**3GPP TSG RAN WG1 Meeting #104-e *R1-210xxxx***

**25 January – 5 February, 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **[DRAFT] CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.212** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **V16.4.0** |  |
|  | | | | | | | | |
| *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:*** | PUR correction on DCI size alignment | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Moderator (Huawei), Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NB\_IOTenh3-Core | | | | |  | ***Date:*** | | | 2021-02-05 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | For NB-IoT, the DCI size of format N0 scrambled by C-RNTI and the DCI size of format N0 scrambled by PUR-RNTI may be different. If the DCI size of format N0 scrambled by C-RNTI and the DCI size of format N0 scrambled by PUR-RNTI are different, when format N1 needs padding, it is not clear that the target DCI size of format N0 is based on format N0 scrambled by C-RNTI or format N0 scrambled by PUR-RNTI. | | | | | | | | |
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| ***Summary of change:*** | | Add “mapped onto the same search space” when format N1 needs padding. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | When format N1 needs padding, UE cannot know the target DCI size of format N0 is based on format N0 scrambled by C-RNTI or format N0 scrambled by PUR-RNTI. | | | | | | | | |
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| ***Clauses affected:*** | | 6.4.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

< Unchanged parts are omitted >

#### 6.4.3.2 DCI Format N1

< Unchanged parts are omitted >

If the number of information bits in format N1 mapped onto the same search space is less than that of format N0 and the format N1 CRC is not scrambled by G-RNTI, zeros shall be appended to format N1 until the payload size equals that of format N0.

< Unchanged parts are omitted >