**3GPP TSG- Meeting #R1-200xxxx**

 **e-Meeting, 26 October 2020 – 13 November 2020**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.214** | **CR** | **draft** | **rev** | **-** | **Current version:** | **16.3** |  |
|  |
| *For* [***HELP***](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:***  | Introduction of the preparation time for SL retransmissions in Mode 1 |
|  |  |
| ***Source to WG:*** | Moderator (Ericsson) |
| ***Source to TSG:*** | RAN WG1 |
|  |  |
| ***Work item code:*** | 5G\_V2X\_NRSL-Core |  | ***Date:*** | 2020-11-02 |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Introduction of new agreements made in RAN1 |
|  |  |
| ***Summary of change:*** | Introduction of the time between PSFCH and PSSCH retransmission for a TB |
|  |  |
| ***Consequences if not approved:*** | Mode 1 operation may not work. The UE may be scheduled to transmit with insufficient time to prepare the PSCCH/PSSCH. |
|  |  |
| ***Clauses affected:*** | 8.6 |
|  |  |
|  | **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 ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**<Unchanged parts omitted>**

## 8.6 UE PSSCH preparation procedure time

For sidelink dynamic grant and for SL configured grant type 2 activation, if the first sidelink symbol in the sidelink allocation for a PSSCH for a transport block and the associated PSCCH, including the DM-RS and the duplicated symbol, as defined by the slot offset $K\_{SL}$ of the scheduling DCI for dynamic grant or the activating DCI for SL configured grant type 2, is no earlier than at symbol *L*, where *L* is defined as the next sidelink symbol with its CP starting $T\_{proc}=(N\_{2}+d\_{2,1})(2048+144)⋅κ2^{-μ}⋅T\_{C}$ after the end of the reception of the last symbol of the PDCCH carrying the DCI scheduling the sidelink transmissions for dynamic grant or activating the SL configured grant type 2, then the UE shall transmit the PSSCH and the associated PSCCH.

*- N2* is based on *µ* of Table 8.6-1, where *µ* corresponds to the one of (*µDL*, *µSL*) resulting with the largest *Tproc*, where the *µDL* corresponds to the subcarrier spacing of the downlink with which the PDCCH carrying the DCI scheduling the PSSCH for dynamic grant or activating the SL configured grant type 2 was transmitted and *µSL* corresponds to the subcarrier spacing of the sidelink channel with which the PSSCH and the associated PSCCH are to be transmitted, and *κ* is defined in Clause 4.1 of [4, TS 38.211].

- *d2,1* = 1.

Otherwise the UE may ignore the scheduling DCI for dynamic grant or the activating DCI for SL configured grant type 2.

The value of $T\_{proc}$ is used both in the case of normal and extended cyclic prefix.

Table 8.6-1: PSSCH preparation time

|  |  |
| --- | --- |
|  | PSSCH preparation time *N2* [symbols] |
| 0 | 10 |
| 1 | 12 |
| 2 | 23 |
| 3 | 36 |

For sidelink resource allocation mode 1, the UE does not expect that the first sidelink symbol in the sidelink allocation for a PSSCH for retransmission of a transport block and the associated PSCCH, including the DM-RS and the duplicated symbol as defined by the "Time resource assignment" field of the corresponding DCI for dynamic grant or for SL configured grant type 2, or by *sl-TimeResourceCG-Type1* for configured grant type 1 starts earlier than at symbol $L$ where $L$ is defined as the next sidelink symbol with its CP starting $T\_{prep}+δ$ after the end of the last symbol of the PSFCH occasion corresponding to the most recent transmission of PSSCH for the same transport block, where $T\_{prep}$ is defined in Clause 16.5 of [6, TS 38.213] and $δ=5∙10^{-4} s$. Otherwise the UE may skip the retransmission of the PSSCH and the transmsission of the corresponding PSCCH.

**<Unchanged parts omitted>**