**3GPP TSG RAN WG1 #116 R1-24xxxxx**

**Athens, Greece, February 26th – March 1st, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.214** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *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 FDM reception of unicast and multicast PDSCH in RRC\_INACTIVE state | | | | | | | | | |
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| ***Source to WG:*** | Moderator (CMCC) | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_MBS\_enh-Core | | | | |  | ***Date:*** | | | 2024-02-29 |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
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| ***Reason for change:*** | | RAN1 agreed that UE doesn’t support FDM multicast and unicast in RRC\_INACTIVE state. However, in current specification, it is allowed FDMed multicast MCCH PDSCH and unicast PDSCH which is not aligned with the agreement.  **Agreement**  FG 33-3-2 and FG 33-3-3 do not apply to the UE multicast reception in RRC INACTIVE state.  **Agreement**  From RAN1 perspective,   * a new FG for the support of FDMed any combinations of unicast/broadcast/multicast PDSCHs in RRC\_INACTIVE state is not needed. * whether a new FG for the support of intra-slot TDMed unicast/broadcast/ multicast PDSCHs in RRC\_INACTIVE state is introduced is up to RAN2. | | | | | | | | |
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| ***Summary of change:*** | | Deleter “or a PDSCH scheduled by a DCI format with multicast-MCCH-RNTI” | | | | | | | | |
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| ***Consequences if not approved:*** | | Unaligned with RAN1 agreement | | | | | | | | |
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| ***Clauses affected:*** | | 5.1 | | | | | | | | |
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|  | | **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:*** | |  | | | | | | | | |

## 5.1 UE procedure for receiving the physical downlink shared channel

< Unchanged parts are omitted >

The maximum number of PDSCHs scheduled per slot per component carrier with C-RNTI/CS-RNTI and G-RNTI/G-CS-RNTI/MCCH-RNTI/multicast-MCCH-RNTI that the UE shall be able to decode is the same as the indicated UE capability for the number of unicast PDSCHs per slot per component carrier. If the UE is capable of receiving FDMed unicast and multicast PDSCH per slot per carrier, the UE shall be able to decode a PDSCH scheduled by a DCI format with C-RNTI or a PDSCH scheduled for a retransmission of a TB by a DCI format with CS-RNTI and a PDSCH scheduled by a DCI format with G-RNTI for multicast or a PDSCH scheduled for a retransmission of a TB by a DCI format with G-CS-RNTI that partially or fully overlap in time in non-overlapping PRBs. If the UE is capable of receiving FDMed unicast and broadcast PDSCH per slot per carrier, the UE shall be able to decode a PDSCH scheduled by a DCI format with C-RNTI or a PDSCH scheduled for a retransmission of a TB by a DCI format with CS-RNTI and a PDSCH scheduled with G-RNTI for broadcast/MCCH-RNTI that partially or fully overlap in time in non-overlapping PRBs. For a reduced capability UE that indicates *supportOfRedCap-r18* but not indicating FG 48-2, if the UE is capable of receiving FDMed unicast and multicast/broadcast PDSCH per slot, the UE can decode the two PDSCHs, with the two PDSCHs partially or fully overlapping in time in non-overlapping PRBs,

- if the total number of PRBs allocated is no more than 25 PRBs when configured with SCS m = 0 or no more than 12 PRBs when configured with SCS m = 1,

- otherwise, the UE may skip decoding one of the two PDSCHs.

< Unchanged parts are omitted >