**3GPP TSG RAN WG1 Meeting #110b-e R1-2210518**

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

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| *CR-Form-v11.2* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **38.214** | **CR** | **CRNum** | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  |
| *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:***  | Draft CR on reference of MAC CE in TS38.321 for SRS resource on unified TCI framework to TS38.214 |
|  |  |
| ***Source to WG:*** | Moderator(ZTE), Lenovo |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | NR\_FeMIMO-Core |  | ***Date:*** | 2022-09-26 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)**Rel-17 (Release 17)* |
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| ***Reason for change:*** | In R17 unified TCI framework, if a SRS resource within an SRS resource set which is not configured with followUnifiedTCIstateSRS, it can be updated with a TCIstate or UL-TCIState by a MAC CE which is 6.1.3.59 or 6.1.3.60 specified in TS38.321. However, in TS38.214 V17.3.0, it refers 6.1.3.47 in TS38.321 for beam indication for SRS resource while the MAC CE in 6.1.3.47 is used to activate common beams for DL and UL channels but not for SRS resource. |
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| ***Summary of change:*** | Change the reference of MAC CE for beam indication of SRS resource from 6.1.3.47 to 6.1.3.59 or 6.1.3.60 on unified TCI framework.  |
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| ***Consequences if not approved:*** | Beam indication of SRS resource based on unified TCI framework is not correct. |
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| ***Clauses affected:*** | 6.2.1 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  |  |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  |  |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  |  |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |

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### 6.2.1 UE sounding procedure

The UE may be configured with one or more Sounding Reference Signal (SRS) resource sets as configured by the higher layer parameter *SRS-ResourceSet* or *SRS-PosResourceSet*. For each SRS resource set configured by *SRS-ResourceSet*, a UE may be configured with SRS resources (higher layer parameter *SRS-Resource*), where the maximum value of K is indicated by UE capability[13, 38.306]. When SRS resource set is configured with the higher layer parameter *SRS-PosResourceSet,* a UE may be configured with *K* ≥1 SRS resources (higher layer parameter *SRS-PosResource*), where the maximum value of K is 16. The SRS resource set applicability is configured by the higher layer parameter *usage* in *SRS-ResourceSet.* When the higher layer parameter *usage* is set to 'beamManagement'*,* only one SRS resource in each of multiple SRS resource sets may be transmitted at a given time instant, but the SRS resources in different SRS resource sets with the same time domain behaviour in the same BWP may be transmitted simultaneously.

For the SRS resource set(s) configured *in srs-ResourceSetToAddModListDCI-0-2* with higher layer parameter *usage* set to '*antennaSwitching*' or '*beamManagement*', the UE expects the same SRS resource set(s) with the same *usage* being configured in *srs-ResourceSetToAddModList.*

When the UE is configured *dl-OrJoint-TCIStateList* or *UL*-*TCIState,* the UE can assume that SRS resource(s) in any SRS resource set, except SRS resource set for positioning and an SRS resource set configured with *followUnifiedTCIstateSRS*, can be configured with *TCIState* or *UL*-*TCIState* or updated as described in clause ~~6.1.3.47~~ 6.1.3.59 or 6.1.3.60 of [10, TS 38.321]. The reference RS in the *DLorJoint-TCIState* can be a CSI-RS resource in a *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *repetition*, or a CSI-RS resource in an *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *trs-Info*. The reference RS in the *UL*-*TCIState*(s) can be a CSI-RS resource in a *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *repetition*, a CSI-RS resource in an *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *trs-Info*, an SRS resource with the higher layer parameter *usage* set to 'beamManagement', or SS/PBCH block associated with the same or different PCI from the PCI of the serving cell.

If an SRS resource set, except an SRS resource set for positioning, is configured with *followUnifiedTCIstateSRS*, the UE shall transmit the target SRS resource(s) within the SRS resource set according to the spatial relation, if applicable, with a reference to the RS used for determining UL TX spatial filter. The RS is determined based on an RS configured with *qcl-Type* set to 'typeD' in *QCL-Info* of the indicated *TCIState* or an RS in the indicated *UL-TCIState*. The reference RS in the indicated *TCIState* can be a CSI-RS resource in a *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *repetition*, or a CSI-RS resource in an *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *trs-Info.* The reference RS in the indicated *UL-TCIState* can be a CSI-RS resource in a *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *repetition*, a CSI-RS resource in an *NZP-CSI-RS-ResourceSet* configured with higher layer parameter *trs-Info,* an SRS resource with the higher layer parameter *usage* set to 'beamManagement', or SS/PBCH block associated with the same or different PCI from the PCI of the serving cell.

< Unchanged parts are omitted >