**3GPP TSG-RAN WG1 Meeting #110bis-eR1-22xxxx**

**e-Meeting, October 10-19, 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **[DRAFT] CHANGE REQUEST** | | | | | | | | |
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|  | **38.213** | **CR** |  | **rev** | **-** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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:*** | Draft CR on SS0 availability for scheduling MBS to TS 38.213 | | | | | | | | | |
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| ***Source to WG:*** | Moderator (CMCC), Huawei, HiSilicon, CBN | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_MBS-Core | | | | |  | ***Date:*** | | | 2022-10-12 |
|  |  | | | |  | |  | | |  |
| ***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 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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In TS 38.331 v17.2.0, the explaination of *searchSpaceMCCH* and *searchSpaceMTCH* are as the following:  *searchSpaceMCCH*   * ID of the search space for MCCH. If the field is absent, the UE does not receive MCCH in this BWP (see TS 38.213 [13], clause 10).   *searchSpaceMTCH*   * ID of the search space for MTCH of MBS broadcast. If the field is absent, the UE applies *searchSpaceMCCH* also for MTCH, (see TS 38.213 [13], clause 10).   In TS 38.213 v17.3.0:   * *searchSpaceZero* in *PDCCH-ConfigCommon* when *searchSpaceMCCH* and *searchSpaceMTCH* are not provided, for a DCI format 4\_0 with CRC scrambled by a MCCH-RNTI or a G-RNTI.   Hence, UE behaviors are different according to TS 38.331 and TS 38.213 regarding whether UE monitors DCI format 4\_0 in *searchSpaceZero.* | | | | | | | | |
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| ***Summary of change:*** | | *searchSpaceZero* is used for a DCI format 4\_0 with CRC scrambled by a MCCH-RNTI or a G-RNTI for MTCH when it is configured by searchSpaceMCCH and searchSpaceMTCH*.* | | | | | | | | |
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| ***Consequences if not approved:*** | | When *searchSpaceMCCH* and *searchSpaceMTCH* are not configured, UE behaviors are different according to TS 38.331 and TS 38.213*.* | | | | | | | | |
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| ***Clauses affected:*** | | 10.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

10.1 UE procedure for determining physical downlink control channel assignment

A set of PDCCH candidates for a UE to monitor is defined in terms of PDCCH search space sets. A search space set can be a CSS set or a USS set. A UE monitors PDCCH candidates in one or more of the following search spaces sets

- a Type0-PDCCH CSS set on the primary cell of the MCG configured by

- *pdcch-ConfigSIB1* in MIB or by *searchSpaceSIB1* in *PDCCH-ConfigCommon* or by *searchSpaceZero* in *PDCCH-ConfigCommon* for a DCI format 1\_0 with CRC scrambled by a SI-RNTI, or

- *searchSpaceZero* in *searchSpaceMCCH* and *searchSpaceMTCH* for a DCI format 4\_0 with CRC scrambled by a MCCH-RNTI or a G-RNTI for MTCH

- a Type0A-PDCCH CSS set configured by *searchSpaceOtherSystemInformation* in *PDCCH-ConfigCommon* for a DCI format 1\_0 with CRC scrambled by a SI-RNTI on the primary cell of the MCG

- a Type0B-PDCCH CSS set configured by *searchSpaceMCCH* and *searchSpaceMTCH* for a DCI format 4\_0 with CRC scrambled by a MCCH-RNTI or a G-RNTI for MTCH, on the primary cell of the MCG

- a Type1-PDCCH CSS set configured by *ra-SearchSpace* in *PDCCH-ConfigCommon* for a DCI format 1\_0 with CRC scrambled by a RA-RNTI, a MsgB-RNTI, or a TC-RNTI on the primary cell

- a Type1A-PDCCH CSS set configured by *sdt-SearchSpace* in *PDCCH-ConfigCommon* for a DCI format with CRC scrambled by a C-RNTI or a CS-RNTI on the primary cell as described in clause 19.1

- a Type2-PDCCH CSS set configured by *pagingSearchSpace* in *PDCCH-ConfigCommon* for a DCI format 1\_0 with CRC scrambled by a P-RNTI on the primary cell of the MCG

- a Type2A-PDCCH CSS set configured by *peiSearchSpace* in *DownlinkConfigCommonSIB* for a DCI format 2\_7 with CRC scrambled by a PEI-RNTI on the primary cell of the MCG

- a Type3-PDCCH CSS set configured by

- *SearchSpace* in *PDCCH-Config* with *searchSpaceType* = *common* for DCI formats with CRC scrambled by INT-RNTI, SFI-RNTI, TPC-PUSCH-RNTI, TPC-PUCCH-RNTI, TPC-SRS-RNTI, or CI-RNTI and, only for the primary cell, C-RNTI, MCS-C-RNTI, CS-RNTI(s), or PS-RNTI, or

- *SearchSpace* in *PDCCH-ConfigMulticast* for DCI formats with CRC scrambled by G-RNTI, or G-CS-RNTI, or

- *searchSpaceMCCH* and *searchSpaceMTCH* on a secondary cell for a DCI format 4\_0 with CRC scrambled by a MCCH-RNTI or a G-RNTI for MTCH, and

- a USS set configured by

- *SearchSpace* in *PDCCH-Config* with *searchSpaceType* = *ue-Specific* for DCI formats with CRC scrambled by C-RNTI, MCS-C-RNTI, SP-CSI-RNTI, CS-RNTI(s), SL-RNTI, SL-CS-RNTI, or SL Semi-Persistent Scheduling V-RNTI

< Unchanged parts are omitted >