**3GPP TSG-RAN WG1 Meeting #118bisR1-240xxxx**

**Hefei, China, October 14th – 18th, 2024**

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| *CR-Form-v12.3* |
| **Draft CHANGE REQUEST** |
|  |
|  | **4** | **CR** |  | **rev** |  | **Current version:** | **17.11.0** |  |
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| *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:***  | PUCCH transmission cancellation due to aperiodic SRS |
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| ***Source to WG:*** |  Moderator (CATT), Ericsson, Samsung |
| ***Source to TSG:*** |   |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core, TEI17 |  | ***Date:*** | 15 |
|  |  |  |  |  |
| ***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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | It is specified in TS 38.214 that PUCCH carrying semi-persistent/periodic CSI report(s) or semi-persistent/periodic L1-RSRP report(s) is cancelled by overlapping aperiodic SRS on the same carrier without a cancellation timeline. However, in order to provide sufficient time for a UE to cancel PUCCH transmission, a cancellation time is needed. |
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| ***Summary of change:*** | Add the timeline requirement for cancellation of PUCCH transmission due to aperiodic SRS by reusing the cancellation timeline of configured PUCCH/PUSCH/PRACH due to overlapping of dynamic DL receptions and/or dynamic SFI. |
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| ***Consequences if not approved:*** | PUCCH cancellation due to overlapping aperiodic SRS on the same carrier in case the time interval between the first symbol of the PUCCH and the last symbol of PDCCH triggering the aperiodic SRS is less than the required time for cancelling PUCCH transmission is not feasible from UE implementation perspective. |
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| ***Clauses affected:*** | 6.2.1 |
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|  | **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 ...  |
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| ***Other comments:*** | The CR can be implemented by a UE of an earlier release without interoperability issue. |
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| ***This CR's revision history:*** |  |

### 6.2.1 UE sounding procedure

< Unchanged parts are omitted >

For PUCCH and SRS on the same carrier, a UE shall not transmit SRS when semi-persistent or periodic SRS is configured in the same symbol(s) with PUCCH carrying only CSI report(s), or only L1-RSRP report(s), or only L1-SINR report(s). A UE shall not transmit SRS when semi-persistent or periodic SRS is configured or aperiodic SRS is triggered to be transmitted in the same symbol(s) with PUCCH carrying HARQ-ACK, link recovery request (as defined in clause 9.2.4 of [6, 38.213]) and/or SR. In the case that SRS is not transmitted due to overlap with PUCCH, only the SRS symbol(s) that overlap with PUCCH symbol(s) are dropped. PUCCH shall not be transmitted when aperiodic SRS is triggered to be transmitted to overlap in the same symbol with PUCCH carrying semi-persistent/periodic CSI report(s) or semi-persistent/periodic L1-RSRP report(s) only, or only L1-SINR report(s) and the PUCCH starts no earlier than $T\_{proc,2 }$ after the last symbol of the PDCCH carrying the triggering command for the aperiodic SRS, where $T\_{proc,2}$ is the PUSCH preparation time for the corresponding UE processing capability assuming $d\_{2,1}=1$ and $μ$ corresponds to the smallest SCS configuration between the SCS configuration of the PDCCH carrying the triggering command and the SCS configuration of the PUCCH.

< Unchanged parts are omitted >