**3GPP TSG- Meeting #**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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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:*** |  | | | | | | | | | |
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| ***Source to WG:*** | , Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***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)* | |
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| ***Reason for change:*** | | In RAN2#127, it was agreed to limit the Parallel Tx capabilities to the FR1 only, which are currently applicable to both FR1 and FR2. Consequently, new capabilities will be added for the FR2 support from Rel-18. | | | | | | | | |
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| ***Summary of change:*** | | Update the parallel Tx capabilities in CA-ParametersNR to be applicable to FR1 but not FR2.  Include support for parallel Tx capabilities for FR2 (in Rel-18 only).  This CR needs to be supported by the UE and the Network to implement this feature (Parallel Tx).  **Impact analysis**  Impacted 5G architecture options: Standalone, EN-DC, NGEN-DC, NE-DC, NR-DC    Impacted functionality: Parallel Tx capabilities    Inter-operability: If the network implements the CR and the UE does not, there is no interoperability issue. The UE may support a parallel Tx capability for both FR1 and FR2 (when including the existing capabilities), but the network will only configure the feature for FR1.  If the UE implements the CR and the network does not, the network may configure a parallel Tx feature for FR2 while the UE may support it only for FR1. | | | | | | | | |
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| ***Consequences if not approved:*** | | The parallel Tx capabilities will remain applicable to both FR1 and FR2 and thus UEs may be forced to refrain from reporting those capabilities in case such UEs could support these features only for FR1. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.7.4 | | | | | | | | |
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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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

START OF CHANGE

| ***parallelTxMsgA-SRS-PUCCH-PUSCH-r16***  Indicates whether the UE supports parallel transmission of MsgA in SpCell and SRS/ PUCCH/ PUSCH across CCs in FR1 serving cells in an inter-band CA band combination or across CCs in FR1 serving cells within a cell group with the inter-band CA operation in case of NR-DC. A UE supporting this feature shall also indicate support of *parallelTxPRACH-SRS-PUCCH-PUSCH*. | BC | No | N/A | N/A |
| --- | --- | --- | --- | --- |
| ***parallelTxMsgA-SRS-PUCCH-PUSCH-intraBand-r17***  Indicates whether the UE supports parallel transmission of MsgA in SpCell and SRS/ PUCCH/ PUSCH across CCs in FR1 serving cells in an intra-band non-contiguous CA band combination or across CCs in FR1 serving cells within a cell group with the intra-band non-contiguous CA operation in case of NR-DC. The UE indicating support of this field shall also indicate support of *parallelTxMsgA-SRS-PUCCH-PUSCH-r16*. | BC | No | N/A | N/A |
| ***parallelTxSRS-PUCCH-PUSCH***  Indicates whether the UE supports parallel transmission of SRS and PUCCH/ PUSCH across CCs in FR1 serving cells in an inter-band CA band combination or across CCs in FR1 serving cells within a cell group with the inter-band CA operation in case of NR-DC. | BC | No | N/A | N/A |
| ***parallelTxSRS-PUCCH-PUSCH-intraBand-r17***  Indicates whether the UE supports parallel transmission of SRS and PUCCH/ PUSCH across CCs in FR1 serving cells in an intra-band non-contiguous CA band combination or across CCs in FR1 serving cells within a cell group with the intra-band non-contiguous CA operation in case of NR-DC. | BC | No | N/A | N/A |
| ***parallelTxPRACH-SRS-PUCCH-PUSCH***  Indicates whether the UE supports parallel transmission of PRACH and SRS/PUCCH/PUSCH across CCs in FR1 serving cells in an inter-band CA band combination or across CCs in FR1 serving cells within a cell group with the inter-band CA operation in case of NR-DC. | BC | No | N/A | N/A |
| ***parallelTxPRACH-SRS-PUCCH-PUSCH-intraBand-r17***  Indicates whether the UE supports parallel transmission of PRACH and SRS/PUCCH/PUSCH across CCs in FR1 serving cells in an intra-band non-contiguous CA band combination or across CCs in FR1 serving cells within a cell group with the intra-band non-contiguous CA operation in case of NR-DC. | BC | No | N/A | N/A |
| ***parallelTxPUCCH-PUSCH-r17***  Indicates whether the UE supports simultaneous PUCCH and PUSCH transmissions of different priority across CCs in FR1 serving cells in an inter-band CA band combination or across CCs in FR1 serving cells within a cell group with the inter-band CA operation in case of NR-DC. | BC | No | N/A | N/A |
| ***parallelTxPUCCH-PUSCH-SamePriority-r17***  Indicates whether the UE supports simultaneous PUCCH and PUSCH transmissions of same priority across CCs in FR1 serving cells in an inter-band CA band combination or across CCs in FR1 serving cells within a cell group with the inter-band CA operation in case of NR-DC as specified in clause 9 of TS 38.213 [11]. | BC | No | N/A | N/A |

END OF CHANGE