**3GPP TSG-RAN WG1 Meeting #117**

Fukuoka City, Fukuoka, Japan, May 20th – 24th, 2024

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.213** | **CR** | **0644** | **rev** | **-** | **Current version:** | **18.2.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Corrections to the beam of CFRA triggered by cell switch command in TS38.213 | | | | | | | | | |
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| ***Source to WG:*** | Moderator (Fujitsu), Huawei, HiSilicon, Ericsson, Google, Langbo, Lenovo, New H3C, Nokia, Samsung, ZTE | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_Mob\_enh2-Core | | | | |  | ***Date:*** | | | 2024-05-23 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | For CFRA triggered by DCI format 1-0, UE uses the same beam as PDCCH order to receive PDCCH scheduling msg 2. However, for CFRA triggered by LTM Cell Switch Command MAC CE, the msg 2 and its scheduling PDCCH is transmitted from the target cell, which can be different from source cell transmits cell switch command. The beam to receive the PDCCH for msg 2 is not defined. | | | | | | | | |
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| ***Summary of change:*** | | Clarify that for msg2 PDCCH, UE should assume same DM-RS antenna port quasi co-location properties as for a SS/PBCH block the UE used for PRACH association for CFRA triggered by LTM cell switch command | | | | | | | | |
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| ***Consequences if not approved:*** | | The beam of msg 2 PDCCH in CFRA triggered by LTM cell switch command is not cleared. | | | | | | | | |
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| ***Clauses affected:*** | | 8.2 | | | | | | | | |
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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:*** | | **Isolated Impact Analysis:**  No inter-operatability issue is identified. | | | | | | | | |
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| ***This CR's revision history:*** | | This is the first version of this draft CR | | | | | | | | |

## 8.2 Random access response - Type-1 random access procedure

< Unchanged parts are omitted >

If the UE detects a DCI format 1\_0 with CRC scrambled by the corresponding RA-RNTI and LSBs of a SFN field in the DCI format 1\_0, if included and applicable, are same as corresponding LSBs of the SFN where the UE transmitted the PRACH, and the UE receives a transport block in a corresponding PDSCH, the UE may assume same DM-RS antenna port quasi co-location properties, as described in [6, TS 38.214], as for a SS/PBCH block or a CSI-RS resource the UE used for PRACH association, as described in clause 8.1, regardless of whether or not the UE is provided *TCI-State* for the CORESET where the UE receives the PDCCH with the DCI format 1\_0.

For the CFRA procedure triggered by LTM Cell Switch Command MAC CE, if the UE detects a DCI format 1\_0 with CRC scrambled by the corresponding RA-RNTI and the UE receives a transport block in a corresponding PDSCH, the UE may assume same DM-RS antenna port quasi co-location properties, as described in [6, TS 38.214], as for a SS/PBCH block the UE used for PRACH association, as described in clause 8.1.

If the UE attempts to detect the DCI format 1\_0 with CRC scrambled by the corresponding RA-RNTI in response to a PRACH transmission initiated by a PDCCH order that triggers a contention-free random access procedure for the SpCell [11, TS 38.321], the UE may assume that the PDCCH that includes the DCI format 1\_0 and the PDCCH order have same DM-RS antenna port quasi co-location properties. If the UE attempts to detect the DCI format 1\_0 with CRC scrambled by the corresponding RA-RNTI in response to a PRACH transmission initiated by a PDCCH order that triggers a contention-free random access procedure for a secondary cell, or if the UE is configured with *twoTAGs* for the SpCell and the CORESET where the UE receives the PDCCH order that triggers a contention-free random access procedure for the SpCell is not associated with the physical cell ID for the serving cell, the UE may assume the DM-RS antenna port quasi co-location properties of the CORESET associated with the Type1-PDCCH CSS set for receiving the PDCCH that includes the DCI format 1\_0 and the PDSCH scheduled by the DCI format 1\_0.

< Unchanged parts are omitted >