**3GPP TSG-CT WG1 Meeting #127-eC1-20xxxx**

**Online, , 13th Nov 2020 - 20th Nov 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **24.587** | **CR** | **161** | **rev** | **0** | **Current version:** | **16.2.1** |  |
|  |
| *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:***  | Handling of abnormal scenario in the PC5 unicast link release |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | eV2XARC |  | ***Date:*** | 2020-11-06 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)* |
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| ***Reason for change:*** | In the current specificaton, it is specified in 6.1.2.4.2 that if the release reason is “direct connection is not available anymore”, there is no need to start the guard timer T5002 at the initiating UE and the UE shall localy release the PC5 unicast link. But UE still sends the DIRECT LINK RELEASE REQUEST.But according to current specification, irrespective of the release reason, the target UE shall respond with the RELEASE ACCEPT message. Later, for completing the release procedure, it is specified that the the initiating UE shall inform the lower layer about the PC5 link identifier. But in this case (when the release reason is “direct connection is not available anymore”), the initiating UE has already deleted the PC5 link context and so PC5 link identifier does not exist. This needs to be corrected. |
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| ***Summary of change:*** | It is corrected that if the DIRECT LINK RELEASE ACCEPT message is received and only when the timer T5002 is running, the initiating UE shall inform the lower layers with PC5 link identifier and delete the PC5 unicast link context.  |
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| ***Consequences if not approved:*** | Incorrect specification |
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| ***Clauses affected:*** | 6.1.2.4.4 |
|  |  |
|  | **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 \* \* \* \*

##### 6.1.2.4.4 PC5 unicast link release procedure completion by the initiating UE

Upon receipt of the DIRECT LINK RELEASE ACCEPT message, if the timer T5002 is running, the initiating UE shall stop timer T5002 and shall release the PC5 unicast link by performing the following behaviors:

a) inform the lower layer along with the PC5 link identifier that the PC5 unicast link has been released; and

b) delete the PC5 unicast link context of the PC5 unicast link after an implementation specific time.

The initiating UE shall form the new KNRP ID from the MSB of KNRP ID included in the DIRECT LINK RELEASE REQUEST message and the LSB of KNRP ID received in the DIRECT LINK RELEASE ACCEPT message. The initiating UE shall replace the existing KNRP ID with the new KNRP ID. The initiating UE may include the new KNRP ID in DIRECT LINK ESTABLISHMENT REQUEST message with the target UE as specified in clause 6.1.2.2.2.

\* \* \* End of Change \* \* \* \*