3GPP TSG-RAN WG3 Meeting #125bis R3-24XXXX

**Hefei, China, 14 – 18 October 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.473** | **CR** | **1456** | **rev** | **2** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Clarification on SpCell ID replacement | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Google, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_Mob\_enh2-Core, NR\_Mob\_enh-Core | | | | |  | ***Date:*** | | | 2024-10-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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 can be 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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The text in the UE Context Modification procedure includes:  *“If the SpCell ID IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall* ***replace any previously received value*** *and regard it as a reconfiguration with sync as defined in TS 38.331 [8]”.*  The gNB-DU stores a SpCell ID of the serving cell for the UE. In a LTM or conditional mobility preparation, the gNB-DU receives a SpCell ID of a (LTM) candidate cell in a UE CONTEXT MODIFICATION REQUEST. Based on the text above, the gNB-DU replaces the SpCell ID of the serving cell with the SpCell ID of the (LTM) candidate cell, which causes the gNB-DU to lose the SpCell ID of the serving cell.  The text above has been there since Release 15 and should only apply to non-LTM and non-conditional-mobility cases. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The gNB-DU replaces any previously received value if the SpCell ID IE is included in the UE CONTEXT MODIFICATION REQUEST message and neither the LTM indicator nor the conditional mobility indicator is included.  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).  The impact can be considered isolated because the change only clarifies the *UE CONTEXT MODIFICATION REQUEST*. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | In the intra-DU LTM or conditional mobility preparation, the gNB-DU replaces the SpCell ID of the serving cell with the SpCell ID of a (LTM) candidate cell. This causes the gNB-DU to lose the SpCell ID of the serving cell. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.3.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR merges the category A changes from the Rel-16 CR with the category F changes of a Rel-18 category F CR. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | R0: R3-244179  R1: Re-submit based on the latest specification and add another concerning scenario “condiitonal mobility”  R2: Revise wording to use specific IE names; Add WI codes for conditional mobility; Add in the Other comments about the situation of this merging CR | | | | | | | | |

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**

The UE CONTEXT MODIFICATION REQUEST message is initiated by the gNB-CU.

Upon reception of the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall perform the modifications, and if successful reports the update in the UE CONTEXT MODIFICATION RESPONSE message.

If the *SpCell ID* IE is included in the UE CONTEXT MODIFICATION REQUEST message and neither the *LTM Information Modify* IE nor the *Conditional Intra-DU Mobility Information* IE is present, the gNB-DU shall replace any previously received value and regard it as a reconfiguration with sync as defined in TS 38.331 [8]. If the *ServCellIndex* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall take this into account for the indicated SpCell. If the *SpCell UL Configured* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall configure UL for the indicated SpCell accordingly. If the *servingCellMO* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall configure servingCellMO for the indicated SpCell accordingly. If the *servingCellMO List* IE is included in the UE CONTEXT MODIFICATION REQUEST message, the gNB-DU shall, if supported, configure servingCellMO after determining the list of BWPs for the UE and include the list of servingCellMOs that have been encoded in *CellGroupConfig* IE as *ServingCellMO-encoded-in-CGC List* IE in theUE CONTEXT MODIFICATION RESPONSE message.

If the *Configured BWP List* IE is included in the UE CONTEXT MODIFICATION RESPONSE message the gNB-CU shall, if supported, take it into account when requesting the gNB-DU for generating preconfigured measurement GAP for the indicated BWPs.

If the *Preconfigured Measurement GAP Request* IE is present in the *CU to DU RRC Information* IE in the UE CONTEXT MODIFICATON REQUEST message, the gNB-DU shall, if supported, consider that the content of the previous *CellGroupConfig* IE was not sent to the UE and generate the pre-configured measurement GAP for the indicated BWPs in the *MeasConfig* IE. If the gNB-DU successfully generates pre-configured measurement GAP for the indicated BWPs, the gNB-DU shall update the *CellGroupConfig* IE with the content of the previous *CellGroupConfig* IE and the preconfigured measurement GAP configuration in the UE CONTEXT MODIFICATION RESPONSE message.

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.

#### <unrelated part omitted>