**3GPP TSG-CT WG1 Meeting #125-eC1-20xxxx**

**Electronic meeting, 20-28 August 2020 (was 205014)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.587** | **CR** | 0105 | **rev** | **1** | **Current version:** | **16.1.1** |  |
|  | | | | | | | | |
| *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 |  | Core Network |  |

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| ***Title:*** | PC5 unicast link release due to RLF from lower layer | | | | | | | | | |
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| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eV2XARC | | | | |  | ***Date:*** | | | 2020-07-24 |
|  |  | | | |  | |  | | |  |
| ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | According to RAN2 agreement(R2-1914138: Report from session chair), upon RLF declaration the UE releases the PC5-RRC connection immediately and sends an indication to upper layer.  Therefore, the V2X layer needs to release PC5 unicast link when lower layer indicates RLF.  In addition, based on R2-2005983(Report from session chair),  when integrity check failure occurs, the UE treats it same as sidelink RLF. It does not require any new failure type, so the V2X layer can determine to release the PC5 unicast link when RLF indication is provided by the lower layer. | | | | | | | | |
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| ***Summary of change:*** | | The UE releases the PC5 unicast link locally if the lower layer indicate the radio link failure of PC5 unicast link. | | | | | | | | |
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| ***Consequences if not approved:*** | | The V2X layer may not know if PC5 unicast link is released due to RLF from the lower layer. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.2.4.1 | | | | | | | | |
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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 ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\*\*\* First change \*\*\*\*\*

##### 6.1.2.4.1 General

The PC5 unicast link release procedure is used to release a secure PC5 unicast link between two UEs. The link can be released from either end point. The UE sending the DIRECT LINK RELEASE REQUEST message is called the "initiating UE" and the other UE is called the "target UE".

If the UE receives an indication of radio link failure from the lower layer, the UE shall release the PC5 unicast link locally and may delete the KNRP ID associated with this link after an implementation specific time.

\*\*\*\*\* End of change \*\*\*\*\*