**3GPP TSG RAN WG1 Meeting #104-e R1-21xxxxx**

**e-Meeting, January 25 – February 05, 2021**

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| *CR-Form-v12.0* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **36.213** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **V16.4.0** |  |
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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:***  | Correction on multicast gap in multi-TB |
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| ***Source to WG:*** | Moderator (Ericsson), Lenovo, Motorola mobility |
| ***Source to TSG:*** | R1 |
|  |  |
| ***Work item code:*** | LTE\_eMTC5 -Core |  | ***Date:*** | 2021-02-04 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | The PDSCH mapping to BL/CE DL subframe(s) doesn’t consider the skipping the scheduling gaps when UE is configured with higher layer parameter *multiTB-Gap* and the PDSCH corresponds to an MPDCCH with DCI CRC scrambled by G-RNTI in subclause 7.1.11 in TS 36.213. |
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| ***Summary of change:*** | When UE is configured with higher layer parameter *multiTB-Gap* and the PDSCH corresponds to an MPDCCH with DCI CRC scrambled by G-RNTI, the PDSCH mapping to BL/CE DL subframe skips the scheduling gap. |
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| ***Consequences if not approved:*** | The PDSCH is not mapped to BL/CE DL subframe correctly when multicast gap is configured. |
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| ***Clauses affected:*** | 7.1.11 |
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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:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**<Unchanged parts are omitted>**

### 7.1.11 PDSCH subframe assignment for BL/CE UE

A BL/CE UE shall upon detection of a MPDCCH with DCI format 6-1A/6-1B/6-2 intended for the UE, decode the corresponding PDSCH in subframe(s) *n+ki* with *i = 0, 1, …, NTBN-1* according to the MPDCCH, where

- subframe *n* is the last subframe in which the MPDCCH is transmitted and is determined from the starting subframe of MPDCCH transmission and the DCI subframe repetition number field in the corresponding DCI;

- the value of is the number of scheduled TB determined in the corresponding DCI if present, otherwise;

- the value of  is determined by the repetition number field in the corresponding DCI, where  are given in Table 7.1.11-1, Table 7.1.11-2 and Table 7.1.11-3, respectively

- if the UE is configured with higher layer parameter *multiTB-Gap* and the PDSCH corresponds to an MPDCCH with DCI CRC scrambled by G-RNTI,

- subframe(s) *ni* = *n+ki* with *i=0,1,…, NTBN-1* are *NTBN* BL/CE DL subframe(s), where, subframe *n+x* is the second BL/CE DL subframe after subframe *n* and for $i=1,…,N×N\_{TB}-1$, subframe $n\_{i}$ is the first BL/CE DL subframe after subframe $n\_{i-1}+N\_{gap}×δ(i mod N)$, $N\_{gap}$ is given by higher layer parameter *multiTB-Gap*, and $δ\left(d\right)=\left\{\begin{matrix}1, d=0\\0,d\ne 0\end{matrix}\right.$.

- otherwise,

- subframe(s) *ni* = *n+ki* with *i=0,1,…, NTBN-1* are *NTBN* consecutive BL/CE DL subframe(s), where, , and subframe *n+x* is the second BL/CE DL subframe after subframe *n*.

- for ,

- if the UE is configured with higher layer parameter *interleaving* in *ce-PDSCH-MultiTB-Config*, and PDSCH corresponding to a MPDCCH with DCI CRC scrambled by C-RNTI and where  for BL/CE UE configured with CEModeA,  for BL/CE UE configured with CEModeB,

- BL/CE DL subframes  with  are associated with TB*r+*1 ,

- otherwise,

- BL/CE DL subframes  with  are associated with TB*r+*1 ,.

**<Unchanged parts are omitted>**