**3GPP TSG-CT WG1 Meeting #138-eC1-226021**

**E-Meeting, 10th – 14th October 2022………………………………………...(was C1-225610)**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **4669** | **rev** | **1** | **Current version:** |  |  |
|  |
| *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:***  | Abnormal case handling |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | 5GProtoc18 |  | ***Date:*** | 2022-09-29 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-18 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | TS 24.301 handle the the abnormal case were UE receive BEARER RESOURCE MODIFICATION REJECT reject with cause #31 as below*d) Rejection of a UE requested bearer resource modification procedure when the UE has initiated the procedure to release all traffic flows for the bearer:* *Upon receipt of a BEARER RESOURCE MODIFICATION REJECT message with ESM cause value #31 "request rejected, unspecified", if the UE had initiated resource release for all the traffic flows for the bearer, it shall deactivate the EPS bearer context locally without peer-to-peer signalling between the UE and the MME and shall stop the timer T3481. In order to synchronize the EPS bearer context status with the MME, the UE may send a TRACKING AREA UPDATE REQUEST message that includes the EPS bearer context status IE to the MME.*Similar handling is required in TS 24.501 as well  |
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| ***Summary of change:*** | Aligning missed abnormal case behaivor with TS 24.301 |
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| ***Consequences if not approved:*** | UE behavior for abnormal situation is not defined. |
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| ***Clauses affected:*** | 6.4.2.5 |
|  |  |
|  | **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:*** |  |

\*\*\*\*\*Start changes \*\*\*\*\*

#### 6.4.2.5 Abnormal cases in the UE

The following abnormal cases can be identified:

a) Expiry of timer T3581.

 The UE shall, on the first expiry of the timer T3581, retransmit the PDU SESSION MODIFICATION REQUEST message and the PDU session information which was transported together with the initial transmission of the PDU SESSION MODIFICATION REQUEST message and shall reset and start timer T3581. This retransmission is repeated four times, i.e. on the fifth expiry of timer T3581, the UE shall abort the procedure and shall release the allocated PTI.

b) Invalid PDU session identity.

 Upon receipt of the PDU SESSION MODIFICATION REJECT message including 5GSM cause #43 "invalid PDU session identity", the UE shall perform a local release of the existing PDU session and shall stop the timer T3581.

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

 If the UE receives a PDU SESSION RELEASE COMMAND message during the UE-requested PDU session modification procedure, and the PDU session indicated in the PDU SESSION RELEASE COMMAND message is the PDU session that the UE had requested to modify, the UE shall abort the PDU session modification procedure and proceed with the network-requested PDU session release procedure.

d) Handling DL user data packets marked with RQI when UE has already revoked the usage of reflective QoS

 If the UE receives a DL user data packet marked with a RQI and the DL user data packet belongs to a PDU session of IPv4, IPv6, IPv4v6 or Ethernet PDU session type for which the UE has already revoked the usage of reflective QoS, then the UE shall ignore the RQI and shall handle the received DL user data packet.

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

 The handling of the same abnormal case as described in subclause 6.3.2.6 applies.

f) Upon receiving an indication that the 5GSM message was not forwarded due to service area restrictions along with a PDU SESSION MODIFICATION 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 abort the procedure and shall stop the timer T3581.

g) Upon receiving an indication that the 5GSM message was not forwarded due to routing failure along with a PDU SESSION MODIFICATION 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 T3581 and shall abort the procedure.

ga) Upon receiving an indication that the 5GSM message was not forwarded because the UE accessing via a satellite NG-RAN cell is informed that the PLMN is not allowed to operate at the present UE location along with a PDU SESSION MODIFICATION 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 T3581 and shall abort the procedure.

h) Collision of UE-requested PDU session modification procedure and N1 NAS signalling connection release

 The UE may immediately retransmit the PDU SESSION MODIFICATION REQUEST message and stop, reset and restart timer T3581, if the following conditions apply:

1) The original UE-requested PDU session modification procedure was initiated over an existing N1 NAS signalling connection; and

2) the previous transmission of the PDU SESSION MODIFICATION REQUEST message was not initiated due to timer T3581 expiry.

i) Rejection of a UE requested PDU session modification procedure when the UE has initiated the procedure to delete all QoS rules for the PDU session:

 Upon receipt of a PDU SESSION MODIFICATION REJECT message with 5GSM cause value #31 "request rejected, unspecified", if the UE had initiated deleting all QoS rules for the PDU session, it shall perform a local release of the PDU session without peer-to-peer signalling between the UE and the AMF and shall stop the timer T3581. In order to synchronize the PDU session context status with the AMF, the UE may perform the registration procedure for mobility and periodic registration update with a REGISTRATION REQUEST message including the PDU session status IE.

\*\*\*\*\*End changes \*\*\*\*\*