**3GPP TSG-CT WG1 Meeting #128-eC1-21xxxx**

**Electronic meeting, 25 Feb - 05 March 2021 (was C1-210813, C1-207719, C1-207211)**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **24.501** | **CR** | **2864** | **rev** | **3** | **Current version:** | **17.1.0** |  |
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| *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:***  | Local release of PDU session due to Service Area Restriction |
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| ***Source to WG:*** | Apple |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | 5GProtoc17 |  | ***Date:*** | 2021-03-01 |
|  |  |  |  |  |
| ***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-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:*** | UE being registered but camped on a tracking area where service area restrictions apply, would need to be captured in the abnormal cases for PDU session release since the behaviour there would be different without the UE having to get into the existing handling of attempting to send PDU session release 5 times. |
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| ***Summary of change:*** | Add a clause for PDU session release when it is already known that 5GSM signalling procedure is not possible due to service area restrictions, which clarifies that the UE shall immediately perform the actions applicable to the fifth expiry of timer T3582. |
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| ***Consequences if not approved:*** | Unnecessary re-attempts triggered by T3582 to send PDU session release by 5GSM when 5GMM is unable to send these messages due to service area restrictions.  |
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| ***Clauses affected:*** | 6.4.3.5 |
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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 \*\*\*\*\*

#### 6.4.3.5 Abnormal cases in the UE

The following abnormal cases can be identified:

a) Expiry of timer T3582.

 The UE shall, on the first expiry of the timer T3582, retransmit the PDU SESSION RELEASE REQUEST message and the PDU session information which was transported together with the initial transmission of the PDU SESSION RELEASE REQUEST message and shall reset and start timer T3582. This retransmission is repeated four times, i.e. on the fifth expiry of timer T3582, the UE shall abort the procedure, release the allocated PTI, perform a local release of the PDU session, and perform the registration procedure for mobility and periodic registration update by sending a REGISTRATION REQUEST message including the PDU session status IE over each access that user plane resources have been established if the PDU session is an MA PDU session, or over the access the PDU session is associated with if the PDU session is a single access PDU session.

b) Collision of UE-requested PDU session release procedure and network-requested PDU session modification procedure.

 When the UE receives a PDU SESSION MODIFICATION COMMAND message during the UE-requested PDU session release procedure, and the PDU session indicated in PDU SESSION MODIFICATION COMMAND message is the PDU session that the UE had requested to release, the UE shall ignore the PDU SESSION MODIFICATION COMMAND message and proceed with the PDU session release procedure.

c) Collision of UE-requested PDU session release procedure and network-requested PDU session release procedure.

 When the UE receives a PDU SESSION RELEASE COMMAND message with the PTI IE set to "No procedure transaction identity assigned" during the UE-requested PDU session release procedure, and the PDU session indicated in the PDU SESSION RELEASE COMMAND message is the same as the PDU session that the UE requests to release, the UE shall abort the UE-requested PDU session release procedure and shall stop the timer T3582 and proceed with the network-requested PDU session release procedure.

d) Receipt of an indication that the 5GSM message was not forwarded due to routing failure

 Upon receiving an indication that the 5GSM message was not forwarded due to routing failure along with a PDU SESSION RELEASE REQUEST message with the PDU session ID IE set to the same value as the PDU session ID that was sent by the UE, the UE shall stop timer T3582, abort the procedure, release the allocated PTI, perform a local release of the PDU session, and perform the registration procedure for mobility and periodic registration update by sending a REGISTRATION REQUEST message including the PDU session status IE over each access that user plane resources have been established if the PDU session is an MA PDU session, or over the access the PDU session is associated with if the PDU session is a single access PDU session.

e) PDU session release signalling restricted due to service area restriction

The UE may deleay the release of the the PDU session until it enters a cell without service area restriction, or it may release the allocated PTI, perform a local release of the PDU session, and include the PDU session status IE over each access that user plane resources have been established if the PDU session is an MA PDU session, or over the access the PDU session is associated with if the PDU session is a single access PDU when performing the next registration procedure.

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