**3GPP TSG-CT WG1 Meeting #135-eC1-222651**

**E-meeting, 6-12 April 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **24.554** | **CR** | **0025** | **rev** | **2** | **Current version:** | **17.0.0** |  |
|  |
| *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 |  | Core Network |  |

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| ***Title:***  | New cause for direct link release |
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| ***Source to WG:*** | ASUSTeK |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | 5G\_ProSe |  | ***Date:*** | 2022-03-30 |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | According to the sub-clauses 5.3.3.7, 5.3.13.5, and 5.3.15.2 in the current RAN2’s RRC running CR (R2-2204226), the L2 U2N Relay UE may trigger PC5-S release with the connected Layer-2 U2N Remote UE when the L2 U2N Relay UE in RRC\_IDLE/RRC\_INACTIVE fails to establish/resume RRC connection with gNB. This implies the AS layer of the L2 U2N Relay UE may send a trigger of PC5-S release to the upper layer.Thus, in response to reception of the PC5-S release trigger from the AS layer, the ProSe layer shall release the established ProSe direct link for the UE-to-network relay communication. |
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| ***Summary of change:*** | In the sub-clause 7.2.6.1, the statement “*If the UE acting as 5G ProSe layer-2 UE-to-network relay UE receives a request of 5G ProSe direct link release from the lower layer* *as specified in 3GPP TS 38.331 [13], the UE shall initiate the 5G ProSe direct link* *release procedure.*” is added. |
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| ***Consequences if not approved:*** | ProSe direct link release cannot be initiated by a trigger from the AS layer due to RRC connection establishment failure. |
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| ***Clauses affected:*** | 7.2.6.1 |
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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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* Start of Changes \* \* \* \*

7.2.6.1 General

The 5G ProSe direct link release procedure is used to release a secure 5G ProSe direct link between two UEs. The link can be released from either end point. The UE sending the PROSE 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 or an indication of PC5-RRC connection release from the lower layer, the UE shall release the 5G ProSe direct link locally and may delete the KNRP ID associated with this link after an implementation specific time. If the UE acting as 5G ProSe layer-2 UE-to-network relay UE receives a request of 5G ProSe direct link release from the lower layer as specified in 3GPP TS 38.331 [13], the UE shall initiate the 5G ProSe direct link release procedure.

When the direct link between a remote UE and a 5G ProSe UE-to-network relay UE is released, the 5G ProSe layer-3 UE-to-network relay UE shall perform the remote UE report procedure as specified in 3GPP TS 24.501 [11].

Editor's note: Any possible changes to the 5G ProSe direct link release procedure due to the security requirements of 5G ProSe layer-2 UE-to-network relay or 5G ProSe layer-3 UE-to-network relay (such as adding new IEs or changing existing IEs) are FFS.

\* \* \* End of Changes \* \* \* \*