**3GPP TSG-RAN WG3 Meeting #129-bisR3-257250**

Prague, Czech Republic, 13th ~17th Oct, 2025

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.473** | **CR** | **1639** | **Rev** | **1** | **Current version:** | **19.0.0** |  |
|  |
| *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:***  | Corrections to SBFD operation |
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| ***Source to WG:*** | Huawei, Nokia |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_duplex\_evo-Core |  | ***Date:*** | 2025-10-03 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)Rel-20 (Release 20)* |
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| ***Reason for change:*** | 1. The CLI Indication procedure introduced in support for SBFD is described in an inaccurate way. Such procedure does not carry the results of CLI measurements, but only an indication of CLI detection. Likewise, it signals indication for a potential need for CLI mitigation.
2. Some corrections to tabular are needed
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| ***Summary of change:*** | 1. Update procedure and semantic descriptions to achieve a more accurate description of the procedure and of the scope of the IEs
2. Add presence “O” for the IE *SSB Resource Configuration*;
3. To correct the IE name as “CLI Measurement Result List”, to align with ASN.1
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| ***Consequences if not approved:*** | The procedure description and semantics are incorrect and open to wrong interpretations, and some ambiguities still remain for the SBFD operation. |
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| ***Clauses affected:*** | 8.2.15.1, 8.2.15.2, 9.2.18.1 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **x** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **x** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** | Rev 1: merge R3-257069 and some updates |

**<< Start of Changes >>**

### 8.2.15 CLI Indication

#### 8.2.15.1 General

This procedure is initiated by the gNB-DU or the gNB-CU to report the result of gNB-to-gNB CLI detection, to request CLI mitigation and to indicate the need for SRS Resource Configuration information.

The procedure uses non UE-associated signalling.

#### 8.2.15.2 Successful Operation



Figure 8.2.15.2-1: CLI Indication initiated from the gNB-DU, successful operation

The gNB-DU initiates the procedure by sending the CLI INDICATION message to the gNB-CU. The gNB-DU reports the results of the gNB-to-gNB CLI detection, possible need for gNB-to-gNB CLI mitigation and SRS Resource Indication in CLI INDICATION message to the gNB-CU.



Figure 8.2.15.2-2: CLI Indication initiated from the gNB-CU, successful operation

The gNB-CU initiates the procedure by sending the CLI INDICATION message to the gNB-DU. The gNB-CU forwards the received results of the gNB-to-gNB CLI detection, possible need for gNB-to-gNB CLI mitigation and SRS Resource Indication in the CLI INDICATION message to the gNB-DU.

**<< Next Change >>**

#### 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 |
| **Cells to be Deactivated List** |  | *0..1* |  | List of cells to be deactivated | YES | reject |
| **>Cells to be Deactivated List Item** |  | *1.. <maxCellingNBDU>* |  |  | EACH | reject |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| **gNB-CU TNL Association To Add List**  |  | *0..1* |  |  | YES | ignore |
| **>gNB-CU TNL Association To Add Item IEs** |  | *1..<maxnoofTNLAssociations>* |  |  | EACH | ignore |
| >>TNL Association Transport Layer Information | M |  | CP Transport Layer Information9.3.2.4 | Transport Layer Address of the gNB-CU. | - |  |
| >>TNL Association Usage | M |  | ENUMERATED (ue, non-ue, both, ...) | Indicates whether the TNL association is only used for UE-associated signalling, or non-UE-associated signalling, or both. For usage of this IE, refer to TS 38.472 [22]. | - |  |
| **gNB-CU TNL Association To Remove List**  |  | *0..1* |  |  | YES | ignore |
| **>gNB-CU TNL Association To Remove Item IEs** |  | *1..<maxnoofTNLAssociation>* |  |  | EACH | ignore |
| >>TNL Association Transport Layer Address | M |  | CP Transport Layer Information9.3.2.4 | Transport Layer Address of the gNB-CU. | - |  |
| >>TNL Association Transport Layer Address gNB-DU | O |  | CP Transport Layer Information9.3.2.4 | Transport Layer Address of the gNB-DU. | YES | reject |
| **gNB-CU TNL Association To Update List**  |  | *0..1* |  |  | YES | ignore |
| **>gNB-CU TNL Association To Update Item IEs** |  | *1..<maxnoofTNLAssociations>* |  |  | EACH | ignore |
| >>TNL Association Transport Layer Address | M |  | CP Transport Layer Information9.3.2.4 | Transport Layer Address of the gNB-CU. | - |  |
| >>TNL Association Usage | O |  | ENUMERATED (ue, non-ue, both, ...) | Indicates whether the TNL association is only used for UE-associated signalling, or non-UE-associated signalling, or both. For usage of this IE, refer to TS 38.472 [22]. | - |  |
| **Cells to be barred List** |  | *0..1* |  | List of cells to be barred. | YES | ignore |
| **>Cells to be barred List Item** |  | *1.. <maxCellingNBDU>* |  |  | EACH | ignore |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| >>Cell Barred | M |  | ENUMERATED (barred, not-barred, ...) |  | - |  |
| >>IAB Barred | O |  | ENUMERATED (barred, not-barred, ...) | Corresponds to information provided in the *iab-Support* contained in the *PLMN-IdentityInfo* IE or contained inthe *NPN-IdentityInfo* IE as defined in TS 38.331 [8]. The codepoint value “barred” indicates that the *iab-Support* is not sent in SIB1, and the codepoint value “not-barred” indicates that the *iab-Support* is sent in SIB1. | - |  |
| >>Mobile IAB Barred | O |  | ENUMERATED (barred, not-barred, ...) | Corresponds to information provided in the *mobileIAB-Support* contained in the *PLMN-IdentityInfo* IE or contained inthe *NPN-IdentityInfo* IE as defined in TS 38.331 [8]. The codepoint value “barred” indicates that the *mobileIAB-Support* is not sent in SIB1, and the codepoint value “not-barred” indicates that the *mobileIAB-Support* is sent in SIB1. | - |  |
| **Protected E-UTRA Resources List** |  | *0..1* |  | List of Protected E-UTRA Resources. | YES | reject |
| **>Protected E-UTRA Resources List Item** |  | *1.. <maxCellineNB>* |  |  | EACH | reject |
| >>Spectrum Sharing Group ID | M |  | INTEGER (1.. maxCellineNB) | Indicates the E-UTRA cells involved in resource coordination with the NR cells affiliated with the same Spectrum Sharing Group ID. | - |  |
| **>>E-UTRA Cells List** |  | *1* |  | List of applicable E-UTRA cells.  | - |  |
| **>>>E-UTRA Cells List Item** |  | *1 .. <maxCellineNB>* |  |  | - |  |
| >>>>EUTRA Cell ID | M |  | BIT STRING (SIZE(28)) | Indicates the E-UTRAN Cell Identifier IE contained in the ECGI as defined in subclause 9.2.14 in TS 36.423 [9]. | - |  |
| >>>>Served E-UTRA Cell Information | M |  | 9.3.1.64 |  | - |  |
| **Neighbour Cell Information List** |  | *0..1* |  |  | YES | ignore |
| **>Neighbour Cell Information List Item** |  | *1 .. <maxCellingNBDU>* |  |  | EACH | ignore |
| >>NR CGI | M |  | 9.3.1.12 |  | - |  |
| >>Intended TDD DL-UL Configuration | O |  | 9.3.1.89 |  | - |  |
| >>SBFD Frequency Configuration | O |  | OCTET STRING | Includes the *SBFD-Subband-Allocation-r19* IE, as defined in TS 38.331[8]. | YES | ignore |
| >>SSB Resource Configuration | O |  | OCTET STRING | Includes the *MeasTiming* contained in the MeasurementTimingConfiguration message as defined in TS 38.331 [8]. | YES | ignore |
| >>NZP CSI-RS Resources Configuration | O |  | 9.3.1.356 |  | YES | ignore |
| >>SRS Resource Configuration | O |  | 9.3.1.357 |  | YES | ignore |
| Transport Layer Address Info | O |  | 9.3.2.5 |  | YES | ignore |
| Uplink BH Non-UP Traffic Mapping | O |  | 9.3.1.103 |  | YES | reject |
| BAP Address | O |  | 9.3.1.111 | Indicates a BAP address assigned to the IAB-donor-DU. | YES | ignore |
| CCO Assistance Information | O |  | 9.3.1.211 | Indicates CCO Assistance Information for cells and beams served by the gNB-DU of the same NG-RAN node or for cells and beams not served by the gNB-DU. | YES | ignore |
| Cells for SON List | O |  | 9.3.1.214 |  | YES | ignore |
| gNB-CU Name | O |  | PrintableString(SIZE(1..150,...)) | Human readable name of the gNB-CU.  | YES | ignore |
| Extended gNB-CU Name | O |  | 9.3.1.206 |  | YES | ignore |
| **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, ...) |  | - |  |
| Predicted CCO Assistance Information | O |  | 9.3.1.367 | Indicates predicted CCO Assistance Information for cells and beams served by the gNB-DU of the same NG-RAN node or for cells and beams not served by the gNB-DU. | YES | ignore |
| Neighbour Future Coverage Modification Notification | O |  | 9.3.1.369 | Indicates Future Coverage Modifications for cells and beams not served by the gNB-DU. | YES | ignore |

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| 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.  |

**<< Next Change >>**

### 9.2.18 CLI Indication Message

#### 9.2.18.1 CLI INDICATION

This message is sent by gNB-DU or gNB-CU to report the results of the CLI detection , to request CLI mitigation and to indicate the need for SRS Resource Configuration information.

Direction: gNB-DU → gNB-CU and 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 |
| Transaction ID | M |  | 9.3.1.23 |  | YES | reject |
| **CLI Measurement Result List** |  | *1* |  |  | YES | ignore |
| **>CLI Measurement Result Item** |  | *1 .. < maxCellingNBDU >* |  |  | - |  |
| >>Cell ID | M |  | NR CGI9.3.1.12 |  | - |  |
| >>SSB Index | O |  | INTEGER (0..63, …) | Strongest DL SSB beam information. | - |  |
| >>NZP CSI-RS Resource Indication | O |  | INTEGER (1..64, …) | Strongest DL NZP CSI-RS beam information. The value is a relative index of the CSI-RS resources within the set of resources signalled. | - |  |
| >>CLI Mitigation Indication | O |  | ENUMERATED (true, …) | Indicates to request CLI mitigation. | - |  |
| SRS Resource Indication  | O |  | ENUMERATED (true, …) | Indicates that SRS Resource configuration information is needed. | YES | ignore |

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| Range bound | Explanation |
| maxCellingNBDU | Maximum no. cells that can be served by a gNB-DU. Value is 512. |

**<< End of Changes >>**