellToReport-NR-ENDC,

 id-CellToReport-Item,

 id-CellToReport-E-UTRA-ENDC-Item,

 id-CellToReport-NR-ENDC-Item,

 id-CompositeAvailableCapacityGroup,

 id-AerialUEsubscriptionInformation,

 id-CriticalityDiagnostics,

 id-DeactivationIndication,

 id-DynamicDLTransmissionInformation,

 id-E-RABs-Admitted-Item,

 id-E-RABs-Admitted-List,

 id-E-RABs-NotAdmitted-List,

 id-E-RABs-SubjectToStatusTransfer-List,

 id-E-RABs-SubjectToStatusTransfer-Item,

 id-E-RABs-ToBeSetup-Item,

 id-GlobalENB-ID,

 id-GUGroupIDList,

 id-GUGroupIDToAddList,

 id-GUGroupIDToDeleteList,

 id-GUMMEI-ID,

 id-Masked-IMEISV,

 id-InvokeIndication,

 id-New-eNB-UE-X2AP-ID,

 id-Old-eNB-UE-X2AP-ID,

 id-Registration-Request,

 id-ReportingPeriodicity,

 id-RLC-Status,

 id-ServedCells,

 id-ServedCellsToActivate,

 id-ServedCellsToAdd,

 id-ServedCellsToModify,

 id-ServedCellsToDelete,

 id-SRVCCOperationPossible,

 id-TargetCell-ID,

 id-TargeteNBtoSource-eNBTransparentContainer,

 id-TimeToWait,

 id-TraceActivation,

 id-UE-ContextInformation,

 id-UE-HistoryInformation,

 id-UE-X2AP-ID,

 id-Measurement-ID,

 id-ReportCharacteristics,

 id-ENB1-Measurement-ID,

 id-ENB2-Measurement-ID,

 id-ENB1-Cell-ID,

 id-ENB2-Cell-ID,

 id-ENB2-Proposed-Mobility-Parameters,

 id-ENB1-Mobility-Parameters,

 id-ENB2-Mobility-Parameters-Modification-Range,

 id-FailureCellPCI,

 id-Re-establishmentCellECGI,

 id-FailureCellCRNTI,

 id-ShortMAC-I,

 id-SourceCellECGI,

 id-FailureCellECGI,

 id-HandoverReportType,

 id-UE-RLF-Report-Container,

 id-PartialSuccessIndicator,

 id-MeasurementInitiationResult-List,

 id-MeasurementInitiationResult-Item,

 id-MeasurementFailureCause-Item,

 id-CompleteFailureCauseInformation-List,

 id-CompleteFailureCauseInformation-Item,

 id-CSGMembershipStatus,

 id-CSG-Id,

 id-MDTConfiguration,

 id-ManagementBasedMDTallowed,

 id-ABS-Status,

 id-RRCConnSetupIndicator,

 id-RRCConnReestabIndicator,

 id-TargetCellInUTRAN,

 id-MobilityInformation,

 id-SourceCellCRNTI,

 id-ManagementBasedMDTPLMNList,

 id-ReceiveStatusOfULPDCPSDUsExtended,

 id-ULCOUNTValueExtended,

 id-DLCOUNTValueExtended,

 id-IntendedULDLConfiguration,

 id-ExtendedULInterferenceOverloadInfo,

 id-RNL-Header,

 id-x2APMessage,

 id-UE-HistoryInformationFromTheUE,

 id-ExpectedUEBehaviour,

 id-MeNB-UE-X2AP-ID,

 id-SeNB-UE-X2AP-ID,

 id-UE-SecurityCapabilities,

 id-SeNBSecurityKey,

 id-SeNBUEAggregateMaximumBitRate,

 id-ServingPLMN,

 id-E-RABs-ToBeAdded-List,

 id-E-RABs-ToBeAdded-Item,

 id-MeNBtoSeNBContainer,

 id-E-RABs-Admitted-ToBeAdded-List,

 id-E-RABs-Admitted-ToBeAdded-Item,

 id-SeNBtoMeNBContainer,

 id-ResponseInformationSeNBReconfComp,

 id-UE-ContextInformationSeNBModReq,

 id-E-RABs-ToBeAdded-ModReqItem,

 id-E-RABs-ToBeModified-ModReqItem,

 id-E-RABs-ToBeReleased-ModReqItem,

 id-E-RABs-Admitted-ToBeAdded-ModAckList,

 id-E-RABs-Admitted-ToBeModified-ModAckList,

 id-E-RABs-Admitted-ToBeReleased-ModAckList,

 id-E-RABs-Admitted-ToBeAdded-ModAckItem,

 id-E-RABs-Admitted-ToBeModified-ModAckItem,

 id-E-RABs-Admitted-ToBeReleased-ModAckItem,

 id-SCGChangeIndication,

 id-E-RABs-ToBeReleased-ModReqd,

 id-E-RABs-ToBeReleased-ModReqdItem,

 id-E-RABs-ToBeReleased-List-RelReq,

 id-E-RABs-ToBeReleased-RelReqItem,

 id-E-RABs-ToBeReleased-List-RelConf,

 id-E-RABs-ToBeReleased-RelConfItem,

 id-E-RABs-SubjectToCounterCheck-List,

 id-E-RABs-SubjectToCounterCheckItem,

 id-CoMPInformation,

 id-ReportingPeriodicityRSRPMR,

 id-RSRPMRList,

 id-UE-RLF-Report-Container-for-extended-bands,

 id-ProSeAuthorized,

 id-CoverageModificationList,

 id-ReportingPeriodicityCSIR,

 id-CSIReportList,

 id-ReceiveStatusOfULPDCPSDUsPDCP-SNlength18,

 id-ULCOUNTValuePDCP-SNlength18,

 id-DLCOUNTValuePDCP-SNlength18,

 id-LHN-ID,

 id-Correlation-ID,

 id-SIPTO-Correlation-ID,

 id-UE-ContextReferenceAtSeNB,

 id-UE-ContextReferenceAtWT,

 id-UE-ContextKeptIndicator,

 id-UEs-ToBeReset,

 id-UEs-Admitted-ToBeReset,

 id-WT-UE-ContextKeptIndicator,

 id-New-eNB-UE-X2AP-ID-Extension,

 id-Old-eNB-UE-X2AP-ID-Extension,

 id-MeNB-UE-X2AP-ID-Extension,

 id-SeNB-UE-X2AP-ID-Extension,

 id-SIPTO-BearerDeactivationIndication,

 id-Tunnel-Information-for-BBF,

 id-SIPTO-L-GW-TransportLayerAddress,

 id-GW-TransportLayerAddress,

 id-X2RemovalThreshold,

 id-CellReportingIndicator,

 id-V2XServicesAuthorized,

 id-resumeID,

 id-UE-ContextInformationRetrieve,

 id-E-RABs-ToBeSetupRetrieve-Item,

 id-NewEUTRANCellIdentifier,

 id-MakeBeforeBreakIndicator,

 id-UESidelinkAggregateMaximumBitRate,

 id-uL-GTPtunnelEndpoint,

 id-SgNBSecurityKey,

 id-SgNBUEAggregateMaximumBitRate,

 id-E-RABs-ToBeAdded-SgNBAddReqList,

 id-MeNBtoSgNBContainer,

 id-SgNB-UE-X2AP-ID,

 id-RequestedSplitSRBs,

 id-E-RABs-ToBeAdded-SgNBAddReq-Item,

 id-E-RABs-Admitted-ToBeAdded-SgNBAddReqAckList,

 id-SgNBtoMeNBContainer,

 id-AdmittedSplitSRBs,

 id-E-RABs-Admitted-ToBeAdded-SgNBAddReqAck-Item,

 id-ResponseInformationSgNBReconfComp,

 id-UE-ContextInformation-SgNBModReq,

 id-E-RABs-ToBeAdded-SgNBModReq-Item,

 id-E-RABs-ToBeModified-SgNBModReq-Item,

 id-E-RABs-ToBeReleased-SgNBModReq-Item,

 id-E-RABs-Admitted-ToBeAdded-SgNBModAckList,

 id-E-RABs-Admitted-ToBeModified-SgNBModAckList,

 id-E-RABs-Admitted-ToBeReleased-SgNBModAckList,

 id-E-RABs-Admitted-ToBeAdded-SgNBModAck-Item,

 id-E-RABs-Admitted-ToBeModified-SgNBModAck-Item,

 id-E-RABs-Admitted-ToBeReleased-SgNBModAck-Item,

 id-E-RABs-Admitted-ToBeReleased-SgNBRelReqAckList,

 id-E-RABs-Admitted-ToBeReleased-SgNBRelReqAck-Item,

 id-E-RABs-ToBeReleased-SgNBModReqdList,

 id-E-RABs-ToBeModified-SgNBModReqdList,

 id-E-RABs-ToBeReleased-SgNBModReqd-Item,

 id-E-RABs-ToBeModified-SgNBModReqd-Item,

 id-E-RABs-ToBeReleased-SgNBChaConfList,

 id-E-RABs-ToBeReleased-SgNBChaConf-Item,

 id-E-RABs-ToBeReleased-SgNBRelReqList,

 id-E-RABs-ToBeReleased-SgNBRelReq-Item,

 id-E-RABs-ToBeReleased-SgNBRelConfList,

 id-E-RABs-ToBeReleased-SgNBRelConf-Item,

 id-E-RABs-ToBeReleased-SgNBRelReqdList,

 id-E-RABs-ToBeReleased-SgNBRelReqd-Item,

 id-E-RABs-SubjectToSgNBCounterCheck-List,

 id-E-RABs-SubjectToSgNBCounterCheck-Item,

 id-Target-SgNB-ID,

 id-RRCContainer,

 id-SRBType,

 id-HandoverRestrictionList,

 id-SCGConfigurationQuery,

 id-SplitSRB,

 id-NRUeReport,

 id-InitiatingNodeType-EndcX2Setup,

 id-InitiatingNodeType-EndcConfigUpdate,

 id-RespondingNodeType-EndcX2Setup,

 id-RespondingNodeType-EndcConfigUpdate,

 id-NRUESecurityCapabilities,

 id-PDCPChangeIndication,

 id-ServedEUTRAcellsENDCX2ManagementList,

 id-ServedEUTRAcellsToModifyListENDCConfUpd,

 id-ServedEUTRAcellsToDeleteListENDCConfUpd,

 id-ServedNRcellsToModifyListENDCConfUpd,

 id-ServedNRcellsToDeleteListENDCConfUpd,

 id-CellAssistanceInformation,

 id-Globalen-gNB-ID,

 id-ServedNRcellsENDCX2ManagementList,

 id-Old-SgNB-UE-X2AP-ID,

 id-UE-ContextReferenceAtSgNB,

 id-SecondaryRATUsageReportList,

 id-ActivationID,

 id-ServedNRCellsToActivate,

 id-ActivatedNRCellList,

 id-MeNBResourceCoordinationInformation,

 id-SgNBResourceCoordinationInformation,

 id-UEAppLayerMeasConfig,

 id-SelectedPLMN,

 id-SubscriberProfileIDforRFP,

 id-InitiatingNodeType-EutranrCellResourceCoordination,

 id-RespondingNodeType-EutranrCellResourceCoordination,

 id-DataTrafficResourceIndication,

 id-SpectrumSharingGroupID,

 id-ListofEUTRACellsinEUTRACoordinationReq,

 id-ListofEUTRACellsinEUTRACoordinationResp,

 id-ListofEUTRACellsinNRCoordinationReq,

 id-ListofNRCellsinNRCoordinationReq,

 id-ListofNRCellsinNRCoordinationResp,

 id-RRCConfigIndication,

 id-SGNB-Addition-Trigger-Ind,

 id-RequestedSplitSRBsrelease,

 id-AdmittedSplitSRBsrelease,

 id-E-RABs-AdmittedToBeModified-SgNBModConfList,

 id-E-RABs-AdmittedToBeModified-SgNBModConf-Item,

 id-UEContextLevelUserPlaneActivity,

 id-ERABActivityNotifyItemList,

 id-MeNBCell-ID,

 id-InitiatingNodeType-EndcX2Removal,

 id-RespondingNodeType-EndcX2Removal,

 id-uLpDCPSnLength,

 id-dL-Forwarding,

 id-E-RABs-DataForwardingAddress-List,

 id-E-RABs-DataForwardingAddress-Item,

 id-Subscription-Based-UE-DifferentiationInfo,

 id-RLCMode-transferred,

 id-dLPDCPSnLength,

 id-secondarysgNBDLGTPTEIDatPDCP,

 id-secondarymeNBULGTPTEIDatPDCP,

 id-lCID,

 id-duplicationActivation,

 id-GNBOverloadInformation,

 id-new-drb-ID-req,

 id-NRNeighbourInfoToModify,

 id-DesiredActNotificationLevel,

 id-LocationInformationSgNB,

 id-LocationInformationSgNBReporting,

 id-endcSONConfigurationTransfer,

 id-EUTRANTraceID,

 id-additionalPLMNs-Item,

 id-InterfaceInstanceIndication,

 id-BPLMN-ID-Info-NR,

 id-SNtriggered,

 id-EPCHandoverRestrictionListContainer,

 id-ERABs-transferred-to-MeNB,

 id-AdditionalRRMPriorityIndex,

 id-LowerLayerPresenceStatusChange,

 id-FastMCGRecovery-SN-to-MN,

 id-FastMCGRecovery-MN-to-SN,

 id-RequestedFastMCGRecoveryViaSRB3,

 id-AvailableFastMCGRecoveryViaSRB3,

 id-RequestedFastMCGRecoveryViaSRB3Release,

 id-ReleaseFastMCGRecoveryViaSRB3,

 id-PartialListIndicator,

 id-MaximumCellListSize,

 id-MessageOversizeNotification,

 id-CellandCapacityAssistInfo,

 id-TNLConfigurationInfo,

 id-TNLA-To-Add-List,

 id-TNLA-To-Update-List,

 id-TNLA-To-Remove-List,

 id-TNLA-Setup-List,

 id-TNLA-Failed-To-Setup-List,

 id-UEContextReferenceatSourceNGRAN,

 id-CHOinformation-REQ,

 id-CHOinformation-ACK,

 id-DAPSRequestInfo,

 id-RequestedTargetCellID,

 id-CandidateCellsToBeCancelledList,

 id-DAPSResponseInfo,

 id-ProcedureStage,

 id-CHO-DC-Indicator,

 id-Ethernet-Type,

 id-NRV2XServicesAuthorized,

 id-NRUESidelinkAggregateMaximumBitRate,

 id-PC5QoSParameters,

 id-TargetCellInNGRAN,

 id-eNB-Measurement-ID-ENDC,

 id-engNB-Measurement-ID-ENDC,

 id-TDDULDLConfigurationCommonNR,

 id-CarrierList,

 id-ULCarrierList,

 id-SSB-PositionsInBurst,

 id-NRCellPRACHConfig,

 id-NBIoT-RLF-Report-Container,

 id-MDTConfigurationNR,

 id-PrivacyIndicator,

 id-TraceCollectionEntityIPAddress,

 id-UERadioCapabilityID,

 id-CSI-RSTransmissionIndication,

 id-DLCarrierList,

 id-IABNodeIndication,

 id-F1CTrafficContainer,

 id-IntendedTDD-DL-ULConfiguration-NR,

 id-UERadioCapability,

 id-SFN-Offset,

 maxCellineNB,

 maxnoofBearers,

 maxnoofPDCP-SN,

 maxFailedMeasObjects,

 maxnoofCellIDforMDT,

 maxnoofTAforMDT,

 maxCellinengNB,

 maxnoofCellIDforQMC,

 maxnoofTAforQMC,

 maxnoofPLMNforQMC,

 maxnoofProtectedResourcePatterns,

 maxnoNRcellsSpectrumSharingWithE-UTRA,

 maxnoofNrCellBands,

 maxnoofSSBAreas

FROM X2AP-Constants;

Unchanged Text Skipped

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- EN-DC X2 SETUP REQUEST

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ENDCX2SetupRequest ::= SEQUENCE {

 protocolIEs ProtocolIE-Container {{ENDCX2SetupRequest-IEs}},

 ...

}

ENDCX2SetupRequest-IEs X2AP-PROTOCOL-IES ::= {

 { ID id-InitiatingNodeType-EndcX2Setup CRITICALITY reject TYPE InitiatingNodeType-EndcX2Setup PRESENCE mandatory}|

 { ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional}|

 { ID id-TNLConfigurationInfo CRITICALITY ignore TYPE TNLConfigurationInfo PRESENCE optional},

 ...

}

InitiatingNodeType-EndcX2Setup ::= CHOICE {

 init-eNB ProtocolIE-Container {{ENB-ENDCX2SetupReqIEs}},

 init-en-gNB ProtocolIE-Container {{En-gNB-ENDCX2SetupReqIEs}},

 ...

}

ENB-ENDCX2SetupReqIEs X2AP-PROTOCOL-IES ::= {

 { ID id-GlobalENB-ID CRITICALITY reject TYPE GlobalENB-ID PRESENCE mandatory}|

 { ID id-ServedEUTRAcellsENDCX2ManagementList CRITICALITY reject TYPE ServedEUTRAcellsENDCX2ManagementList PRESENCE mandatory}|

 { ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

-- NOTE: In the current version of this specification the *Interface Instance Indication* IE is not included in the *Initiating NodeType* IE --

 { ID id-CellandCapacityAssistInfo CRITICALITY ignore TYPE CellandCapacityAssistInfo PRESENCE optional },

 ...

}

ServedEUTRAcellsENDCX2ManagementList ::= SEQUENCE (SIZE (1.. maxCellineNB)) OF SEQUENCE {

 servedEUTRACellInfo ServedCell-Information,

 nrNeighbourInfo NRNeighbour-Information OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {ServedEUTRAcellsENDCX2Management-ExtIEs} } OPTIONAL,

 ...

}

ServedEUTRAcellsENDCX2Management-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

En-gNB-ENDCX2SetupReqIEs X2AP-PROTOCOL-IES ::= {

 { ID id-Globalen-gNB-ID CRITICALITY reject TYPE GlobalGNB-ID PRESENCE mandatory}|

 { ID id-ServedNRcellsENDCX2ManagementList CRITICALITY reject TYPE ServedNRcellsENDCX2ManagementList PRESENCE mandatory}|

 { ID id-PartialListIndicator CRITICALITY ignore TYPE PartialListIndicator PRESENCE optional },

 ...

}

ServedNRcellsENDCX2ManagementList ::= SEQUENCE (SIZE (1.. maxCellinengNB)) OF SEQUENCE {

 servedNRCellInfo ServedNRCell-Information,

 nRNeighbourInfo NRNeighbour-Information OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {En-gNBServedCells-ExtIEs} } OPTIONAL,

 ...

}

En-gNBServedCells-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

ServedNRCell-Information ::= SEQUENCE {

 nrpCI NRPCI,

 nrCellID NRCGI,

 fiveGS-TAC FiveGS-TAC OPTIONAL,

 configured-TAC TAC OPTIONAL,

 broadcastPLMNs BroadcastPLMNs-Item,

 nrModeInfo CHOICE {

 fdd FDD-InfoServedNRCell-Information,

 tdd TDD-InfoServedNRCell-Information,

 ...

 },

 measurementTimingConfiguration OCTET STRING,

 iE-Extensions ProtocolExtensionContainer { {ServedNRCell-Information-ExtIEs} } OPTIONAL,

 ...

}

ServedNRCell-Information-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 {ID id-additionalPLMNs-Item CRITICALITY ignore EXTENSION AdditionalPLMNs-Item PRESENCE optional}|

 { ID id-BPLMN-ID-Info-NR CRITICALITY ignore EXTENSION BPLMN-ID-Info-NR PRESENCE optional}|

 { ID id-SSB-PositionsInBurst CRITICALITY ignore EXTENSION SSB-PositionsInBurst PRESENCE optional}|

 { ID id-NRCellPRACHConfig CRITICALITY ignore EXTENSION NRCellPRACHConfig PRESENCE optional}|

 { ID id-CSI-RSTransmissionIndication CRITICALITY ignore EXTENSION CSI-RSTransmissionIndication PRESENCE optional}|

 { ID id-SFN-Offset CRITICALITY ignore EXTENSION SFN-Offset PRESENCE optional },

 ...

}

FDD-InfoServedNRCell-Information ::= SEQUENCE {

 ul-NRFreqInfo NRFreqInfo,

 dl-NRFreqInfo NRFreqInfo,

 ul-NR-TxBW NR-TxBW,

 dl-NR-TxBW NR-TxBW,

 iE-Extensions ProtocolExtensionContainer { {FDD-InfoServedNRCell-Information-ExtIEs} } OPTIONAL,

 ...

}

FDD-InfoServedNRCell-Information-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-ULCarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

 { ID id-DLCarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional },

 ...

}

TDD-InfoServedNRCell-Information ::= SEQUENCE {

 nRFreqInfo NRFreqInfo,

 nR-TxBW NR-TxBW,

 iE-Extensions ProtocolExtensionContainer { {TDD-InfoServedNRCell-Information-ExtIEs} } OPTIONAL,

 ...

}

TDD-InfoServedNRCell-Information-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-TDDULDLConfigurationCommonNR CRITICALITY ignore EXTENSION TDDULDLConfigurationCommonNR PRESENCE optional}|

 { ID id-CarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional}|

 { ID id-IntendedTDD-DL-ULConfiguration-NR CRITICALITY ignore EXTENSION IntendedTDD-DL-ULConfiguration-NR PRESENCE optional},

 ...

}

CellandCapacityAssistInfo::= SEQUENCE {

 maximumCellListSize MaximumCellListSize OPTIONAL,

 cellAssistanceInformation CellAssistanceInformation OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {CellandCapacityAssistInfo-ExtIEs} } OPTIONAL,

 ...

}

CellandCapacityAssistInfo-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

CellAssistanceInformation ::= CHOICE {

 limited-list Limited-list,

 full-list ENUMERATED {allServedNRcells, ...},

 ...

}

Limited-list ::= SEQUENCE (SIZE (1..maxCellinengNB)) OF SEQUENCE {

 nrCellID NRCGI,

 iE-Extensions ProtocolExtensionContainer { {Limited-list-ExtIEs} } OPTIONAL,

 ...

}

Limited-list-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

Next Change

### 9.3.5 Information Element Definitions

Unchanged Text Skipped

-- S

S1TNLLoadIndicator ::= SEQUENCE {

 dLS1TNLLoadIndicator LoadIndicator,

 uLS1TNLLoadIndicator LoadIndicator,

 iE-Extensions ProtocolExtensionContainer { {S1TNLLoadIndicator-ExtIEs} } OPTIONAL,

 ...

}

S1TNLLoadIndicator-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SCGChangeIndication ::= ENUMERATED {pDCPCountWrapAround, pSCellChange, other, ...}

SecondaryRATUsageReportList ::= SEQUENCE (SIZE(1..maxnoofBearers)) OF ProtocolIE-Single-Container {{SecondaryRATUsageReport-ItemIEs}}

SecondaryRATUsageReport-ItemIEs X2AP-PROTOCOL-IES ::= {

 { ID id-SecondaryRATUsageReport-Item CRITICALITY reject TYPE SecondaryRATUsageReport-Item PRESENCE mandatory},

 ...

}

SecondaryRATUsageReport-Item ::= SEQUENCE {

 e-RAB-ID E-RAB-ID,

 secondaryRATType ENUMERATED {nr, ..., nR-unlicensed },

 e-RABUsageReportList E-RABUsageReportList,

 iE-Extensions ProtocolExtensionContainer { {SecondaryRATUsageReport-Item-ExtIEs} } OPTIONAL,

...

}

SecondaryRATUsageReport-Item-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SeNBSecurityKey ::= BIT STRING (SIZE(256))

SeNBtoMeNBContainer ::= OCTET STRING

ServedCells ::= SEQUENCE (SIZE (1.. maxCellineNB)) OF SEQUENCE {

 servedCellInfo ServedCell-Information,

 neighbour-Info Neighbour-Information OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {ServedCell-ExtIEs} } OPTIONAL,

 ...

}

ServedCell-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-NRNeighbourInfoToAdd CRITICALITY ignore EXTENSION NRNeighbour-Information PRESENCE optional },

 ...

}

ServedCell-Information ::= SEQUENCE {

 pCI PCI,

 cellId ECGI,

 tAC TAC,

 broadcastPLMNs BroadcastPLMNs-Item,

 eUTRA-Mode-Info EUTRA-Mode-Info,

 iE-Extensions ProtocolExtensionContainer { {ServedCell-Information-ExtIEs} } OPTIONAL,

 ...

}

ServedCell-Information-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-Number-of-Antennaports CRITICALITY ignore EXTENSION Number-of-Antennaports PRESENCE optional}|

 { ID id-PRACH-Configuration CRITICALITY ignore EXTENSION PRACH-Configuration PRESENCE optional}|

 { ID id-MBSFN-Subframe-Info CRITICALITY ignore EXTENSION MBSFN-Subframe-Infolist PRESENCE optional}|

 { ID id-CSG-Id CRITICALITY ignore EXTENSION CSG-Id PRESENCE optional}|

 { ID id-MBMS-Service-Area-List CRITICALITY ignore EXTENSION MBMS-Service-Area-Identity-List PRESENCE optional}|

 { ID id-MultibandInfoList CRITICALITY ignore EXTENSION MultibandInfoList PRESENCE optional}|

 { ID id-FreqBandIndicatorPriority CRITICALITY ignore EXTENSION FreqBandIndicatorPriority PRESENCE optional}|

 { ID id-BandwidthReducedSI CRITICALITY ignore EXTENSION BandwidthReducedSI PRESENCE optional}|

 { ID id-ProtectedEUTRAResourceIndication CRITICALITY ignore EXTENSION ProtectedEUTRAResourceIndication PRESENCE optional}|

 { ID id-BPLMN-ID-Info-EUTRA CRITICALITY ignore EXTENSION BPLMN-ID-Info-EUTRA PRESENCE optional}|

 { ID id-NPRACHConfiguration CRITICALITY ignore EXTENSION NPRACHConfiguration PRESENCE optional}|

 { ID id-SFN-Offset CRITICALITY ignore EXTENSION SFN-Offset PRESENCE optional },

 ...

}

ServiceType ::= ENUMERATED{

 qMC-for-streaming-service,

 qMC-for-MTSI-service,

 ...

}

SgNBCoordinationAssistanceInformation ::= ENUMERATED{

 coordination-not-required,

 ...

}

SgNBResourceCoordinationInformation ::= SEQUENCE {

 nR-CGI NRCGI,

 uLCoordinationInformation BIT STRING (SIZE(6..4400, ...)),

 dLCoordinationInformation BIT STRING (SIZE(6..4400, ...)) OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {SgNBResourceCoordinationInformationExtIEs} } OPTIONAL,

 ...

}

SgNBResourceCoordinationInformationExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-ECGI CRITICALITY ignore EXTENSION ECGI PRESENCE optional}|

 { ID id-SgNBCoordinationAssistanceInformation CRITICALITY reject EXTENSION SgNBCoordinationAssistanceInformation PRESENCE optional},

 ...

}

SgNB-UE-X2AP-ID ::= INTEGER (0..4294967295)

SIPTOBearerDeactivationIndication ::= ENUMERATED {

 true,

 ...

}

SharedResourceType ::= CHOICE{

 uLOnlySharing ULOnlySharing,

 uLandDLSharing ULandDLSharing,

 ...

}

ShortMAC-I ::= BIT STRING (SIZE(16))

SGNB-Addition-Trigger-Ind ::= ENUMERATED {

 sn-change,

 inter-eNB-HO,

 intra-eNB-HO,

 ...

}

SNtriggered ::=ENUMERATED{

true,

...

}

SourceOfUEActivityBehaviourInformation ::= ENUMERATED {

 subscription-information,

 statistics,

 ...

}

SpecialSubframe-Info ::= SEQUENCE {

 specialSubframePatterns SpecialSubframePatterns,

 cyclicPrefixDL CyclicPrefixDL,

 cyclicPrefixUL CyclicPrefixUL,

 iE-Extensions ProtocolExtensionContainer { {SpecialSubframe-Info-ExtIEs} } OPTIONAL,

 ...

}

SpecialSubframe-Info-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SpecialSubframePatterns ::= ENUMERATED {

 ssp0,

 ssp1,

 ssp2,

 ssp3,

 ssp4,

 ssp5,

 ssp6,

 ssp7,

 ssp8,

 ...

}

SpectrumSharingGroupID ::= INTEGER (1..maxCellineNB)

SubbandCQI ::= SEQUENCE {

 subbandCQICodeword0 SubbandCQICodeword0,

 subbandCQICodeword1 SubbandCQICodeword1 OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {SubbandCQI-ExtIEs} } OPTIONAL,

 ...

}

Subscription-Based-UE-DifferentiationInfo ::= SEQUENCE {

 periodicCommunicationIndicator ENUMERATED {periodically, ondemand, ...} OPTIONAL,

 periodicTime INTEGER (1..3600, ...) OPTIONAL,

 scheduledCommunicationTime ScheduledCommunicationTime OPTIONAL,

 stationaryIndication ENUMERATED {stationary, mobile, ...} OPTIONAL,

 trafficProfile ENUMERATED {single-packet, dual-packets, multiple-packets, ...} OPTIONAL,

 batteryIndication ENUMERATED {battery-powered, battery-powered-not-rechargeable-or-replaceable, not-battery-powered, ...} OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { Subscription-Based-UE-DifferentiationInfo-ExtIEs} } OPTIONAL,

 ...

}

Subscription-Based-UE-DifferentiationInfo-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

ScheduledCommunicationTime ::= SEQUENCE {

 dayofWeek BIT STRING (SIZE(7)) OPTIONAL,

 timeofDayStart INTEGER (0..86399, ...) OPTIONAL,

 timeofDayEnd INTEGER (0..86399, ...) OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { ScheduledCommunicationTime-ExtIEs}} OPTIONAL,

 ...

}

ScheduledCommunicationTime-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SRVCCOperationPossible ::= ENUMERATED {

 possible,

 ...

}

SSBAreaCapacityValue-List ::= SEQUENCE (SIZE (1.. maxnoofSSBAreas)) OF SSBAreaCapacityValue-Item

SSBAreaCapacityValue-Item ::= SEQUENCE {

 ssbIndex SSBIndex,

 ssbAreaCapacityValue INTEGER (0..100),

 iE-Extensions ProtocolExtensionContainer { {SSBAreaCapacityValue-ExtIEs} } OPTIONAL,

 ...

}

SSBAreaCapacityValue-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SSBAreaRadioResourceStatus-List ::= SEQUENCE (SIZE (1.. maxnoofSSBAreas)) OF SSBAreaRadioResourceStatus-Item

SSBAreaRadioResourceStatus-Item ::= SEQUENCE {

 ssbIndex SSBIndex,

 ssbAreaDLGBRPRBUsage INTEGER (0..100),

 ssbAreaULGBRPRBUsage INTEGER (0..100),

 ssbAreaDLNonGBRPRBUsage INTEGER (0..100),

 ssbAreaULNonGBRPRBUsage INTEGER (0..100),

 ssbAreaDLTotalPRBUsage INTEGER (0..100),

 ssbAreaULTotalPRBUsage INTEGER (0..100),

 ssbAreaDLSchedulingPDCCHCCEUsage INTEGER (0..100) OPTIONAL,

 ssbAreaULSchedulingPDCCHCCEUsage INTEGER (0..100) OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {SSBAreaRadioResourceStatus-ExtIEs} } OPTIONAL,

 ...

}

SSBAreaRadioResourceStatus-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SSBIndex ::= INTEGER (0..63)

SSB-PositionsInBurst ::= CHOICE {

 shortBitmap BIT STRING (SIZE (4)),

 mediumBitmap BIT STRING (SIZE (8)),

 longBitmap BIT STRING (SIZE (64)),

 choice-extension ProtocolIE-Single-Container { {SSB-PositionsInBurst-ExtIEs} }

}

SSB-PositionsInBurst-ExtIEs X2AP-PROTOCOL-IES ::= {

 ...

}

SubbandCQI-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SubbandCQICodeword0 ::= CHOICE {

 four-bitCQI INTEGER (0..15, ...),

 two-bitSubbandDifferentialCQI INTEGER (0..3, ...),

 two-bitDifferentialCQI INTEGER (0..3, ...),

 ...

}

SubbandCQICodeword1 ::= CHOICE {

 four-bitCQI INTEGER (0..15, ...),

 three-bitSpatialDifferentialCQI INTEGER (0..7, ...),

 two-bitSubbandDifferentialCQI INTEGER (0..3, ...),

 two-bitDifferentialCQI INTEGER (0..3, ...),

 ...

}

SubbandCQIList ::= SEQUENCE (SIZE(1.. maxSubband)) OF SubbandCQIItem

SubbandCQIItem ::= SEQUENCE {

 subbandCQI SubbandCQI,

 subbandIndex INTEGER (0..27,...),

 iE-Extensions ProtocolExtensionContainer { {SubbandCQIItem-ExtIEs} } OPTIONAL,

 ...

}

SubbandCQIItem-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SubbandSize ::= ENUMERATED {

 size2,

 size3,

 size4,

 size6,

 size8,

 ...

}

SubscriberProfileIDforRFP ::= INTEGER (1..256)

SubframeAllocation ::= CHOICE {

 oneframe Oneframe,

 fourframes Fourframes,

 ...

}

SubframeAssignment ::= ENUMERATED {

 sa0,

 sa1,

 sa2,

 sa3,

 sa4,

 sa5,

 sa6,

 ...

}

SubframeType ::= ENUMERATED{mbsfn,nonmbsfn,...}

SgNBSecurityKey ::= BIT STRING (SIZE(256))

SgNBtoMeNBContainer ::= OCTET STRING

SRBType ::= ENUMERATED {srb1, srb2, ...}

SCGConfigurationQuery ::= ENUMERATED {true,...}

SULInformation ::= SEQUENCE {

 sUL-ARFCN INTEGER (0.. 3279165),

 sUL-TxBW NR-TxBW,

 iE-Extensions ProtocolExtensionContainer { {SULInformation-ExtIEs} } OPTIONAL,

 ...

}

SupportedSULFreqBandItem ::= SEQUENCE {

 freqBandIndicatorNr INTEGER (1..1024,...),

 iE-Extensions ProtocolExtensionContainer { {SupportedSULFreqBandItem-ExtIEs} } OPTIONAL,

 ...

}

SupportedSULFreqBandItem-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

SULInformation-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 { ID id-CarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

 { ID id-FrequencyShift7p5khz CRITICALITY ignore EXTENSION FrequencyShift7p5khz PRESENCE optional },

 ...

}

SFN-Offset ::= SEQUENCE {

 SFN-Time-Offset BIT STRING (SIZE(24)),

 iE-Extensions ProtocolExtensionContainer { {SFN-Offset-ExtIEs} } OPTIONAL,

 ...

}

SFN-Offset-ExtIEs X2AP-PROTOCOL-EXTENSION ::= {

 ...

}

Next Change

### 9.3.7 Constant definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Constant definitions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

X2AP-Constants {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

eps-Access (21) modules (3) x2ap (2) version1 (1) x2ap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

 ProcedureCode,

 ProtocolIE-ID

FROM X2AP-CommonDataTypes;

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Elementary Procedures

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

id-handoverPreparation ProcedureCode ::= 0

id-handoverCancel ProcedureCode ::= 1

id-loadIndication ProcedureCode ::= 2

id-errorIndication ProcedureCode ::= 3

id-snStatusTransfer ProcedureCode ::= 4

id-uEContextRelease ProcedureCode ::= 5

id-x2Setup ProcedureCode ::= 6

id-reset ProcedureCode ::= 7

id-eNBConfigurationUpdate ProcedureCode ::= 8

id-resourceStatusReportingInitiation ProcedureCode ::= 9

id-resourceStatusReporting ProcedureCode ::= 10

id-privateMessage ProcedureCode ::= 11

id-mobilitySettingsChange ProcedureCode ::= 12

id-rLFIndication ProcedureCode ::= 13

id-handoverReport ProcedureCode ::= 14

id-cellActivation ProcedureCode ::= 15

id-x2Release ProcedureCode ::= 16

id-x2APMessageTransfer ProcedureCode ::= 17

id-x2Removal ProcedureCode ::= 18

id-seNBAdditionPreparation ProcedureCode ::= 19

id-seNBReconfigurationCompletion ProcedureCode ::= 20

id-meNBinitiatedSeNBModificationPreparation ProcedureCode ::= 21

id-seNBinitiatedSeNBModification ProcedureCode ::= 22

id-meNBinitiatedSeNBRelease ProcedureCode ::= 23

id-seNBinitiatedSeNBRelease ProcedureCode ::= 24

id-seNBCounterCheck ProcedureCode ::= 25

id-retrieveUEContext ProcedureCode ::= 26

id-sgNBAdditionPreparation ProcedureCode ::= 27

id-sgNBReconfigurationCompletion ProcedureCode ::= 28

id-meNBinitiatedSgNBModificationPreparation ProcedureCode ::= 29

id-sgNBinitiatedSgNBModification ProcedureCode ::= 30

id-meNBinitiatedSgNBRelease ProcedureCode ::= 31

id-sgNBinitiatedSgNBRelease ProcedureCode ::= 32

id-sgNBCounterCheck ProcedureCode ::= 33

id-sgNBChange ProcedureCode ::= 34

id-rRCTransfer ProcedureCode ::= 35

id-endcX2Setup ProcedureCode ::= 36

id-endcConfigurationUpdate ProcedureCode ::= 37

id-secondaryRATDataUsageReport ProcedureCode ::= 38

id-endcCellActivation ProcedureCode ::= 39

id-endcPartialReset ProcedureCode ::= 40

id-eUTRANRCellResourceCoordination ProcedureCode ::= 41

id-SgNBActivityNotification ProcedureCode ::= 42

id-endcX2Removal ProcedureCode ::= 43

id-dataForwardingAddressIndication ProcedureCode ::= 44

id-gNBStatusIndication ProcedureCode ::= 45

id-deactivateTrace ProcedureCode ::= 46

id-traceStart ProcedureCode ::= 47

id-endcConfigurationTransfer ProcedureCode ::= 48

id-handoverSuccess ProcedureCode ::= 49

id-conditionalHandoverCancel ProcedureCode ::= 50

id-earlyStatusTransfer ProcedureCode ::= 51

id-cellTrafficTrace ProcedureCode ::= 52

id-endcresourceStatusReporting ProcedureCode ::= 53

id-endcresourceStatusReportingInitiation ProcedureCode ::= 54

id-f1CTrafficTransfer ProcedureCode ::= 55

id-UERadioCapabilityIDMapping ProcedureCode ::= 56

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Lists

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-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

maxEARFCN INTEGER ::= 65535

maxEARFCNPlusOne INTEGER ::= 65536

newmaxEARFCN INTEGER ::= 262143

maxInterfaces INTEGER ::= 16

maxCellineNB INTEGER ::= 256

maxnoofBands INTEGER ::= 16

maxnoofBearers INTEGER ::= 256

maxNrOfErrors INTEGER ::= 256

maxnoofPDCP-SN INTEGER ::= 16

maxnoofEPLMNs INTEGER ::= 15

maxnoofEPLMNsPlusOne INTEGER ::= 16

maxnoofForbLACs INTEGER ::= 4096

maxnoofForbTACs INTEGER ::= 4096

maxnoofBPLMNs INTEGER ::= 6

maxnoofAdditionalPLMNs INTEGER ::= 6

maxnoofNeighbours INTEGER ::= 512

maxnoofPRBs INTEGER ::= 110

maxPools INTEGER ::= 16

maxnoofCells INTEGER ::= 16

maxnoofMBSFN INTEGER ::= 8

maxFailedMeasObjects INTEGER ::= 32

maxnoofCellIDforMDT INTEGER ::= 32

maxnoofTAforMDT INTEGER ::= 8

maxnoofMBMSServiceAreaIdentities INTEGER ::= 256

maxnoofMDTPLMNs INTEGER ::= 16

maxnoofCoMPHypothesisSet INTEGER ::= 256

maxnoofCoMPCells INTEGER ::= 32

maxUEReport INTEGER ::= 128

maxCellReport INTEGER ::= 9

maxnoofPA INTEGER ::= 3

maxCSIProcess INTEGER ::= 4

maxCSIReport INTEGER ::= 2

maxSubband INTEGER ::= 14

maxofNRNeighbours INTEGER ::= 1024

maxCellinengNB INTEGER ::= 16384

-- maxnoofNRCarriers INTEGER ::= 32

maxnooftimeperiods INTEGER ::= 2

maxnoofCellIDforQMC INTEGER ::= 32

maxnoofTAforQMC INTEGER ::= 8

maxnoofPLMNforQMC INTEGER ::= 16

maxUEsinengNBDU INTEGER ::= 8192

maxnoofProtectedResourcePatterns INTEGER ::= 16

maxnoNRcellsSpectrumSharingWithE-UTRA INTEGER ::= 64

maxnoofNrCellBands INTEGER ::= 32

maxnoofBluetoothName INTEGER ::= 4

maxnoofWLANName INTEGER ::= 4

maxnoofextBPLMNs INTEGER ::= 12

maxnoofTLAs INTEGER ::= 16

maxnoofGTPTLAs INTEGER ::= 16

maxnoofTNLAssociations INTEGER ::= 32

maxnoofCellsinCHO INTEGER ::= 8

maxnoofPC5QoSFlows INTEGER ::= 2048

maxnoofSSBAreas INTEGER ::= 64

maxnoofNRSCSs INTEGER ::= 5

maxnoofNRPhysicalResourceBlocks INTEGER ::= 275

maxnoofNonAnchorCarrierFreqConfig INTEGER ::= 15

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- IEs

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-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

id-E-RABs-Admitted-Item ProtocolIE-ID ::= 0

id-E-RABs-Admitted-List ProtocolIE-ID ::= 1

id-E-RAB-Item ProtocolIE-ID ::= 2

id-E-RABs-NotAdmitted-List ProtocolIE-ID ::= 3

id-E-RABs-ToBeSetup-Item ProtocolIE-ID ::= 4

id-Cause ProtocolIE-ID ::= 5

id-CellInformation ProtocolIE-ID ::= 6

id-CellInformation-Item ProtocolIE-ID ::= 7

id-New-eNB-UE-X2AP-ID ProtocolIE-ID ::= 9

id-Old-eNB-UE-X2AP-ID ProtocolIE-ID ::= 10

id-TargetCell-ID ProtocolIE-ID ::= 11

id-TargeteNBtoSource-eNBTransparentContainer ProtocolIE-ID ::= 12

id-TraceActivation ProtocolIE-ID ::= 13

id-UE-ContextInformation ProtocolIE-ID ::= 14

id-UE-HistoryInformation ProtocolIE-ID ::= 15

id-UE-X2AP-ID ProtocolIE-ID ::= 16

id-CriticalityDiagnostics ProtocolIE-ID ::= 17

id-E-RABs-SubjectToStatusTransfer-List ProtocolIE-ID ::= 18

id-E-RABs-SubjectToStatusTransfer-Item ProtocolIE-ID ::= 19

id-ServedCells ProtocolIE-ID ::= 20

id-GlobalENB-ID ProtocolIE-ID ::= 21

id-TimeToWait ProtocolIE-ID ::= 22

id-GUMMEI-ID ProtocolIE-ID ::= 23

id-GUGroupIDList ProtocolIE-ID ::= 24

id-ServedCellsToAdd ProtocolIE-ID ::= 25

id-ServedCellsToModify ProtocolIE-ID ::= 26

id-ServedCellsToDelete ProtocolIE-ID ::= 27

id-Registration-Request ProtocolIE-ID ::= 28

id-CellToReport ProtocolIE-ID ::= 29

id-ReportingPeriodicity ProtocolIE-ID ::= 30

id-CellToReport-Item ProtocolIE-ID ::= 31

id-CellMeasurementResult ProtocolIE-ID ::= 32

id-CellMeasurementResult-Item ProtocolIE-ID ::= 33

id-GUGroupIDToAddList ProtocolIE-ID ::= 34

id-GUGroupIDToDeleteList ProtocolIE-ID ::= 35

id-SRVCCOperationPossible ProtocolIE-ID ::= 36

id-Measurement-ID ProtocolIE-ID ::= 37

id-ReportCharacteristics ProtocolIE-ID ::= 38

id-ENB1-Measurement-ID ProtocolIE-ID ::= 39

id-ENB2-Measurement-ID ProtocolIE-ID ::= 40

id-Number-of-Antennaports ProtocolIE-ID ::= 41

id-CompositeAvailableCapacityGroup ProtocolIE-ID ::= 42

id-ENB1-Cell-ID ProtocolIE-ID ::= 43

id-ENB2-Cell-ID ProtocolIE-ID ::= 44

id-ENB2-Proposed-Mobility-Parameters ProtocolIE-ID ::= 45

id-ENB1-Mobility-Parameters ProtocolIE-ID ::= 46

id-ENB2-Mobility-Parameters-Modification-Range ProtocolIE-ID ::= 47

id-FailureCellPCI ProtocolIE-ID ::= 48

id-Re-establishmentCellECGI ProtocolIE-ID ::= 49

id-FailureCellCRNTI ProtocolIE-ID ::= 50

id-ShortMAC-I ProtocolIE-ID ::= 51

id-SourceCellECGI ProtocolIE-ID ::= 52

id-FailureCellECGI ProtocolIE-ID ::= 53

id-HandoverReportType ProtocolIE-ID ::= 54

id-PRACH-Configuration ProtocolIE-ID ::= 55

id-MBSFN-Subframe-Info ProtocolIE-ID ::= 56

id-ServedCellsToActivate ProtocolIE-ID ::= 57

id-ActivatedCellList ProtocolIE-ID ::= 58

id-DeactivationIndication ProtocolIE-ID ::= 59

id-UE-RLF-Report-Container ProtocolIE-ID ::= 60

id-ABSInformation ProtocolIE-ID ::= 61

id-InvokeIndication ProtocolIE-ID ::= 62

id-ABS-Status ProtocolIE-ID ::= 63

id-PartialSuccessIndicator ProtocolIE-ID ::= 64

id-MeasurementInitiationResult-List ProtocolIE-ID ::= 65

id-MeasurementInitiationResult-Item ProtocolIE-ID ::= 66

id-MeasurementFailureCause-Item ProtocolIE-ID ::= 67

id-CompleteFailureCauseInformation-List ProtocolIE-ID ::= 68

id-CompleteFailureCauseInformation-Item ProtocolIE-ID ::= 69

id-CSG-Id ProtocolIE-ID ::= 70

id-CSGMembershipStatus ProtocolIE-ID ::= 71

id-MDTConfiguration ProtocolIE-ID ::= 72

id-ManagementBasedMDTallowed ProtocolIE-ID ::= 74

id-RRCConnSetupIndicator ProtocolIE-ID ::= 75

id-NeighbourTAC ProtocolIE-ID ::= 76

id-Time-UE-StayedInCell-EnhancedGranularity ProtocolIE-ID ::= 77

id-RRCConnReestabIndicator ProtocolIE-ID ::= 78

id-MBMS-Service-Area-List ProtocolIE-ID ::= 79

id-HO-cause ProtocolIE-ID ::= 80

id-TargetCellInUTRAN ProtocolIE-ID ::= 81

id-MobilityInformation ProtocolIE-ID ::= 82

id-SourceCellCRNTI ProtocolIE-ID ::= 83

id-MultibandInfoList ProtocolIE-ID ::= 84

id-M3Configuration ProtocolIE-ID ::= 85

id-M4Configuration ProtocolIE-ID ::= 86

id-M5Configuration ProtocolIE-ID ::= 87

id-MDT-Location-Info ProtocolIE-ID ::= 88

id-ManagementBasedMDTPLMNList ProtocolIE-ID ::= 89

id-SignallingBasedMDTPLMNList ProtocolIE-ID ::= 90

id-ReceiveStatusOfULPDCPSDUsExtended ProtocolIE-ID ::= 91

id-ULCOUNTValueExtended ProtocolIE-ID ::= 92

id-DLCOUNTValueExtended ProtocolIE-ID ::= 93

id-eARFCNExtension ProtocolIE-ID ::= 94

id-UL-EARFCNExtension ProtocolIE-ID ::= 95

id-DL-EARFCNExtension ProtocolIE-ID ::= 96

id-AdditionalSpecialSubframe-Info ProtocolIE-ID ::= 97

id-Masked-IMEISV ProtocolIE-ID ::= 98

id-IntendedULDLConfiguration ProtocolIE-ID ::= 99

id-ExtendedULInterferenceOverloadInfo ProtocolIE-ID ::= 100

id-RNL-Header ProtocolIE-ID ::= 101

id-x2APMessage ProtocolIE-ID ::= 102

id-ProSeAuthorized ProtocolIE-ID ::= 103

id-ExpectedUEBehaviour ProtocolIE-ID ::= 104

id-UE-HistoryInformationFromTheUE ProtocolIE-ID ::= 105

id-DynamicDLTransmissionInformation ProtocolIE-ID ::= 106

id-UE-RLF-Report-Container-for-extended-bands ProtocolIE-ID ::= 107

id-CoMPInformation ProtocolIE-ID ::= 108

id-ReportingPeriodicityRSRPMR ProtocolIE-ID ::= 109

id-RSRPMRList ProtocolIE-ID ::= 110

id-MeNB-UE-X2AP-ID ProtocolIE-ID ::= 111

id-SeNB-UE-X2AP-ID ProtocolIE-ID ::= 112

id-UE-SecurityCapabilities ProtocolIE-ID ::= 113

id-SeNBSecurityKey ProtocolIE-ID ::= 114

id-SeNBUEAggregateMaximumBitRate ProtocolIE-ID ::= 115

id-ServingPLMN ProtocolIE-ID ::= 116

id-E-RABs-ToBeAdded-List ProtocolIE-ID ::= 117

id-E-RABs-ToBeAdded-Item ProtocolIE-ID ::= 118

id-MeNBtoSeNBContainer ProtocolIE-ID ::= 119

id-E-RABs-Admitted-ToBeAdded-List ProtocolIE-ID ::= 120

id-E-RABs-Admitted-ToBeAdded-Item ProtocolIE-ID ::= 121

id-SeNBtoMeNBContainer ProtocolIE-ID ::= 122

id-ResponseInformationSeNBReconfComp ProtocolIE-ID ::= 123

id-UE-ContextInformationSeNBModReq ProtocolIE-ID ::= 124

id-E-RABs-ToBeAdded-ModReqItem ProtocolIE-ID ::= 125

id-E-RABs-ToBeModified-ModReqItem ProtocolIE-ID ::= 126

id-E-RABs-ToBeReleased-ModReqItem ProtocolIE-ID ::= 127

id-E-RABs-Admitted-ToBeAdded-ModAckList ProtocolIE-ID ::= 128

id-E-RABs-Admitted-ToBeModified-ModAckList ProtocolIE-ID ::= 129

id-E-RABs-Admitted-ToBeReleased-ModAckList ProtocolIE-ID ::= 130

id-E-RABs-Admitted-ToBeAdded-ModAckItem ProtocolIE-ID ::= 131

id-E-RABs-Admitted-ToBeModified-ModAckItem ProtocolIE-ID ::= 132

id-E-RABs-Admitted-ToBeReleased-ModAckItem ProtocolIE-ID ::= 133

id-E-RABs-ToBeReleased-ModReqd ProtocolIE-ID ::= 134

id-E-RABs-ToBeReleased-ModReqdItem ProtocolIE-ID ::= 135

id-SCGChangeIndication ProtocolIE-ID ::= 136

id-E-RABs-ToBeReleased-List-RelReq ProtocolIE-ID ::= 137

id-E-RABs-ToBeReleased-RelReqItem ProtocolIE-ID ::= 138

id-E-RABs-ToBeReleased-List-RelConf ProtocolIE-ID ::= 139

id-E-RABs-ToBeReleased-RelConfItem ProtocolIE-ID ::= 140

id-E-RABs-SubjectToCounterCheck-List ProtocolIE-ID ::= 141

id-E-RABs-SubjectToCounterCheckItem ProtocolIE-ID ::= 142

id-CoverageModificationList ProtocolIE-ID ::= 143

id-ReportingPeriodicityCSIR ProtocolIE-ID ::= 145

id-CSIReportList ProtocolIE-ID ::= 146

id-UEID ProtocolIE-ID ::= 147

id-enhancedRNTP ProtocolIE-ID ::= 148

id-ProSeUEtoNetworkRelaying ProtocolIE-ID ::= 149

id-ReceiveStatusOfULPDCPSDUsPDCP-SNlength18 ProtocolIE-ID ::= 150

id-ULCOUNTValuePDCP-SNlength18 ProtocolIE-ID ::= 151

id-DLCOUNTValuePDCP-SNlength18 ProtocolIE-ID ::= 152

id-UE-ContextReferenceAtSeNB ProtocolIE-ID ::= 153

id-UE-ContextKeptIndicator ProtocolIE-ID ::= 154

id-New-eNB-UE-X2AP-ID-Extension ProtocolIE-ID ::= 155

id-Old-eNB-UE-X2AP-ID-Extension ProtocolIE-ID ::= 156

id-MeNB-UE-X2AP-ID-Extension ProtocolIE-ID ::= 157

id-SeNB-UE-X2AP-ID-Extension ProtocolIE-ID ::= 158

id-LHN-ID ProtocolIE-ID ::= 159

id-FreqBandIndicatorPriority ProtocolIE-ID ::= 160

id-M6Configuration ProtocolIE-ID ::= 161

id-M7Configuration ProtocolIE-ID ::= 162

id-Tunnel-Information-for-BBF ProtocolIE-ID ::= 163

id-SIPTO-BearerDeactivationIndication ProtocolIE-ID ::= 164

id-GW-TransportLayerAddress ProtocolIE-ID ::= 165

id-Correlation-ID ProtocolIE-ID ::= 166

id-SIPTO-Correlation-ID ProtocolIE-ID ::= 167

id-SIPTO-L-GW-TransportLayerAddress ProtocolIE-ID ::= 168

id-X2RemovalThreshold ProtocolIE-ID ::= 169

id-CellReportingIndicator ProtocolIE-ID ::= 170

id-BearerType ProtocolIE-ID ::= 171

id-resumeID ProtocolIE-ID ::= 172

id-UE-ContextInformationRetrieve ProtocolIE-ID ::= 173

id-E-RABs-ToBeSetupRetrieve-Item ProtocolIE-ID ::= 174

id-NewEUTRANCellIdentifier ProtocolIE-ID ::= 175

id-V2XServicesAuthorized ProtocolIE-ID ::= 176

id-OffsetOfNbiotChannelNumberToDL-EARFCN ProtocolIE-ID ::= 177

id-OffsetOfNbiotChannelNumberToUL-EARFCN ProtocolIE-ID ::= 178

id-AdditionalSpecialSubframeExtension-Info ProtocolIE-ID ::= 179

id-BandwidthReducedSI ProtocolIE-ID ::= 180

id-MakeBeforeBreakIndicator ProtocolIE-ID ::= 181

id-UE-ContextReferenceAtWT ProtocolIE-ID ::= 182

id-WT-UE-ContextKeptIndicator ProtocolIE-ID ::= 183

id-UESidelinkAggregateMaximumBitRate ProtocolIE-ID ::= 184

id-uL-GTPtunnelEndpoint ProtocolIE-ID ::= 185

id-DL-scheduling-PDCCH-CCE-usage ProtocolIE-ID ::= 193

id-UL-scheduling-PDCCH-CCE-usage ProtocolIE-ID ::= 194

id-UEAppLayerMeasConfig ProtocolIE-ID ::= 195

id-extended-e-RAB-MaximumBitrateDL ProtocolIE-ID ::= 196

id-extended-e-RAB-MaximumBitrateUL ProtocolIE-ID ::= 197

id-extended-e-RAB-GuaranteedBitrateDL ProtocolIE-ID ::= 198

id-extended-e-RAB-GuaranteedBitrateUL ProtocolIE-ID ::= 199

id-extended-uEaggregateMaximumBitRateDownlink ProtocolIE-ID ::= 200

id-extended-uEaggregateMaximumBitRateUplink ProtocolIE-ID ::= 201

id-NRrestrictioninEPSasSecondaryRAT ProtocolIE-ID ::= 202

id-SgNBSecurityKey ProtocolIE-ID ::= 203

id-SgNBUEAggregateMaximumBitRate ProtocolIE-ID ::= 204

id-E-RABs-ToBeAdded-SgNBAddReqList ProtocolIE-ID ::= 205

id-MeNBtoSgNBContainer ProtocolIE-ID ::= 206

id-SgNB-UE-X2AP-ID ProtocolIE-ID ::= 207

id-RequestedSplitSRBs ProtocolIE-ID ::= 208

id-E-RABs-ToBeAdded-SgNBAddReq-Item ProtocolIE-ID ::= 209

id-E-RABs-Admitted-ToBeAdded-SgNBAddReqAckList ProtocolIE-ID ::= 210

id-SgNBtoMeNBContainer ProtocolIE-ID ::= 211

id-AdmittedSplitSRBs ProtocolIE-ID ::= 212

id-E-RABs-Admitted-ToBeAdded-SgNBAddReqAck-Item ProtocolIE-ID ::= 213

id-ResponseInformationSgNBReconfComp ProtocolIE-ID ::= 214

id-UE-ContextInformation-SgNBModReq ProtocolIE-ID ::= 215

id-E-RABs-ToBeAdded-SgNBModReq-Item ProtocolIE-ID ::= 216

id-E-RABs-ToBeModified-SgNBModReq-Item ProtocolIE-ID ::= 217

id-E-RABs-ToBeReleased-SgNBModReq-Item ProtocolIE-ID ::= 218

id-E-RABs-Admitted-ToBeAdded-SgNBModAckList ProtocolIE-ID ::= 219

id-E-RABs-Admitted-ToBeModified-SgNBModAckList ProtocolIE-ID ::= 220

id-E-RABs-Admitted-ToBeReleased-SgNBModAckList ProtocolIE-ID ::= 221

id-E-RABs-Admitted-ToBeAdded-SgNBModAck-Item ProtocolIE-ID ::= 222

id-E-RABs-Admitted-ToBeModified-SgNBModAck-Item ProtocolIE-ID ::= 223

id-E-RABs-Admitted-ToBeReleased-SgNBModAck-Item ProtocolIE-ID ::= 224

id-E-RABs-ToBeReleased-SgNBModReqdList ProtocolIE-ID ::= 225

id-E-RABs-ToBeModified-SgNBModReqdList ProtocolIE-ID ::= 226

id-E-RABs-ToBeReleased-SgNBModReqd-Item ProtocolIE-ID ::= 227

id-E-RABs-ToBeModified-SgNBModReqd-Item ProtocolIE-ID ::= 228

id-E-RABs-ToBeReleased-SgNBChaConfList ProtocolIE-ID ::= 229

id-E-RABs-ToBeReleased-SgNBChaConf-Item ProtocolIE-ID ::= 230

id-E-RABs-ToBeReleased-SgNBRelReqList ProtocolIE-ID ::= 231

id-E-RABs-ToBeReleased-SgNBRelReq-Item ProtocolIE-ID ::= 232

id-E-RABs-ToBeReleased-SgNBRelConfList ProtocolIE-ID ::= 233

id-E-RABs-ToBeReleased-SgNBRelConf-Item ProtocolIE-ID ::= 234

id-E-RABs-SubjectToSgNBCounterCheck-List ProtocolIE-ID ::= 235

id-E-RABs-SubjectToSgNBCounterCheck-Item ProtocolIE-ID ::= 236

id-RRCContainer ProtocolIE-ID ::= 237

id-SRBType ProtocolIE-ID ::= 238

id-Target-SgNB-ID ProtocolIE-ID ::= 239

id-HandoverRestrictionList ProtocolIE-ID ::= 240

id-SCGConfigurationQuery ProtocolIE-ID ::= 241

id-SplitSRB ProtocolIE-ID ::= 242

id-NRUeReport ProtocolIE-ID ::= 243

id-InitiatingNodeType-EndcX2Setup ProtocolIE-ID ::= 244

id-InitiatingNodeType-EndcConfigUpdate ProtocolIE-ID ::= 245

id-RespondingNodeType-EndcX2Setup ProtocolIE-ID ::= 246

id-RespondingNodeType-EndcConfigUpdate ProtocolIE-ID ::= 247

id-NRUESecurityCapabilities ProtocolIE-ID ::= 248

id-PDCPChangeIndication ProtocolIE-ID ::= 249

id-ServedEUTRAcellsENDCX2ManagementList ProtocolIE-ID ::= 250

id-CellAssistanceInformation ProtocolIE-ID ::= 251

id-Globalen-gNB-ID ProtocolIE-ID ::= 252

id-ServedNRcellsENDCX2ManagementList ProtocolIE-ID ::= 253

id-UE-ContextReferenceAtSgNB ProtocolIE-ID ::= 254

id-SecondaryRATUsageReport ProtocolIE-ID ::= 255

id-ActivationID ProtocolIE-ID ::= 256

id-MeNBResourceCoordinationInformation ProtocolIE-ID ::= 257

id-SgNBResourceCoordinationInformation ProtocolIE-ID ::= 258

id-ServedEUTRAcellsToModifyListENDCConfUpd ProtocolIE-ID ::= 259

id-ServedEUTRAcellsToDeleteListENDCConfUpd ProtocolIE-ID ::= 260

id-ServedNRcellsToModifyListENDCConfUpd ProtocolIE-ID ::= 261

id-ServedNRcellsToDeleteListENDCConfUpd ProtocolIE-ID ::= 262

id-E-RABUsageReport-Item ProtocolIE-ID ::= 263

id-Old-SgNB-UE-X2AP-ID ProtocolIE-ID ::= 264

id-SecondaryRATUsageReportList ProtocolIE-ID ::= 265

id-SecondaryRATUsageReport-Item ProtocolIE-ID ::= 266

id-ServedNRCellsToActivate ProtocolIE-ID ::= 267

id-ActivatedNRCellList ProtocolIE-ID ::= 268

id-SelectedPLMN ProtocolIE-ID ::= 269

id-UEs-ToBeReset ProtocolIE-ID ::= 270

id-UEs-Admitted-ToBeReset ProtocolIE-ID ::= 271

id-RRCConfigIndication ProtocolIE-ID ::= 272

id-DownlinkPacketLossRate ProtocolIE-ID ::= 273

id-UplinkPacketLossRate ProtocolIE-ID ::= 274

id-SubscriberProfileIDforRFP ProtocolIE-ID ::= 275

id-serviceType ProtocolIE-ID ::= 276

id-AerialUEsubscriptionInformation ProtocolIE-ID ::= 277

id-SGNB-Addition-Trigger-Ind ProtocolIE-ID ::= 278

id-MeNBCell-ID ProtocolIE-ID ::= 279

id-RequestedSplitSRBsrelease ProtocolIE-ID ::= 280

id-AdmittedSplitSRBsrelease ProtocolIE-ID ::= 281

id-NRS-NSSS-PowerOffset ProtocolIE-ID ::= 282

id-NSSS-NumOccasionDifferentPrecoder ProtocolIE-ID ::= 283

id-ProtectedEUTRAResourceIndication ProtocolIE-ID ::= 284

id-InitiatingNodeType-EutranrCellResourceCoordination ProtocolIE-ID ::= 285

id-RespondingNodeType-EutranrCellResourceCoordination ProtocolIE-ID ::= 286

id-DataTrafficResourceIndication ProtocolIE-ID ::= 287

id-SpectrumSharingGroupID ProtocolIE-ID ::= 288

id-ListofEUTRACellsinEUTRACoordinationReq ProtocolIE-ID ::= 289

id-ListofEUTRACellsinEUTRACoordinationResp ProtocolIE-ID ::= 290

id-ListofEUTRACellsinNRCoordinationReq ProtocolIE-ID ::= 291

id-ListofNRCellsinNRCoordinationReq ProtocolIE-ID ::= 292

id-ListofNRCellsinNRCoordinationResp ProtocolIE-ID ::= 293

id-E-RABs-AdmittedToBeModified-SgNBModConfList ProtocolIE-ID ::= 294

id-E-RABs-AdmittedToBeModified-SgNBModConf-Item ProtocolIE-ID ::= 295

id-UEContextLevelUserPlaneActivity ProtocolIE-ID ::= 296

id-ERABActivityNotifyItemList ProtocolIE-ID ::= 297

id-InitiatingNodeType-EndcX2Removal ProtocolIE-ID ::= 298

id-RespondingNodeType-EndcX2Removal ProtocolIE-ID ::= 299

id-RLC-Status ProtocolIE-ID ::= 300

id-CNTypeRestrictions ProtocolIE-ID ::= 301

id-uLpDCPSnLength ProtocolIE-ID ::= 302

id-BluetoothMeasurementConfiguration ProtocolIE-ID ::= 303

id-WLANMeasurementConfiguration ProtocolIE-ID ::= 304

id-NRrestrictionin5GS ProtocolIE-ID ::= 305

id-dL-Forwarding ProtocolIE-ID ::= 306

id-E-RABs-DataForwardingAddress-List ProtocolIE-ID ::= 307

id-E-RABs-DataForwardingAddress-Item ProtocolIE-ID ::= 308

id-Subscription-Based-UE-DifferentiationInfo ProtocolIE-ID ::= 309

id-GNBOverloadInformation ProtocolIE-ID ::= 310

id-dLPDCPSnLength ProtocolIE-ID ::= 311

id-secondarysgNBDLGTPTEIDatPDCP ProtocolIE-ID ::= 312

id-secondarymeNBULGTPTEIDatPDCP ProtocolIE-ID ::= 313

id-lCID ProtocolIE-ID ::= 314

id-duplicationActivation ProtocolIE-ID ::= 315

id-ECGI ProtocolIE-ID ::= 316

id-RLCMode-transferred ProtocolIE-ID ::= 317

id-E-RABs-Admitted-ToBeReleased-SgNBRelReqAckList ProtocolIE-ID ::= 318

id-E-RABs-Admitted-ToBeReleased-SgNBRelReqAck-Item ProtocolIE-ID ::= 319

id-E-RABs-ToBeReleased-SgNBRelReqdList ProtocolIE-ID ::= 320

id-E-RABs-ToBeReleased-SgNBRelReqd-Item ProtocolIE-ID ::= 321

id-NRCGI ProtocolIE-ID ::= 322

id-MeNBCoordinationAssistanceInformation ProtocolIE-ID ::= 323

id-SgNBCoordinationAssistanceInformation ProtocolIE-ID ::= 324

id-new-drb-ID-req ProtocolIE-ID ::= 325

id-endcSONConfigurationTransfer ProtocolIE-ID ::= 326

id-NRNeighbourInfoToAdd ProtocolIE-ID ::= 327

id-NRNeighbourInfoToModify ProtocolIE-ID ::= 328

id-DesiredActNotificationLevel ProtocolIE-ID ::= 329

id-LocationInformationSgNBReporting ProtocolIE-ID ::= 330

id-LocationInformationSgNB ProtocolIE-ID ::= 331

id-LastNG-RANPLMNIdentity ProtocolIE-ID ::= 332

id-EUTRANTraceID ProtocolIE-ID ::= 333

id-additionalPLMNs-Item ProtocolIE-ID ::= 334

id-InterfaceInstanceIndication ProtocolIE-ID ::= 335

id-BPLMN-ID-Info-EUTRA ProtocolIE-ID ::= 336

id-BPLMN-ID-Info-NR ProtocolIE-ID ::= 337

id-NBIoT-UL-DL-AlignmentOffset ProtocolIE-ID ::= 338

id-ERABs-transferred-to-MeNB ProtocolIE-ID ::= 339

id-AdditionalRRMPriorityIndex ProtocolIE-ID ::= 340

id-LowerLayerPresenceStatusChange ProtocolIE-ID ::= 341

id-FastMCGRecovery-SN-to-MN ProtocolIE-ID ::= 342

id-RequestedFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 343

id-AvailableFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 344

id-RequestedFastMCGRecoveryViaSRB3Release ProtocolIE-ID ::= 345

id-ReleaseFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 346

id-FastMCGRecovery-MN-to-SN ProtocolIE-ID ::= 347

id-PartialListIndicator ProtocolIE-ID ::= 348

id-MaximumCellListSize ProtocolIE-ID ::= 349

id-MessageOversizeNotification ProtocolIE-ID ::= 350

id-CellandCapacityAssistInfo ProtocolIE-ID ::= 351

id-TNLConfigurationInfo ProtocolIE-ID ::= 352

id-TNLA-To-Add-List ProtocolIE-ID ::= 353

id-TNLA-To-Update-List ProtocolIE-ID ::= 354

id-TNLA-To-Remove-List ProtocolIE-ID ::= 355

id-TNLA-Setup-List ProtocolIE-ID ::= 356

id-TNLA-Failed-To-Setup-List ProtocolIE-ID ::= 357

id-UnlicensedSpectrumRestriction ProtocolIE-ID ::= 358

id-UEContextReferenceatSourceNGRAN ProtocolIE-ID ::= 359

id-EPCHandoverRestrictionListContainer ProtocolIE-ID ::= 360

id-CHOinformation-REQ ProtocolIE-ID ::= 361

id-CHOinformation-ACK ProtocolIE-ID ::= 362

id-DAPSRequestInfo ProtocolIE-ID ::= 363

id-RequestedTargetCellID ProtocolIE-ID ::= 364

id-CandidateCellsToBeCancelledList ProtocolIE-ID ::= 365

id-DAPSResponseInfo ProtocolIE-ID ::= 366

id-ProcedureStage ProtocolIE-ID ::= 367

id-CHO-DC-Indicator ProtocolIE-ID ::= 368

id-Ethernet-Type ProtocolIE-ID ::= 369

id-NRV2XServicesAuthorized ProtocolIE-ID ::= 370

id-NRUESidelinkAggregateMaximumBitRate ProtocolIE-ID ::= 371

id-PC5QoSParameters ProtocolIE-ID ::= 372

id-NPRACHConfiguration ProtocolIE-ID ::= 373

id-NBIoT-RLF-Report-Container ProtocolIE-ID ::= 374

id-MDTConfigurationNR ProtocolIE-ID ::= 375

id-PrivacyIndicator ProtocolIE-ID ::= 376

id-TraceCollectionEntityIPAddress ProtocolIE-ID ::= 377

id-UERadioCapabilityID ProtocolIE-ID ::= 378

id-SNtriggered ProtocolIE-ID ::= 379

id-CSI-RSTransmissionIndication ProtocolIE-ID ::= 380

id-DLCarrierList ProtocolIE-ID ::= 381

id-TargetCellInNGRAN ProtocolIE-ID ::= 382

id-eNB-Measurement-ID-ENDC ProtocolIE-ID ::= 383

id-engNB-Measurement-ID-ENDC ProtocolIE-ID ::= 384

id-TDDULDLConfigurationCommonNR ProtocolIE-ID ::= 385

id-CarrierList ProtocolIE-ID ::= 386

id-ULCarrierList ProtocolIE-ID ::= 387

id-FrequencyShift7p5khz ProtocolIE-ID ::= 388

id-SSB-PositionsInBurst ProtocolIE-ID ::= 389

id-NRCellPRACHConfig ProtocolIE-ID ::= 390

id-CellToReport-NR-ENDC ProtocolIE-ID ::= 391

id-CellToReport-NR-ENDC-Item ProtocolIE-ID ::= 392

id-CellMeasurementResult-NR-ENDC ProtocolIE-ID ::= 393

id-CellMeasurementResult-NR-ENDC-Item ProtocolIE-ID ::= 394

id-IABNodeIndication ProtocolIE-ID ::= 395

id-QoS-Mapping-Information ProtocolIE-ID ::= 396

id-F1CTrafficContainer ProtocolIE-ID ::= 397

id-IntendedTDD-DL-ULConfiguration-NR ProtocolIE-ID ::= 399

id-UERadioCapability ProtocolIE-ID ::= 400

id-CellMeasurementResult-E-UTRA-ENDC ProtocolIE-ID ::= 401

id-CellMeasurementResult-E-UTRA-ENDC-Item ProtocolIE-ID ::= 402

id-CellToReport-E-UTRA-ENDC ProtocolIE-ID ::= 403

id-CellToReport-E-UTRA-ENDC-Item ProtocolIE-ID ::= 404

id-TraceCollectionEntityURI ProtocolIE-ID ::= 405

id-SFN-Offset ProtocolIE-ID ::= XXX

END

-- ASN1STOP

End of Changes