**3GPP TSG-RAN WG1 Meeting #104-e R1-2xxxxxx**

**E-meeting, January 25 – February 5, 2021**

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| *CR-Form-v12.1* |
| **[DRAFT] CHANGE REQUEST** |
|  |
|  | **38.213** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **16.4.0** |  |
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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:***  | CR on Scell BFR  |
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| ***Source to WG:*** | Moderator (Apple), ZTE |
| ***Source to TSG:*** | R1 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core |  | ***Date:*** | 2021-01-25 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-16 |
|  | *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-15 (Release 15)Rel-16 (Release 16)**Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | According to current TS38.213, we still have two following interpretations about the sentence that the SCS configuration for the 28 symbols is the smallest of the SCS configurations of the active DL BWP for the PDCCH reception and of the active DL BWP(s) of the at least one SCell.* Interpretation-1: Determining SCS of 28 symbols is per failed cell (i.e., based on the smallest SCS of the response receiving cell and a respective failed cell).
* Interpretation-2: Determining SCS of 28 symbols is based on the smallest SCS of the response receiving cell and all failed cells.

From the perspective of the complexity of UE implementation, Interpretation-2 is more appropriate and is beneficial for aligning the timeline of beam updating across CC. |
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| ***Summary of change:*** | Determining SCS of 28 symbols is based on the smallest SCS of the response receiving cell and all failed cells |
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| ***Consequences if not approved:*** | SCS of 28 symbols is unclear. |
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| ***Clauses affected:*** | 6 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  |  |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
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| ***Other comments:*** | Isolated impact analysis:* No impact to existing gNB and UE implementation.
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| ***This CR's revision history:*** |  |

# 6 Link recovery procedures

**<Unchanged part is omitted>**

A UE can be provided, by *schedulingRequestID-BFR-SCell-r16*, a configuration for PUCCH transmission with a link recovery request (LRR) as described in Clause 9.2.4. The UE can transmit in a first PUSCH MAC CE providing index(es) for at least corresponding SCell(s) with radio link quality worse than Qout,LR, indication(s) of presence of $q\_{new}$ for corresponding SCell(s), and index(es) $q\_{new}$ for a periodic CSI-RS configuration or for a SS/PBCH block provided by higher layers, as described in [11, TS 38.321], if any, for corresponding SCell(s). After 28 symbols from a last symbol of a PDCCH reception with a DCI format scheduling a PUSCH transmission with a same HARQ process number as for the transmission of the first PUSCH and having a toggled NDI field value, the UE

- monitors PDCCH in all CORESETs on the SCell(s) indicated by the MAC CE using the same antenna port quasi co-location parameters as the ones associated with the corresponding index(es) $q\_{new}$, if any

- transmits PUCCH on a PUCCH-SCell using a same spatial domain filter as the one corresponding to $q\_{new}$ for periodic CSI-RS or SS/PBCH block reception, as described in Clause 9.2.2, and using a power determined as described in Clause 7.2.1 with $q\_{u}=0$, $q\_{d}=q\_{new}$, and $l=0$, if

- the UE is provided *PUCCH-SpatialRelationInfo* for the PUCCH,

- a PUCCH with the LRR was either not transmitted or was transmitted on the PCell or the PSCell, and

- the PUCCH-SCell is included in the SCell(s) indicated by the MAC-CE

where the SCS configuration for the 28 symbols is the smallest of the SCS configurations of the active DL BWP for the PDCCH reception and of the active DL BWP(s) of the SCell(s) indicated by the MAC-CE.