**3GPP TSG-RAN WG4 Meeting #111 R4-2410225**

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

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **4401** | **rev** | **1** | **Current version:** | **17.13.0** |  |
|  | | | | | | | | |
| *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:*** | (NR\_RRM\_enh2-Core)CR on SRS antenna switching interruption requirements in R17 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | , Huawei | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_RRM\_enh2-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:*** | | For RRM requirements under NR CA, there is no async scenario from MRTD/MTTD perspective. The asyc table is redundant and shall be removed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Remove the async table in 8.2.2.2.16 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The requirements are not correct, and may cause confusion. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 8.2.2.2.16 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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>

##### 8.2.2.2.16 Interruptions at NR SRS antenna port switching

The requirements in this clause are applicable to SRS antenna port switching on FR1 and SRS resource(s) is only configured within the last 6 symbols of a slot. For interruption caused by SRS antenna port switching, the victim cell is based on the entry number of the band indicated by *txSwitchImpactToRx* and/or *txSwitchWithAnotherBand* regardless of per-FR MG capability. An UL interruption is allowed on any of the serving cells as indicated in *txSwitchWithAnotherBand*, and a DL interruption is allowed on any of the serving cells as indicated in *txSwitchImpactToRx*.

The UE shall perform SRS antenna port switching only if the below conditions are met.

- the SRS switching is not colliding with any other UL transmission with higher priority defined in TS 38.214 [26] if the serving cell on which the higher priority transmission is performed is a victim cell based on *txSwitchWithAnotherBand* or is the same carrier on which SRS is transmitted.

- the SRS switching is not colliding with any NR measurements (i.e. SSB/CSI-RS based L1/L3 measurements) and the measurements for RLM/BFD/CBD if the serving cell on which the NR measurements and the measurements for RLM/BFD/CBD is performed is a victim cell based on *txSwitchImpactToRx* or is the same carrier on which SRS is transmitted.

No requirements are defined for SRS antenna port switching if aperiodic SRS switching is colliding with aperiodic L1-RSRP/L1-SINR measurements and the serving cell on which the aperiodic L1-RSRP/L1-SINR measurement is configured is indicated in *txSwitchImpactToRx* or is the same carrier on which aperiodic SRS is scheduled/configured.

For NR-SA, aggressor and victim cells are synchronized, as defined in clause 7.6.4. When 1 SRS symbol is configured in a slot for SRS antenna switching, the interruption requirement in Table 8.2.2.2.16-1 applies. For the rest of SRS configurations, the interruption requirement in Table 8.2.2.2.16-3 applies.

**Table 8.2.2.2.16-1: Interruption length in symbols of victim CC when 1 SRS symbol is configured**

|  |  |  |  |
| --- | --- | --- | --- |
| **Victim cell SCS(kHz)** | **Aggressor cell SCS (kHz)** | | |
| **15** | **30** | **60** |
| 15 | 3 | 2 | 2 |
| 30 | 4 | 3 | 3 |
| 60 | 8 | 6 | 5 |
| 120 | 14 | 10 | 8 |

**Table 8.2.2.2.16.2: Void**



**Table 8.2.2.2.16-3: Interruption length in slots of victim CC for rest of the SRS configurations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Victim cell SCS(kHz)** | **Aggressor cell SCS (kHz)** | | |
| **15** | **30** | **60** |
| 15 | 2 | 2 | 2 |
| 30 | 2 | 2 | 2 |
| 60 | 3 | 2 | 2 |
| 120 | 5 | 3 | 3 |

<End of Change #1>