**3GPP TSG RAN WG1 Meeting #110bis-e R1-22xxxxx**

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

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.214** | **CR** |  | **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:*** | Correction on Type 1 configured grant PUSCH transmission associated with two SRS resource sets | | | | | | | | | |
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| ***Source to WG:*** | Moderator (Nokia), Samsung, Lenovo | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_feMIMO-Core | | | | |  | ***Date:*** | | | 2022-10-17 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | According to TS38.214 V17.3.0, providing two SRS resource indicators and two precoding information is mentioned as the condition to support both codebook and non-codebook-based Type 1 configured grant PUSCH transmission associated with two SRS resource sets (i.e., mTRP Type 1 CG PUSCH). However, there is no precoding information for non-codebook-based PUSCH. Furthermore, if only one SRS resource is configured per SRS resource set of two SRS resource sets configured for PUSCH transmission, there are no SRS resource indicators in the configuration of Type 1 configured grant PUSCH. Therefore, the condition “if two SRS resource indicators and two precoding information are provided” can not be used to determine a Type 1 configured grant PUSCH transmission associated with two SRS resource sets. | | | | | | | | |
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| ***Summary of change:*** | | Replace the current condition “if two SRS resource indicators and two precoding information are provided” with “if two *p0-PUSCH-Alpha2* is provided” to determine a Type 1 configured grant PUSCH transmission associated with two SRS resource sets. | | | | | | | | |
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| ***Consequences if not approved:*** | | Determining a Type 1 configured grant PUSCH transmission associated with two SRS resource sets (M-TRP PUSCH) is not correct. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.2.3 | | | | | | | | |
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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:*** | | **Isolated impact analysis:**  This CR has no isolated impact on network and UE behavior. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

< Unchanged parts are omitted >

6.1.2.3 Resource allocation for uplink transmission with configured grant

< Unchanged parts are omitted >

For PUSCH transmissions with a Type 1 or Type 2 configured grant, the number of (nominal) repetitions *K* to be applied to the transmitted transport block is provided by the indexed row in the time domain resource allocation table if *numberOfRepetitions* is present in the table; otherwise *K* is provided by the higher layer configured parameters *repK.*

For PUSCH transmissions with a Type 2 configured grant, when two SRS resource sets are configured in srs-*ResourceSetToAddModList* or *srs-ResourceSetToAddModListDCI-0-2*, the SRS resource set association to (nominal) repetitions follows *MappingPattern* in *ConfiguredGrantConfig* as defined in Clause 6.1.2.1 for PUSCH scheduled by DCI format 0\_1 and 0\_2. For PUSCH transmissions with a Type 1 configured grant, when two SRS resource sets with usage set to 'codebook' or 'noncodebook' are configured in *srs-ResourceSetToAddModList* or *srs-ResourceSetToAddModListDCI-0-2*, if *p0-PUSCH-Alpha2* is provided, the SRS resource set association to (nominal) repetitions is determined as follows. When K = 2, the first and second SRS resource sets are applied to the first and second (nominal) repetitions, respectively.

- When K > 2 and *cyclicMapping* in *ConfiguredGrantConfig* is enabled, the first and second SRS resource sets are applied to the first and second (nominal) repetitions, respectively, and the same SRS resource set mapping pattern continues to the remaining (nominal) repetitions.

- When K > 2 and *sequentialMapping* in *ConfiguredGrantConfig* is enabled, first SRS resource set is applied to the first and second (nominal) repetitions, and the second SRS resource set is applied to the third and fourth (nominal) repetitions, and the same SRS resource set mapping pattern continues to the remaining (nominal) repetitions.

< Unchanged parts are omitted >