**3GPP TSG RAN WG1 #110bis-eR1-2210083**

**e-Meeting, October 10th – 19th, 2022**

|  |
| --- |
| *CR-Form-v12.2* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **38.214** | **CR** | **-** | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  |
| *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)*.* |
|  |

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

|  |
| --- |
|  |
| ***Title:***  | Correction on indicated TCI state |
|  |  |
| ***Source to WG:*** | ASUSTeK  |
| ***Source to TSG:*** | R1 |
|  |  |
| ***Work item code:*** | NR\_FeMIMO-Core |  | ***Date:*** | 2022-09-30 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | The indicated TCI state provided by DCI format 1\_1/1\_2 could be 1 DL TCI state and 1 UL TCI state according to MAC CE. However, text in current TS 38.214 merely cover 1 indicated DL TCI state or 1 indicated UL TCI state, and does not cover 1 indicated DL TCI state and 1 indicated UL TCI state. |
|  |  |
| ***Summary of change:*** | Change “DCI format 1\_1/1\_2 providing indicated *TCIState* or *UL-TCIState*” to “DCI format 1\_1/1\_2 providing indicated *TCIState* and/or *UL-TCIState*”.Change “the indicated *DLorJointTCIState* or *UL-TCIstate*” to “the indicated *DLorJointTCIState* and/or *UL-TCIstate*”. |
|  |  |
| ***Consequences if not approved:*** | Ambiguity exists when DCI format 1\_1/1\_2 indicates TCI code-point which is 1 DL TCI state and 1 UL TCI state accoridng to MAC CE. |
|  |  |
| ***Clauses affected:*** | 5.1.5 |
|  |  |
|  | **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's revision history:*** |  |

5.1.5 Antenna ports quasi co-location

<omitted>

The UE receives an activation command, as described in clause 6.1.3.14 of [10, TS 38.321] or 6.1.3.47 of [10, TS 38.321], used to map up to 8 TCI states and/or pairs of TCI states, with one TCI state for DL channels/signals and/or one TCI state for UL channels/signals to the codepoints of the DCI field *'Transmission Configuration Indication'* for one or for a set of CCs/DL BWPs, and if applicable, for one or for a set of CCs/UL BWPs. When a set of TCI state IDs are activated for a set of CCs/DL BWPs and if applicable, for a set of CCs/UL BWPs, where the applicable list of CCs is determined by the indicated CC in the activation command, the same set of TCI state IDs are applied for all DL and/or UL BWPs in the indicated CCs. If the activation command maps *TCIState* and/or *UL-TCIState* to only one TCI codepoint, the UE shall apply the indicated *TCIState* and/or *UL-TCIState* to one or to a set of CCs /DL BWPs, and if applicable, to one or to a set of CCs /UL BWPs once the indicated mapping for the one single TCI codepoint is applied as described in [11, TS 38.133].

When the *bwp-id* or *cell* for QCL-TypeA/D source RS in a QCL-Info of the TCI state is not configured, the UE assumes that QCL-TypeA/D source RS is configured in the CC/DL BWP where TCI state applies.

When *tci-PresentInDCI* is set as 'enabled' or *tci-PresentDCI-1-2* is configured for the CORESET, a UE configured with *dl-OrJoint-TCIStateList* with activated *TCIState* or *UL-TCIState* receives DCI format 1\_1/1\_2 providing indicated *TCIState* and/or *UL-TCIState* for a CC or all CCs in the same CC list configured by *simultaneousTCI-UpdateList1-r17, simultaneousTCI-UpdateList2-r17, simultaneousTCI-UpdateList3-r17, simultaneousTCI-UpdateList4-r17*. The DCI format 1\_1/1\_2 can be with or without, if applicable, DL assignment. If the DCI format 1\_1/1\_2/ is without DL assignment, the UE can assume the following:

- CS-RNTI is used to scramble the CRC for the DCI

- The values of the following DCI fields are set as follows:

- RV = all '1's

- MCS = all '1's

- NDI = 0

- Set to all '0's for FDRA Type 0, or all '1's for FDRA Type 1, or all '0's for dynamicSwitch (same as in Table 10.2-4 of [6, TS 38.213]).

<omitted>

When the UE would transmit a PUCCH with HARQ-ACK information or a PUSCH with HARQ-ACK information corresponding to the DCI carrying the TCI State indication and without DL assignment, or corresponding to the PDSCH scheduled by the DCI carrying the TCI State indication, and if the indicated TCI State is different from the previously indicated one, the indicated *DLorJointTCIState* and/or *UL-TCIstate* should be applied starting from the first slot that is at least $ beamAppTime$ symbols after the last symbol of the PUCCH or the PUSCH. The first slot and the $ beamAppTime$ symbols are both determined on the active BWP with the smallest SCS among the active BWP(s) of the carrier(s) applying the beam indication.