**3GPP TSG-RAN WG4 Meeting #111 R4-24xxxxx**

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

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **?** | **rev** | **-** | **Current version:** | **15.25.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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| ***Title:*** | CR on maintenance of R15 TCI state list updated delay | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | Clarify the RRM requirements are for PDSCH TCI but not PDCCH TCI, as discussed in R4-2407758 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify the RRM requirements are for PDSCH TCI but not PDCCH TCI, as discussed in R4-2407758 | | | | | | | | |
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| ***Consequences if not approved:*** | | The requirements might be mis-understood. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.10.4, 8.10.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 38.533 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

<Start of Change #1>

8.10.4 DCI based TCI state switch delay

If the target TCI state is known, and a UE is configured with the higher layer parameter *tci-PresentInDCI* which is set as 'enabled'for the CORESET scheduling PDSCH, upon receiving DCI indicating the TCI state of PDSCH at slot n, UE shall be able to receive PDSCH with target TCI state of the serving cell on which TCI state switch occurs at the first slot that is after slot n+*timeDurationForQCL*, where, *timeDurationForQCL* is the time required by the UE to perform PDCCH reception and applying spatial QCL information received in DCI for PDSCH processing as described in TS 38.214 [26], the value of *timeDurationForQCL* is defined in TS 38.331 [2].

The known condition for TCI state defined in clause 8.10.2 is applied.

<End of Change #1>

<Start of Change #2>

### 8.10.6 Active TCI state list update delay

If the target TCI state is known, upon receiving PDSCH carrying MAC-CE for activation/deactivation of UE-specific PDSCH TCI state as defined in clause 6.1.3.14 of TS 38.321 [7] at slot n, UE shall be able to be indicated with a new target TCI state by PDCCH if *tci-PresentInDCI* is set as ‘enabled’, or be scheduled withPDSCH with a new target TCI state by a PDCCH if *tci-PresentInDCI* is NOT set as ‘enabled’, while the PDCCH is received at the first slot that is after n+ THARQ + +TOk\*(Tfirst-SSB + TSSB-proc) / *NR slot length*, where THARQ, Tfirst-SSB, TSSB-proc and TOk are defined in clause 8.10.3.

<End of Change #2>