**3GPP TSG-RAN WG2 Meeting #117-e *R2-2203674***

**Electronic, 21st Feb – 3rd Mar, 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.304** | **CR** | **0236** | **rev** | **-** | **Current version:** | **16.7.0** |  |
|  |
| *For* ***[HELP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <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:***  | Running CR of TS 38.304 for Sidelink enhancement |
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| ***Source to WG:*** | ZTE |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | NR\_SL\_enh-Core |  | ***Date:*** | 2022-3-4 |
|  |  |  |  |  |
| ***Category:*** | ***B*** |  | ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | This CR introduces the support of Rel17 features for SL DRX and SL IUC based on following agreements:**Agreement in RAN2#113e:**Timer-based SL DRX is also applied to SL groupcast/broadcast.For broadcast/groupcast, for in-coverage case, RRC\_IDLE/INACTIVE TX-UE/RX-UE obtain DRX configuration from SIB. It is up to network implementation how to coordinate active time between different cells.For broadcast/groupcast, for out-of-coverage case, TX-UE/RX-UE obtain DRX configuration from pre-configuration.**Agreement in RAN2#115e:**For unicast, when to send the DRX configuration to RX UE is up to TX UE implementation for the case that TX UE determines the DRX configuration of the RX UE, i.e. TX UE can send the DRX configuration to RX UE without any restriction.For SL unicast, RX UE may include its desired SL DRX configuration in the assistance information which is transmitted to TX UE. |
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| ***Summary of change:*** | 1. Add description of SL-DRX in IDLE/INACIVE state in section 8.1.2. Add description of SL IUC in IDLE/INACTIVE state in section 8.1 |
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| ***Consequences if not approved:*** | Rel17 features for sidelink are not supported in NR. |
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| ***Clauses affected:*** | 8.1 |
|  |  |
|  | **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:*** |  |

*First Modified Subclause*

## 8.1 NR sidelink communication and V2X sidelink communication

The UE may transmit or receive NR sidelink communication if it fulfils the condition(s) defined in TS 38.331 [3], clause 5.8.2. When UE is in-coverage for sidelink operation as defined in clause 8.2, the UE may perform NR sidelink communication according to *SystemInformationBlockType12,* and when out-of-coverage for sidelink, the UE may perform NR sidelink communication according to *SL-V2X-PreconfigurationNR* or according to *SystemInformationBlockType12* of the cell on the frequency which provides inter-carrier NR sidelink configuration, as specified in TS 38.331 [3]. The UE shall not perform NR sidelink communication according to *SL-V2X-PreconfigurationNR* if the UE detects a cell providing NR sidelink configuration or inter-carrier NR sidelink configuration for the frequency UE is interested to perform NR sidelink communication on.

The UE may transmit or receive V2X sidelink communication if it fulfills the condition(s) defined in TS 36.331[6], clause 5.10.1d. When UE is in-coverage for sidelink operation as defined in clause 8.2, the UE may perform V2X sidelink communication according to *SystemInformationBlockType13/SystemInformationBlockType14* of the cell on an NR frequency.

For NR sidelink broadcast and groupcast, the UE may obtain SL DRX configuration from *SIB12* (for in-coverage UE, as defined in clause 8.2, in RRC\_IDLE and RRC\_INACTIVE state) or *SL-PreconfigurationNR* (for UE out-of-coverage).

For inter-UE coordination (IUC) information configuration, the UE may obtain it from *SIB12* (for in-coverage UE, as defined in clause 8.2, in RRC\_IDLE and RRC\_INACTIVE state) or *SL-PreconfigurationNR*(for UE out-of-coverage).

*End of change*