**3GPP TSG-RAN WG1 Meeting #117R1-240xxxx**

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** | **xxxx** | **rev** | **-** | **Current version:** | **18.2.0** |  |
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| *For* [***HELP***](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:*** | Correction on CFRA procedure triggered by LTM cell switch command | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Moderator (Fujitsu), Nokia | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_mob\_enh2-Core | | | | |  | ***Date:*** | | | 2024-05-22 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | In RAN1 116-bis, changes were made to section 8.1 to include the LTM cell switch command triggered CFRA procedure. However, the following items are still missing for this scenario:   * the reference and description of the cell for PRACH transmission, and * ~~the timeline between the LTM cell switch command and the PRACH transmission.~~ | | | | | | | | |
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| ***Summary of change:*** | | Added that the cell for PRACH transmission is indicated by Target Configuration ID field in LTM cell switch command MAC CE [38.321].  ~~Added the timeline for LTM cell switch command triggered RACH, the UE would transmit a HARQ-ACK, and a time between the last symbol of the HARQ-ACK transmission and the first symbol of the PRACH transmission is larger than or equal to msec. or msec~~ | | | | | | | | |
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| ***Consequences if not approved:*** | | Missing specification text for RACH-based LTM | | | | | | | | |
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| ***Clauses affected:*** | | 8.1 | | | | | | | | |
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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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | **Isolated Impact Analysis:**  This CR has no isolated impact on network and UE behavior. | | | | | | | | |
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| ***This CR's revision history:*** | | This is the first version of this draft CR | | | | | | | | |

8.1 Random access preamble

<Unchanged part is omitted>

For a PRACH transmission by a UE triggered by a PDCCH order or an LTM cell switch command MAC CE, the PRACH mask index field, if the value of the random access preamble index field is not zero, indicates the PRACH occasion for the PRACH transmission where the PRACH occasions are associated with the SS/PBCH block index indicated by the SS/PBCH block index field of the PDCCH order or an LTM cell switch command MAC CE and, if any, a cell indicator field in PDCCH order [5, TS 38.212] or a Target Configuration ID field in LTM cell switch command MAC CE [11, TS 38.321] indicates a cell for the PRACH transmission. If the UE is provided by *cellSpecificKoffset*, the PRACH occasion is after slot where is the slot of the UL BWP for the PRACH transmission that overlaps with the end of the PDCCH order reception assuming , and is the SCS configuration for the PRACH transmission. If the PDCCH reception for the PDCCH order includes two PDCCH candidates from two linked search space sets based on *searchSpaceLinkingId*, as described in clause 10.1, the last symbol of the PDCCH reception is the last symbol of the PDCCH candidate that ends later. The PDCCH reception includes the two PDCCH candidates also when the UE is not required to monitor one of the two PDCCH candidates as described in clauses 10 (except clause 10.4), 11.1, 11.1.1 and 17.2.

<Unchanged part is omitted>

If a random access procedure is initiated by a PDCCH order, the UE, if requested by higher layers, transmits a PRACH in the selected PRACH occasion, as described in [11, TS 38.321], for which a time between the last symbol of the PDCCH order and the first symbol of the PRACH transmission is larger than or equal to msec~~. In case of a random access procedure is initiated by an LTM cell switch command MAC CE, the UE would transmit a PUCCH with HARQ-ACK information corresponding to the PDSCH carrying the LTM cell switch command, and a time between the last symbol of the HARQ-ACK transmission and the first symbol of the PRACH transmission is larger than or equal to msec. W~~here

- is a time duration of symbols corresponding to a PUSCH preparation time for UE processing capability 1 [6, TS 38.214] assuming corresponds to the smallest SCS configuration between the SCS configuration of the PDCCH order ~~or the PUSCH carrying the LTM cell switch command MAC CE~~ and the SCS configuration of the corresponding PRACH transmission

- if the active UL BWP does not change, or if a cell indicator field in the PDCCH order indicates a non-serving cell [5, TS 38.212], and is defined in [10, TS 38.133] otherwise

- msec for FR1 and msec for FR2

- is a switching gap duration as defined in [6, TS 38.214]

- if a cell indicator field in the PDCCH order indicates a serving cell or if cell indicator field is not present, and is defined in [10, TS 38.133] otherwise

- if a cell indicator field in the PDCCH order indicates a serving cell or if cell indicator field is not present, and is defined in [10, TS 38.133] otherwise

~~If a random access procedure is initiated by an LTM Cell Switch Command MAC CE, the UE, if requested by higher layers, transmits a PRACH in the selected PRACH occasion, as described in [11, TS 38.321], for which a time between the last symbol of the PUCCH or the PUSCH with HARQ-ACK information for the PDSCH providing the MAC CE and the first symbol of the PRACH transmission is larger than or equal to msec, where , ,~~ ~~and are defined in [10, TS 38.133].~~

<Unchanged part is omitted>

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