3GPP TSG-RAN2 Meeting #126 *R2-240xxxx*

Fukuoka, Japan, 20 – 24 May 2024

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.300** | **CR** | **0864** | **rev** | **2** | **Current version:** | **18.1.0** |  |
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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:***  | Clarifications for MBS RedCap CFR [RedCapMBS\_Bcast] |
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| ***Source to WG:*** | Ericsson, CATT, ZTE |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | TEI18 |  | ***Date:*** | 2024-05-27 |
|  |  |  |  |  |
| ***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 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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)Rel-20 (Release 20)* |
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| ***Reason for change:*** | The following RAN2 agreements for MBS RedCap CFR have not been captured in the specifications:* **The UE only monitors one CFR at a time, i.e. it monitors the RedCap CFR if configured, otherwise the default CFR if the BW of the default CFR is within UE capability limit.**
* **Network shall ensure that the UE doesn’t receive DCIs targeting different CFR for same GRNTI.**

To resolve this issue it was agreed:* **Capture in 38.300 that a UE only monitors one CFR at a time. A RedCap UE monitors the RedCap CFR, if configured, otherwise the default CFR if the bandwidth of the default CFR is within the UE capability** (see [R2-2403548](http://www.3gpp.org/ftp//tsg_ran/WG2_RL2/TSGR2_125bis/Docs//R2-2403548.zip))**.**
* **Network shall ensure that the UE doesn’t receive DCIs targeting different CFR for same GRNTI** (see [R2-2402283](http://www.3gpp.org/ftp//tsg_ran/WG2_RL2/TSGR2_125bis/Docs//R2-2402283.zip))**.**

RAN2 identified that the UE could also experience problems when receiving MCCH scheduling for the default and RedCap CFR at the same time (see [R2-2402631](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_125bis/Docs/R2-2402631.zip)): * **We try to capture the agreement that “network ensures no time domain overlap of MCCH scheduling for MCCH of RedCap UEs and MCCH of non-RedCap UEs;” in 38.300 (for the agreed case).**
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| ***Summary of change:*** | The following clarification is added to section 16.10.6.6. Physical Layer for MBS broadcast: The NG-RAN node may configure an additional RedCap CFR when the bandwidth of the configured default CFR exceeds the (e)RedCap UE capability. A UE only monitors one CFR at a time. An (e)RedCap UE monitors the RedCap CFR, if configured, otherwise the (e)RedCap UE monitors the default CFR, if the bandwidth of the default CFR is within the UE capability. The NG-RAN node ensures that a UE does not receive two DCIs simultaneously (i.e., one associated with the RedCap CFR and another associated with the default CFR) with the same G-RNTI or the same MCCH-RNTI. |
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| ***Consequences if not approved:*** | RAN2 agreements for RedCap CFR are not captured in the specifications.  |
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| ***Clauses affected:*** | 16.10.6.6 |
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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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**<Start of modified section>**

<TEXT OMITTED>

#### 16.10.6.6 Physical Layer

A CFR configured by SIB is defined for broadcast scheduling as an 'MBS frequency region' with a number of contiguous PRBs with a bandwidth equal to or larger than CORESET0, with the same numerology as CORESET0, and broadcast scheduling may have specific characteristics (e.g., PDCCH and PDSCH configurations). The NG-RAN node may configure an additional RedCap CFR when the bandwidth of the configured default CFR exceeds the (e)RedCap UE capability. A UE only monitors one CFR at a time. An (e)RedCap UE monitors the RedCap CFR, if configured, otherwise the (e)RedCap UE monitors the default CFR, if the bandwidth of the default CFR is within the UE capability. The NG-RAN node ensures that a UE does not receive two DCIs simultaneously (i.e., one associated with the RedCap CFR and another associated with the default CFR) with the same G-RNTI or the same MCCH-RNTI.

The maximum number of MIMO layers is one for MBS broadcast scheduling. RB-level rate matching, and RE-level rate matching around LTE-CRS configured by higher layer signalling are supported for MCCH and MTCH. Slot-level repetition is supported for MTCH.

HARQ-ACK feedback is not supported for MBS broadcast.

Only dynamic scheduling is supported for MBS broadcast.

<TEXT OMITTED>

**<End of modified section>**