**3GPP TSG-RAN WG1 Meeting #110bis-e *R1-221xxxx***

**eMeeting, October 10 – 19, 2022**

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| *CR-Form-v12.2* |
| **[DRAFT] CHANGE REQUEST** |
|  |
|  | **38.214** | **CR** |  | **rev** | **-** | **Current version:** | **17.3.0** |  |
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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:***  | Clarifying ambiguous usage of *TCI-State* |
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| ***Source to WG:*** | Moderator(ZTE), Huawei, HiSilicon |
| ***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)* |
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| ***Reason for change:*** | It is mentioned in Clause 5.1.5 of 38.214 that 1. The UE is not expected to be configured with *TCI-State* in a CC in a band if the UE is configured *dl-OrJoint-TCIStateList* in any CC in the same band; and
2. The UE can assume that when the UE is configured with *TCI-State* in any CC in the CC list configured by *simultaneousTCI-UpdateList1-r16*, *simultaneousTCI-UpdateList2-r16*, *simultaneousSpatial-UpdatedList1-r16*, or *simultaneousSpatial-UpdatedList2-r16*, the UE is not configured with *dl-OrJoint-TCIStateList* in any CC within the same band in the CC list.

Above is meant to specify that Rel-17 unified TCI state and the legacy TCI state cannot be simultanuously configured for a UE in the same band. However, according to the latest 38.331, both *tci-StatesToAddModList* and *dl-OrJoint-TCIStateList* configure *TCI-State* which means that *TCI-State* is used for both Rel-17 unified TCI state and the legacy TCI state. Therefore, the current text in Clause 5.1.5 of 38.214 should be corrected to clarify that *dl-OrJoint-TCIStateList* and *tci-StatesToAddModList* cannot be configured for a UE in the same band. |
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| ***Summary of change:*** | *TCI-State* is changed to *tci-StatesToAddModList* in two occasions in Clause 5.1.5 of 38.214 to clarify the actual intention of the spec that Rel-17 unified TCI state and the legacy TCI state cannot be simulatanuously configured in the same band. |
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| ***Consequences if not approved:*** | The current specification is incorrect as it states that UE is not expected to be configured with *TCI-State* and *dl-OrJoint-TCIStateList* in the same band. However, *dl-OrJoint-TCIStateList* is a container that includes a set of *TCI-State.* |
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| ***Clauses affected:*** | 5.1.5 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  |  |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

### 5.1.5 Antenna ports quasi co-location

**<Unchanged parts are omitted>**

If the *TCIState* or *UL-TCIState* configurations are absent in a BWP of the CC, the UE can apply the *TCIState* or *UL-TCIState* configurations from a reference BWP of a reference CC. The UE is not expected to be configured with *tci-StatesToAddModList*, *SpatialRelationInfo* or *PUCCH-SpatialRelationInfo*, except *SpatialRelationInfoPos* in a CC in a band, if the UE is configured with *dl-OrJoint-TCIStateList* or *UL-TCIState* in any CC in the same band. The UE can assume that when the UE is configured with *tci-StatesToAddModList* in any CC in the CC list configured by *simultaneousTCI-UpdateList1-r16, simultaneousTCI-UpdateList2-r16,* *simultaneousSpatial-UpdatedList1-r16, or simultaneousSpatial-UpdatedList2-r16,* the UE is not configured with *dl-OrJoint-TCIStateList* or *UL-TCIState* in any CC within the same band in the CC list.

**<Unchanged parts are omitted>**