**3GPP TSG-** **RAN WG1 Meeting #118 *R1-2407xxx***

**Maastricht, Netherlands, August 19 - 23, 2024**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.213** | **CR** | **xxx** | **rev** |  | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *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 PSFCH resource mapping for contiguous RB resource pool | | | | | | | | | |
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| ***Source to WG:*** | Moderator (Huawei), ZTE, Sanechips, Huawei, HiSilicon, Samsung | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_SL\_enh2-Core | | | | |  | ***Date:*** | | | 2024-08-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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:*** | | For operation with shared spectrum channel access, when *sl-PSFCH-Type* is not provided, the description of the ‘**subchannel in RB set k’** is not clear in the current TS 38.213. As shown in the following figure, only partial PRBs of **subchannel i** is within RB set k.    It is unclear whether or not subchannel i was included in RB-set k for PSSCH-PSFCH mapping in the current TS 38.213.  There are two kinds of understandings:   * Understanding 1: Subchannel i was included in RB set k for PSSCH-PSFCH mapping; * Understanding 2: Subchannel i was not included in RB set k for PSSCH-PSFCH mapping;   It is suggested that RAN1 clarify which of the above understandings should be adopted in the TS 38.213.  And in RAN1#113, it was agreed:  **Agreement**  For contiguous RB-based PSCCH/PSSCH transmission in SL-U, regarding sub-channel(s) which include intra-cell guardband PRBs, support only option 3.   * Option 3: Such sub-channel(s) cannot be used for PSCCH transmission, and can be used for PSSCH transmission   So it is reasonable to not allocate PSFCH resource in RB set k to the special subchannels which are partially overlapped with RB set k. | | | | | | | | |
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| ***Summary of change:*** | | Adding a limiting that only the subchanels whose all PRBs are located in RB set k are considered for PSFCH resource allocation. | | | | | | | | |
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| ***Consequences if not approved:*** | | Whether and how to allocate PSFCH resource in RB set k to the special subchannels which are partially overlapped with RB set k is unclear. | | | | | | | | |
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| ***Clauses affected:*** | | 16.3.0 | | | | | | | | |
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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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

16.3.0 UE procedure for transmitting PSFCH with control information

<Unchanged parts are omitted>

For operation with shared spectrum channel access, when *sl-PSFCH-Type* is not provided and within RB-set , for the -th candidate PSFCH transmission occasion, , a UE determines a set of PRBs in a resource pool based on the -th indication provided by *sl-PSFCH-RB-SetList* or *sl-RB-SetPSFCHList* for PSFCH transmission with HARQ-ACK information or conflict information, respectively. The UE expects that different PRBs are (pre)configured for conflict information and HARQ-ACK information. For a number of sub-channels where all PRBs of each sub-channel are located in RB-set and a number of PSSCH slots associated with a PSFCH slot that is less than or equal to , the UE allocates the PRBs from the PRBs to slot among the PSSCH slots associated with the PSFCH slot and sub-channel , where , , , and the allocation starts in an ascending order of and continues in an ascending order of . The UE expects that isa multiple of *.*

<Unchanged parts are omitted>