**3GPP TSG-RAN WG3 Meeting #129 R3-255808**

**Bengaluru, India, 25th - 29th Aug, 2025**

**Title:** (TP to BLCR for TS 38.473) Discussion on on-demand SIB1 for UEs in idle or inactive mode

**Source:** Huawei

**Agenda item:** 17.3

**Document Type:** Other

# Introduction

This contribution provides the TP for TS 38.473 on the on-demand SIB1 for UEs in idle or inactive mode based on the agreements. In addition, this TP also captures the agreements on the paging adaptation PEI capability and the servingcellMO.

# 2. TP for TS 38.473 – on top of R3-255081

 <<<<<<<<<<<<<<<<<<<< Change Begins >>>>>>>>>>>>>>>>>>>>

### 8.2.3 F1 Setup

#### 8.2.3.1 General

The purpose of the F1 Setup procedure is to exchange application level data needed for the gNB-DU and the gNB-CU to correctly interoperate on the F1 interface. This procedure shall be the first F1AP procedure triggered for the F1-C interface instance after a TNL association has become operational.

NOTE: If F1-C signalling transport is shared among multiple F1-C interface instances, one F1 Setup procedure is issued per F1-C interface instance to be setup, i.e. several F1 Setup procedures may be issued via the same TNL association after that TNL association has become operational.

NOTE: Exchange of application level configuration data also applies between the gNB-DU and the gNB-CU in case the DU does not broadcast system information other than for radio frame timing and SFN, as specified in the TS 37.340 [7]. How to use this information when this option is used is not explicitly specified.

The procedure uses non-UE associated signalling.

This procedure erases any existing application level configuration data in the two nodes and replaces it by the one received. This procedure also re-initialises the F1AP UE-related contexts (if any) and erases all related signalling connections in the two nodes like a Reset procedure would do.

#### 8.2.3.2 Successful Operation



Figure 8.2.3.2-1: F1 Setup procedure: Successful Operation

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

If the F1 SETUP REQUEST message contains the *Mobile* *IAB-MT User Location Information* IE, the gNB-CU shall, if supported, take it into account when reporting UE location information to the AMF for a UE served by the mobile IAB-node.

If the *XR Broadcast Information* IE is included in the *Served Cell Information* IE in the F1 SETUP REQUEST message, the gNB-CU shall, if supported, consider the indicated cell does not allow 2Rx XR UEs in case of subsequent outgoing mobility involving XR UEs.

If the *NCGI to be Updated List* IE is included in the F1 SETUP RESPONSE message, the gNB-DU shall, if supported, change the NCGI of the cell indicated by the *Old NCGI* IE to the NCGI indicated by the *New NCGI* IE.

If the *Barring Exemption for Emergency Call Information* IE is included in the *Served Cell Information* IE in the F1 SETUP REQUEST message, the gNB-CU may store the information and consider the indicated cell allows emergency bearer services for UEs who would otherwise consider the cell as barred as specified in TS 38.304 [24].

If the *On-demand SIB1* IEis included and set to “Provision” in the *Served Cell Information* IE in the F1 SETUP REQUEST message, the gNB-CU shall, if supported, use this information indicated in the *od-SIB1-Config* IE for coordination of on-demand SIB1 transmission for network energy saving as specified in TS 38.300 [6].

If the *On-demand SIB1* IE is included and set to “Stop provision” in the *Served Cell Information* IE in the F1 SETUP REQUEST message, the gNB-CU shall, if supported, stop the coordination of on-demand SIB1 transmission as specified in TS 38.300 [6].

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

### 8.2.4 gNB-DU Configuration Update

#### 8.2.4.1 General

The purpose of the gNB-DU Configuration Update procedure is to update application level configuration data needed for the gNB-DU and the gNB-CU to interoperate correctly on the F1 interface. This procedure does not affect existing UE-related contexts, if any. The procedure uses non-UE associated signalling.

NOTE: Update of application level configuration data also applies between the gNB-DU and the gNB-CU in case the DU does not broadcast system information other than for radio frame timing and SFN, as specified in the TS 37.340 [7]. How to use this information when this option is used is not explicitly specified.

#### 8.2.4.2 Successful Operation



Figure 8.2.4.2-1: gNB-DU Configuration Update procedure: Successful Operation

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

If the GNB-DU CONFIGURATION UPDATE message contains the *Mobile IAB-MT User Location Information* IE, the gNB-CU shall, if supported, take it into account when reporting UE location information to the AMF for a UE served by the mobile IAB-node.

If the *XR Broadcast Information* IE is included in the *Served Cell Information* IE in the GNB-DU CONFIGURATION UPDATE message, the gNB-CU shall, if supported, consider the indicated cell does not allow 2Rx XR UEs in case of subsequent outgoing mobility involving XR UEs.

If the *Barring Exemption for Emergency Call Information* IE is included in the *Served Cell Information* IE in the GNB-DU CONFIGURATION UPDATE message, the gNB-CU may store the information and consider the indicated cell allows emergency bearer services for UEs who would otherwise consider the cell as barred as specified in TS 38.304 [24].

If the *On-demand SIB1* IE is included and set to “Provision” in the *Served Cell Information* IE in the GNB-DU CONFIGURATION UPDATE message, the gNB-CU shall, if supported, use this information indicated in the *od-SIB1-Config* IE for coordination of on-demand SIB1 transmission for network energy saving as specified in TS 38.300 [6].

If the *On-demand SIB1* IE is included and set to “Stop provision” in the *Served Cell Information* IE in the GNB-DU CONFIGURATION UPDATE message, the gNB-CU shall, if supported, stop the coordination of on-demand SIB1 transmission for network energy saving as specified in TS 38.300 [6].

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

### 8.2.5 gNB-CU Configuration Update

#### 8.2.5.1 General

The purpose of the gNB-CU Configuration Update procedure is to update application level configuration data needed for the gNB-DU and gNB-CU to interoperate correctly on the F1 interface. This procedure does not affect existing UE-related contexts, if any. The procedure uses non-UE associated signalling.

#### 8.2.5.2 Successful Operation



Figure 8.2.5.2-1: gNB-CU Configuration Update procedure: Successful Operation

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

If the *gNB-CU Name* IE is included in the GNB-CU CONFIGURATION UPDATE message, the gNB-DU may store it or update this IE value if already stored, and use it as a human readable name of the gNB-CU. If the *Extended gNB-CU Name* IE is included in the GNB-CU CONFIGURATION UPDATE message, the gNB-DU may store it or update this IE value if already stored, and use it as a human readable name of the gNB-CU and shall ignore the *gNB-CU Name* IE if also included.

If the *Mobile IAB Barred* IE is included in the GNB-CU CONFIGURATION UPDATE message, the gNB-DU shall, if supported, consider it as an indication of whether the cell allows mobile IAB-node access.

If the *On-demand SIB1 Cell* IE is contained in the GNB-CU CONFIGURATION UPDATE message, the gNB-DU shall, if supported, consider to start or stop the on-demand SIB1 operation as indicated by *the On-demand SIB1 indicator* IE for the cell indicated by the *NR CGI* IE.

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

## 8.3 UE Context Management procedures

### 8.3.1 UE Context Setup

#### 8.3.1.1 General

The purpose of the UE Context Setup procedure is to establish the UE Context including, among others, SRB, DRB, BH RLC channel, Uu Relay RLC channel, PC5 Relay RLC channel, and SL DRB configuration. The procedure uses UE-associated signalling.

#### 8.3.1.2 Successful Operation



Figure 8.3.1.2-1: UE Context Setup Request procedure: Successful Operation

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

If the *SCell To Be Setup List* IE is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall consider it as a list of candidate SCells to be set up. If the *SCell UL Configured* IE is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall configure UL for the indicated SCell accordingly. If the *servingCellMO* IE is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall configure servingCellMO for the indicated SCell accordingly. If the *servingCellMO-On-demand* IE is included in the UE CONTEXT SETUP REQUEST message, the gNB-DU shall configure the servingCellMO for on-demand SSB in the indicated SCell accordingly.

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

### 8.3.4 UE Context Modification (gNB-CU initiated)

#### 8.3.4.1 General

The purpose of the UE Context Modification procedure is to modify the established UE Context, e.g., establishing, modifying and releasing radio resources or sidelink resources. This procedure is also used to command the gNB-DU to stop data transmission for the UE for mobility (see TS 38.401 [4]). The procedure uses UE-associated signalling.

#### 8.3.4.2 Successful Operation



Figure 8.3.4.2-1: UE Context Modification procedure. Successful operation

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

If the *SCell To Be Setup List* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall consider it as a list of candidate SCells to be set up. If the *SCell To Be Setup List* IE is included in the UE CONTEXT MODIFICATION REQUEST message and the indicated SCell(s) are already setup, the gNB-DU shall replace any previously received value. If the *SCell UL Configured* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall configure UL for the indicated SCell accordingly. If the *servingCellMO* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall configure servingCellMO for the indicated SCell accordingly. If the *servingCellMO-On-demand* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall configure the servingCellMO for on-demand SSB in the indicated SCell accordingly

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

## 8.7 Paging procedures

### 8.7.1 Paging

#### 8.7.1.1 General

The purpose of the Paging procedure is used to provide the paging information to enable the gNB-DU to page a UE. The procedure uses non-UE associated signalling.

#### 8.7.1.2 Successful Operation



Figure 8.7.1.2-1: Paging procedure. Successful operation.

The gNB-CU initiates the procedure by sending a PAGING message.

The *Paging DRX* IE may be included in the PAGING message, and if present the gNB-DU may use it to determine the final paging cycle for the UE.

The *Paging Priority* IE may be included in the PAGING message, and if present the gNB-DU may use it according to TS 23.501 [21].

At the reception of the PAGING message, the gNB-DU shall perform paging of the UE in cells which belong to cells as indicated in the *Paging Cell List* IE.

The *Paging Origin* IE may be included in the PAGING message, and if present the gNB-DU shall transfer it to the UE.

The *RAN UE Paging DRX* IE may be included in the PAGING message, and if present the gNB-DU may use it according to TS 38.304 [24].

The *CN UE Paging DRX* IE may be included in the PAGING message, and if present the gNB-DU may use it according to TS 38.304 [24].

The *NR Paging eDRX Information* IE may be included in the PAGING message, and if present the gNB-DU may use it according to TS 38.304 [24].

The *NR Paging eDRX Information for RRC INACTIVE* IE may be included in the PAGING message, and if present the gNB-DU shall, if supported, use it according to TS 38.304 [24].

The *Paging Cause* IE may be included in the PAGING message. If present the gNB-DU shall, if supported, send it to UE according to TS 38.331 [8].

The *PEIPS Assistance Information* IE may be included in the PAGING message, and if present the gNB-DU shall, if supported, use it for paging subgrouping of the UE, as specified in TS 38.300 [6].

The *RedCap Indication* IE may be included in the *UE Paging Capability* IE in the PAGING message, and if present the gNB-DU shall, if supported, use it for paging of the RedCap UE or the eRedCap UE.

The *NES Paging Adaptation Indication* IE may be included in the *UE Paging Capability* IE in the PAGING message, and if present the gNB-DU shall, if supported, use it for paging adaptation to the UE.

The *Last Used Cell Indication* IE may be included in the *Paging Cell Item IEs* IE of the PAGING message, and if present the gNB-DU shall, if supported, consider the cell identified by the *NR CGI* IE as the last used cell of the paged UE, and use it as specified in TS 38.331 [8].

The *Recommended SSBs List* IE may be included in the *Paging Cell Item IEs* IE of the PAGING message, and if present the gNB-DU shall, if supported, use it to send the paging message over the indicated SSB beams.

The *PEI Subgrouping Support Indication* IE may be included in the *Paging Cell Item IEs* IE in the PAGING message, and if present the gNB-DU shall, if supported, consider that the cell identified by the *NR CGI* IE is supported by the UE to receive the paging early indication as described in TS 38.300 [6] and TS 38.304 [24].

The *PEI Subgrouping Support Indication – Paging Adaptation* IE may be included in the *Paging Cell Item IEs* IE in the PAGING message, and if present the gNB-DU shall, if supported, consider that the cell identified by the *NR CGI* IE is supported by the UE to receive the paging adaptation related paging early indication as described in TS 38.300 [6] and TS 38.304 [24].

The *UE Paging Capability* IE may be included in the PAGING message, and if present the gNB-DU shall, if supported, take it into account when paging the UE.

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

#### 9.2.2.1 UE CONTEXT SETUP REQUEST

This message is sent by the gNB-CU to request the setup of a UE context.

Direction: gNB-CU → gNB-DU.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| gNB-CU UE F1AP ID | M  |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID  | O |  | 9.3.1.5 |  | YES | ignore |
| SpCell ID | M |  | NR CGI 9.3.1.12 | Special Cell as defined in TS 38.321 [16]. For handover case, this IE is considered as target cell. | YES | reject |
| ServCellIndex | M |  | INTEGER (0..31,...) |  | YES | reject |
| SpCell UL Configured | O |  | Cell UL Configured9.3.1.33 |  | YES | ignore |
| CU to DU RRC Information | M |  | 9.3.1.25 |  | YES | reject |
| **Candidate SpCell List** |  | *0..1* |  |  | YES | ignore |
| **>Candidate SpCell Item IEs** |  | *1 .. <maxnoofCandidateSpCells>* |  |  | EACH | ignore |
| >>Candidate SpCell ID | M |  | NR CGI 9.3.1.12 | Special Cell as defined in TS 38.321 [16] | - |  |
| DRX Cycle  | O |  | 9.3.1.24 |  | YES | ignore |
| Resource Coordination Transfer Container | O |  | OCTET STRING | Includes the *MeNB Resource Coordination Information* IE as defined in subclause 9.2.116 of TS 36.423 [9] for EN-DC case or *MR-DC Resource Coordination Information* IE as defined in TS 38.423 [28] for NGEN-DC and NE-DC cases. | YES | ignore |
| **SCell To Be Setup List** |  | *0..1* |  |  | YES | ignore |
| **>SCell to Be Setup Item IEs** |  | *1.. <maxnoofSCells>* |  |  | EACH | ignore |
| >>SCell ID | M |  | NR CGI 9.3.1.12 | SCell Identifier in gNB | - |  |
| >>SCellIndex | M |  | INTEGER (1..31, ...) |  | - |  |
| >>SCell UL Configured | O |  | Cell UL Configured9.3.1.33 |  | - |  |
| >>servingCellMO | O |  | INTEGER (1..64, ...) |  | YES | ignore |
| >>servingCellMO-On-demand | O |  | INTEGER (1..64, ...) |  | YES | ignore |
| **SRB to Be Setup List** |  | *0..1* |  |  | YES | reject |
| **>SRB to Be Setup Item IEs** |  | *1 .. <maxnoofSRBs>* |  |  | EACH | reject |
| >>SRB ID | M |  | 9.3.1.7 |  | - |  |
| >>Duplication Indication | O |  | ENUMERATED (true, ..., false) | If included, it should be set to true. This IE is ignored if the *Additional Duplication Indication* IE is present. | - |  |
| >>Additional Duplication Indication | O |  | ENUMERATED (three, four, …) |  | YES | ignore |
| >>SDT RLC Bearer Configuration | O |  | OCTET STRING | Includes the *RLC-BearerConfig* IE defined in subclause 6.3.2 of TS 38.331 [8] | YES | ignore |
| >>SRB Mapping Info | O |  | Uu RLC Channel ID 9.3.1.266 | This IE contains the mapped Uu Relay RLC CH ID for the SRB | YES | ignore |
| <<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>> |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

#### 9.2.2.7 UE CONTEXT MODIFICATION REQUEST

This message is sent by the gNB-CU to provide UE Context information changes to the gNB-DU.

Direction: gNB-CU → gNB-DU

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| gNB-CU UE F1AP ID | M |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID | M |  | 9.3.1.5 |  | YES | reject |
| SpCell ID | O |  | NR CGI 9.3.1.12 | Special Cell as defined in TS 38.321 [16]. For handover case, this IE is considered as target cell. | YES | ignore |
| ServCellIndex | O |  | INTEGER (0..31, ...) |  | YES | reject |
| SpCell UL Configured | O |  | Cell UL Configured9.3.1.33 |  | YES | ignore |
| DRX Cycle  | O |  | 9.3.1.24 |  | YES | ignore |
| CU to DU RRC Information | O |  | 9.3.1.25 |  | YES | reject |
| Transmission Action Indicator | O |  | 9.3.1.11 |  | YES | ignore |
| Resource Coordination Transfer Container | O |  | OCTET STRING | Includes the *MeNB Resource Coordination Information* IE as defined in subclause 9.2.116 of TS 36.423 [9] for EN-DC case or *MR-DC Resource Coordination Information* IE as defined in TS 38.423 [28] for NGEN-DC and NE-DC cases. | YES | ignore |
| RRC Reconfiguration Complete Indicator | O |  | 9.3.1.30 |  | YES | ignore |
| RRC-Container | O |  | 9.3.1.6 | Includes the *DL-DCCH-Message* message as defined in subclause 6.2 of TS 38.331 [8], encapsulated in a PDCP PDU. | YES | reject |
| **SCell To Be Setup List** |  | *0..1* |  |  | YES | ignore |
| **>SCell to Be Setup Item IEs** |  | *1.. <maxnoofSCells>* |  |  | EACH | ignore |
| >>SCell ID | M |  | NR CGI 9.3.1.12 | SCell Identifier in gNB | - |  |
| >>SCellIndex | M |  | INTEGER (1..31, ...) |  | - |  |
| >>SCell UL Configured | O |  | Cell UL Configured9.3.1.33 |  | - |  |
| >>servingCellMO | O |  | INTEGER (1..64, ...) |  | YES | ignore |
| >>servingCellMO-On-demand | O |  | INTEGER (1..64, ...) |  | YES | ignore |
| **SCell To Be Removed List** |  | *0..1* |  |  | YES | ignore |
| **>SCell to Be Removed Item IEs** |  | *1 .. <maxnoofSCells>* |  |  | EACH | ignore |
| >>SCell ID | M |  | NR CGI 9.3.1.12 | SCell Identifier in gNB | - |  |
| **SRB to Be Setup List** |  | *0..1* |  |  | YES | reject |
| **>SRB to Be Setup Item IEs** |  | *1..<maxnoofSRBs>* |  |  | EACH | reject |
| >>SRB ID | M |  | 9.3.1.7 |  | - |  |
| >>Duplication Indication | O |  | ENUMERATED (true, ..., false) | This IE is ignored if the *Additional Duplication Indication* IE is present. | - |  |
| >>Additional Duplication Indication | O |  | ENUMERATED (three, four, …) |  | YES | ignore |
| >>SRB Mapping Info | O |  | Uu RLC Channel ID 9.3.1.266 | This IE contains the mapped Uu Relay RLC CH ID for the SRB | YES | ignore |
| >>SDT Indicator Setup | O |  | ENUMERATED (true, …) | Indicates SDT SRB. | YES | reject |
| <<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>> |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

### 9.2.6 Paging messages

#### 9.2.6.1 PAGING

This message is sent by the gNB-CU and is used to request the gNB-DU to page UEs.

Direction: gNB-CU → gNB-DU

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | ignore |
| UE Identity Index value | M |  | 9.3.1.39 |  | YES | reject |
| CHOICE *Paging Identity* | M |  |  |  | YES | reject |
| *>RAN UE Paging identity* |  |  |  |  |  |  |
| >>RAN UE Paging identity | M |  | 9.3.1.43 |  | - |  |
| *>CN UE paging identity* |  |  |  |  |  |  |
| >>CN UE paging identity  | M |  | 9.3.1.44 |  | - |  |
| Paging DRX | O |  | 9.3.1.40 | It is defined as the minimum between the RAN UE Paging DRX and CN UE Paging DRX | YES | ignore |
| Paging Priority | O |  | 9.3.1.41 |  | YES | ignore |
| **Paging Cell List**  |  | *1* |  |  | YES | ignore |
| **>Paging Cell Item IEs** |  | *1 .. <maxnoofPagingCells>* |  |  | EACH | ignore |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| >>Last Used Cell Indication | O |  | ENUMERATED(true, …) |  | YES | ignore |
| >>PEI Subgrouping Support Indication | O |  | ENUMERATED(true, …) |  | YES | ignore |
| >>PEI Subgrouping Support Indication – Paging Adaptation  | O |  | ENUMERATED(true, …) |  | YES | ignore |
| **>>****Recommended SSBs List** |  | *0 .. 1* |  |  | YES | ignore |
| **>>>Recommended SSBs List Item** |  | *1 .. < maxnoofSSBAreas >* |  |  | YES | ignore |
| >>>>SSB Index | M |  | INTEGER (0..63) | Identifier of the recommended SSB beam for paging. | - |  |
| Paging Origin | O |  | 9.3.1.79 |  | YES | ignore |
| RAN UE Paging DRX | O |  | Paging DRX9.3.1.40 | This IE indicates the RAN paging cycle as defined in TS 38.304 [24]. | YES | ignore |
| CN UE Paging DRX | O |  | Paging DRX9.3.1.40 | This IE indicates the UE specific paging cycle as defined in TS 38.304 [24]. | YES | ignore |
| NR Paging eDRX Information | O |  | 9.3.1.258 |  | YES | ignore |
| NR Paging eDRX Information for RRC INACTIVE | O |  | 9.3.1.259 |  | YES | ignore |
| Paging Cause | O |  | ENUMERATED(voice, …)  | This IE indicates the paging cause is IMS voice, refer to TS 23.501[21]. | YES | ignore |
| PEIPS Assistance Information | O |  | 9.3.1.269 |  | YES | ignore |
| UE Paging Capability  | O |  | 9.3.1.270 |  | YES | ignore |
| Extended UE Identity Index Value | O |  | 9.3.1.285 |  | YES | ignore |
| Hashed UE Identity Index Value | O |  | 9.3.1.286 |  | YES | ignore |
| MT-SDT Information | O |  | 9.3.1.289 |  | YES | ignore |
| NR Paging Long eDRX Information for RRC INACTIVE | O |  | 9.3.1.325 |  | YES | ignore |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofPagingCells | Maximum no. of paging cells, the maximum value is 512.  |
| maxnoofSSBAreas | Maximum no. SSB Areas that can be served by a cell. Value is 64.  |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

#### 9.2.1.10 GNB-CU CONFIGURATION UPDATE

This message is sent by the gNB-CU to transfer updated information associated to an F1-C interface instance.

NOTE: If F1-C signalling transport is shared among several F1-C interface instances, this message may transfer updated information associated to several F1-C interface instances.

Direction: gNB-CU → gNB-DU

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | reject |
| Transaction ID | M |  | 9.3.1.23 |  | YES | reject |
| **Cells to be Activated List** |  | *0..1* |  | List of cells to be activated or modified | YES | reject |
| **>Cells to be Activated List Item** |  | *1.. <maxCellingNBDU>* |  |  | EACH | reject |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| >>NR PCI  | O |  | INTEGER (0..1007) | Physical Cell ID | - |  |
| >>gNB-CU System Information | O |  | 9.3.1.42 | RRC container with system information owned by gNB-CU | YES | reject |
| >>Available PLMN List | O |  | 9.3.1.65 |  | YES | ignore |
| >>Extended Available PLMN List | O |  | 9.3.1.76 | This is included if *Available PLMN List* IE is included and if more than 6 Available PLMNs is to be signalled. | YES | ignore |
| >>IAB Info IAB-donor-CU | O |  | 9.3.1.105 | IAB-related configuration sent by the IAB-donor-CU. | YES | ignore |
| >>Available SNPN ID List | O |  | 9.3.1.163 | Indicates the available SNPN ID list.If this IE is included, the content of the *Available PLMN List* IE and *Extended Available PLMN List* IE if present in the *Cells to be Activated List Item* IE is ignored. | YES | ignore |
| >>MBS Broadcast Neighbour Cell List | O |  | 9.3.1.226 |  | YES | ignore |
| >>SSBs within the cell to be Activated List | O |  | 9.3.1.326 | List of SSB beams within the cell requested to be activated. | YES | reject |
| <<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>> |
| **Cells Allowed to be Deactivated List** |  | *0..1* |  |  | YES | ignore |
| >**Cells Allowed to be Deactivated List Item** |  | *1 .. <maxCellingNBDU>* |  |  | EACH | ignore |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| **On-demand SIB1 Cell** |  | *0..1* |  |  | YES | ignore |
| >NR CGI | M |  | 9.3.1.12 |  | - |  |
| >On-demand SIB1 Indicator | M |  | ENUMERATED(start, stop, ...) |  | - |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxCellingNBDU | Maximum numbers of cells that can be served by a gNB-DU. Value is 512. |
| maxnoofTNLAssociations | Maximum numbers of TNL Associations between the gNB-CU and the gNB-DU. Value is 32. |
| maxCellineNB | Maximum no. cells that can be served by an eNB. Value is 256. |
| *maxnoofSSBAreas* | Maximum no. SSB Areas that can be served by a cell. Value is 64.  |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

#### 9.3.1.10 Served Cell Information

This IE contains cell configuration information of a cell in the gNB-DU.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| NR CGI | M |  | 9.3.1.12 |  | - |  |
| NR PCI | M |  | INTEGER (0..1007) | Physical Cell ID | - |  |
| 5GS TAC | O |  | 9.3.1.29 | 5GS Tracking Area Code | - |  |
| Configured EPS TAC | O |  | 9.3.1.29a |  | - |  |
| **Served PLMNs** |  | *1..<maxnoofBPLMNs>* |  | Broadcast PLMNs in SIB 1 associated to the NR Cell Identity in the *NR CGI* IE | - |  |
| >PLMN Identity | M |  | 9.3.1.14 |  | - |  |
| >TAI Slice Support List | O |  | Slice Support List9.3.1.37 | Supported S-NSSAIs per PLMN or per SNPN.  | YES | ignore |
| >NPN Support Information | O |  | 9.3.1.156 | Supported NPNs per PLMN. | YES | reject |
| >Extended TAI Slice Support List | O |  | Extended Slice Support List9.3.1.165 | Additional Supported S-NSSAIs per PLMN or per SNPN.  | YES | reject |
| >TAI NSAG Support List | O |  | 9.3.1.273 | NSAG information associated with the slices per TAC, per PLMN or per SNPN. | YES | ignore |
| <<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>> |
| XR Broadcast Information | O |  | ENUMERATED (true, …) | Corresponds to information provided in the *cellBarred2RxXR* contained in the *SIB1* message as defined in TS 38.331 [8]. | YES | ignore |
| Barring Exemption for Emergency Call Information | O |  | ENUMERATED (true, …) | Corresponds to information provided in the *barringExemptEmergencyCall*  contained in the *SIB1* message as defined in 38.331 [10]. | YES | ignore |
| CHOICE *on-demand SIB1* | O |  |  |  | YES | ignore |
| >*Provision*  |  |  |  |  |  |  |
| >>On-demand SIB1 Config | M |  | Octet String | Includes the *od-SIB1-Config* contained in the SIBxx message for the cell indicated by the *NR PCI* IE as defined in TS 38.331 [8]. | - |  |
| >*Stop provision* |  |  |  |  |  |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofBPLMNs | Maximum no. of Broadcast PLMN Ids. Value is 6. |
| maxnoofExtendedBPLMNs | Maximum no. of Extended Broadcast PLMN Ids. Value is 6. |
| maxnoofBPLMNsNR | Maximum no. of PLMN Ids.broadcast in an NR cell. Value is 12. |
| maxnoofNR-UChannelIDs | Maximum no. NR-U Channel IDs in a cell. Value is 16. |
| maxnoofMBSFSAs | Maximum no. of MBS FSAs by a cell. Value is 256. |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

#### 9.3.1.270 UE Paging Capability

This IE provides the UE Paging Capability information needed for paging.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| INACTIVE State PO-Determination | O |  | ENUMERATED(supported,…) | Corresponds to the *inactiveStatePO-Determination* contained in the *UERadioPagingInformation* IE defined in TS 38.331 [8]. | - |  |
| RedCap Indication | O |  | ENUMERATED(true,…) | Indicates that the paged UE is a Redcap UE or an eRedCap UE. | YES | ignore |
| NES Paging Adaptation Indication | O |  | ENUMERATED(supported,…) | Corresponds to the *pagingAdaptation* contained in the *UERadioPagingInformation* IE defined in TS 38.331 [8]. | YES | ignore |

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

###

### 9.4.5 Information Element Definitions

-- ASN1START

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

--

-- Information Element Definitions

--

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

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

 id-SRSPosPeriodicConfigHyperSFNIndex,

 id-candidatePSCellsToCancel,

 id-ValidityAreaSpecificSRSInformationExtended,

 id-OnDemandSIB1,

 id-NESPagingAdaptationIndication,

 id-PEISubgroupingSupportIndication-PagingAdaptation,

 id-ServingCellMO-Ondemand,

 maxNRARFCN,

 maxnoofErrors,

 maxnoofBPLMNs,

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

PER-Scalar ::= INTEGER (0..9, ...)

PER-Exponent ::= INTEGER (0..9, ...)

PagingCell-Item ::= SEQUENCE {

 nRCGI NRCGI ,

 iE-Extensions ProtocolExtensionContainer { { PagingCell-ItemExtIEs } } OPTIONAL

}

PagingCell-ItemExtIEs F1AP-PROTOCOL-EXTENSION ::= {

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

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

 { ID id-Recommended-SSBs-List CRITICALITY ignore EXTENSION Recommended-SSBs-List PRESENCE optional }|

 { ID id-PEISubgroupingSupportIndication-PagingAdaptation CRITICALITY ignore EXTENSION PEISubgroupingSupportIndication-PagingAdaptation PRESENCE optional },

 ...

}

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

PDUSessionID ::= INTEGER (0..255)

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

PEISubgroupingSupportIndication-PagingAdaptation ::= ENUMERATED {true, ...}

ReportingPeriodicityValue ::= INTEGER (0..512, ...)

Periodicity ::= INTEGER (0..640000, ...)

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

SCell-ToBeSetup-Item ::= SEQUENCE {

 sCell-ID NRCGI ,

 sCellIndex SCellIndex,

 sCellULConfigured CellULConfigured OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { SCell-ToBeSetup-ItemExtIEs } } OPTIONAL,

 ...

}

SCell-ToBeSetup-ItemExtIEs F1AP-PROTOCOL-EXTENSION ::= {

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

 { ID id-ServingCellMO-Ondemand CRITICALITY ignore EXTENSION ServingCellMO PRESENCE optional },

 ...

}

SCell-ToBeSetupMod-Item ::= SEQUENCE {

 sCell-ID NRCGI ,

 sCellIndex SCellIndex,

 sCellULConfigured CellULConfigured OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { SCell-ToBeSetupMod-ItemExtIEs } } OPTIONAL,

 ...

}

SCell-ToBeSetupMod-ItemExtIEs F1AP-PROTOCOL-EXTENSION ::= {

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

 { ID id-ServingCellMO-Ondemand CRITICALITY ignore EXTENSION ServingCellMO PRESENCE optional },

 ...

}

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

### 9.4.7 Constant Definitions

-- ASN1START

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

--

-- Constant definitions

--

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

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

id-MobilityInitiation ProtocolIE-ID ::= 859

id-ValidityAreaSpecificSRSInformationExtended ProtocolIE-ID ::= 860

id-PLMNIndexNRAssistanceInfoForNetShar ProtocolIE-ID ::= 861

id-OnDemandSIB1 ProtocolIE-ID ::= aaa

id-NESPagingAdaptationIndication ProtocolIE-ID ::= bbb

id-OnDemand-SIB1-Cell ProtocolIE-ID ::= ccc

id-PEISubgroupingSupportIndication-PagingAdaptation ProtocolIE-ID ::= ddd

id-ServingCellMO-Ondemand ProtocolIE-ID ::= ddd

<<<<<<<<<<<<<<<<<<<< Change Ends >>>>>>>>>>>>>>>>>>>>