**3GPP TSG-RAN WG1 Meeting #112bis-e *R1-2304086***

 **E-meeting, 17 – 26 April, 2023**

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| *CR-Form-v12.2* |
| **[DRAFT]CHANGE REQUEST** |
|  |
|  | **38.213** | **CR** | **xxx** | **rev** | **-** | **Current version:** | **17.5.0** |  |
|  |
| *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 condition for not providing Type-1 CB |
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| ***Source to WG:*** | Moderator (Huawei), CATT, Samsung |
| ***Source to TSG:*** | R1 |
|  |  |
| ***Work item code:*** | NR\_MBS-Core |  | ***Date:*** | 2023-04-20 |
|  |  |  |  |  |
| ***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 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | It is unclear whether HARQ-ACK information for DCI formats without scheduling PDSCH reception should be proivded, if a Type-1 HARQ-ACK codebook would not include any HARQ-ACK information for transport blocks with enabled HARQ-ACK information.  |
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| ***Summary of change:*** | Replacing the following paragraph*‘If a Type-1 HARQ-ACK codebook would not include any HARQ-ACK information for transport blocks with enabled HARQ-ACK information, the UE does not provide the Type-1 HARQ-ACK codebook and does not transmit a corresponding PUCCH.’* **by***‘A UE does not provide a Type-1 HARQ-ACK codebook if the Type-1 HARQ-ACK codebook would include only HARQ-ACK information for transport blocks associated with HARQ processes with disabled HARQ-ACK information.’* |
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| ***Consequences if not approved:*** | If a Type-1 HARQ-ACK codebook would not include any HARQ-ACK information for transport blocks with enabled HARQ-ACK information but with HARQ-ACK information for DCI formats without scheduling PDSCH reception, UE behavior is unclear whether provide the Type-1 HARQ-ACK codebook or whether transmit a corresponding PUCCH.  |
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| ***Clauses affected:*** | 9.1.2 |
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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:*** |  |

9.1.2 Type-1 HARQ-ACK codebook determination

This clause applies if the UE is configured with *pdsch-HARQ-ACK-Codebook = semi-static*. In clauses 9.1.2, 9.1.2.1, and 9.1.2.2, if the UE is configured with *pdsch-HARQ-ACK-Codebook = semi-static* for only one of unicast or multicast HARQ-ACK codebook, the Type-1 HARQ-ACK codebook is generated considering only one of respective unicast or multicast configurations for PDSCH receptions or for PDCCH monitoring for detection of DCI formats.

A UE does not provide a Type-1 HARQ-ACK codebook if the Type-1 HARQ-ACK codebook would include only HARQ-ACK information for transport blocks associated with HARQ processes with disabled HARQ-ACK information.

If a UE is provided *downlinkHARQ-FeedbackDisabled* indicating disabled HARQ-ACK information for a HARQ process associated with a transport block in PDSCH reception occasion $m$ on serving cell $c$, the UE reports a NACK value for a HARQ-ACK information bit corresponding to the transport block in a Type-1 HARQ-ACK codebook and does not consider the transport block as received in the determination of $N\_{m,c}^{received}$ in clause 9.1.2.1. If the UE is also provided *PDSCH-CodeBlockGroupTransmission*, the UE reports NACK values for HARQ-ACK information bits corresponding to CBGs of the transport block in the Type-1 HARQ-ACK codebook and does not consider the CBGs as received in the determination of $N\_{m,c}^{received,CBG}$ in clause 9.1.2.1. If the UE is also provided *harq-feedbackEnablingforSPSactive* = '*enabled'*, the UE considers a HARQ process associated with a transport block in a first SPS PDSCH reception, after an activation of SPS PDSCH receptions, to have enabled HARQ-ACK information and the UE provides a HARQ-ACK information bit according to a decoding outcome for the transport block in the first SPS PDSCH reception.

If a UE reports HARQ-ACK information associated with a G-RNTI for multicast or a G-CS-RNTI with disabled HARQ-ACK information, as described in clause 18, a value of the HARQ-ACK information is a UE implementation choice.

< Unchanged parts are omitted >