**3GPP TSG-CT WG1 Meeting #133-eC1-216691**

**E-meeting, 11-19 November 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.501** | **CR** | **3722** | **rev** | **1** | **Current version:** | **17.4.1** |  |
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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:*** | T3447 handling for MUSIM capable UE | | | | | | | | | |
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| ***Source to WG:*** | vivo, Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MUSIM | | | | |  | ***Date:*** | | | 2021-10-29 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 1.TS23.501 CR 3235 (S2-2108145) has agreed that upon detection of Paging Occasions (POs) collision, the MUSIM capable UE uses the MRU procedure to trigger a new 5G-GUTI assignment.  If the MUSIM capable UE detects POs collision when T3447 is running, the UE should be allowed to initiate the MRU procedure to request for a new 5G-GUTI assignment. However the above case is not exempted from the SGC.  2.Similarly, the MUSIM capable UE in 5GMM-CONNECTED mode or in 5GMM-CONNECTED mode with RRC inactive indication should be allowed to request for connection release when T3447 is running. The MUSIM capable UE in 5GMM-CONNECTED mode with RRC inactive indication should be allowed to reject the RAN paging when T3447 is running. These cases should also be exempted from the SGC. | | | | | | | | |
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| ***Summary of change:*** | | 1.The MUSIM capable UE can initiate the MRU procedure to obtain a new 5G-GUTI to resolve POs collision when T3447 is running.  2.The MUSIM capable UE can initiate the SR procedure to request the network to release the NAS signalling connection or reject the RAN paging when T3447 is running. | | | | | | | | |
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| ***Consequences if not approved:*** | | 1.The MUSIM capable UE can not obtain a new 5G-GUTI upon detecting POs collision when T3447 is running, which would cause the paging failure.  2.The MUSIM capable UE in 5GMM-CONNECTED mode or in 5GMM-CONNECTED mode with RRC inactive indication can not request to leave the current network to get the service from another network when T3447 is running. This would cause a negative impact on user experience.  3.The MUSIM capable UE in 5GMM-CONNECTED mode with RRC inactive indication can not reject the RAN paging when T3447 is running. | | | | | | | | |
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| ***Clauses affected:*** | | 5.5.1.3.7, 5.6.1.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

5.5.1.3.7 Abnormal cases in the UE

The following abnormal cases can be identified:

a) Timer T3346 is running.

The UE shall not start the registration procedure for mobility and periodic registration update unless:

1) the UE is in 5GMM-CONNECTED mode;

2) the UE received a paging;

3) the UE receives a NOTIFICATION message over non-3GPP access when the UE is in 5GMM-CONNECTED mode over non-3GPP access and in 5GMM-IDLE mode over 3GPP access;

4) the UE is a UE configured for high priority access in selected PLMN;

5) the UE has an emergency PDU session established or is establishing an emergency PDU session;

6) the UE receives a request from the upper layers to perform emergency services fallback;

7) the UE receives the CONFIGURATION UPDATE COMMAND message as specified in subclause 5.4.4.3; or

8) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and:

- the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]); and

- timer T3346 was not started when N1 NAS signalling connection was established with RRC establishment cause set to "mo-ExceptionData".

The UE stays in the current serving cell and applies the normal cell reselection process.

NOTE 1: It is considered an abnormal case if the UE needs to initiate a registration procedure for mobility and periodic registration update while timer T3346 is running independent on whether timer T3346 was started due to an abnormal case or a non-successful case.

If the registration procedure for mobility and periodic registration update was initiated for an MO MMTEL voice call (i.e. access category 4), for an MO MMTEL video call (i.e. access category 5), for an MO IMS registration related signalling (i.e. access category 9) or for NAS signalling connection recovery during an ongoing MO MMTEL voice call (i.e. access category 4), or during an MO MMTEL video call (i.e. access category 5) or during an ongoing MO IMS registration related signalling (i.e. access category 9), then a notification that the procedure was not initiated due to network congestion shall be provided to upper layers.

b) The lower layers indicate that the access attempt is barred.

The UE shall not start the registration procedure for mobility and periodic registration update. The UE stays in the current serving cell and applies the normal cell reselection process. Receipt of the access barred indication shall not trigger the selection of a different core network type (EPC or 5GCN).

The registration procedure for mobility and periodic registration update is started, if still needed, when the lower layers indicate that the barring is alleviated for the access category with which the access attempt was associated.

ba) The lower layers indicate that:

1) access barring is applicable for all access categories except categories 0 and 2 and the access category with which the access attempt was associated is other than 0 and 2; or

2) access barring is applicable for all access categories except category 0 and the access category with which the access attempt was associated is other than 0.

If the REGISTRATION REQUEST message has not been sent, the UE shall proceed as specified for case b. If the REGISTRATION REQUEST message has been sent, the UE shall proceed as specified for case e and, additionally, the registration procedure for mobility and periodic registration update is started, if still needed, when the lower layers indicate that the barring is alleviated for the access category with which the access attempt was associated. For additional UE requirements for both cases see subclause 4.5.5.

c) T3510 timeout.

The UE shall abort the registration update procedure and the N1 NAS signalling connection, if any, shall be released locally.

If the UE has initiated the registration procedure in order to enable performing the service request procedure for emergency services fallback,the UE shall inform the upper layers of the failure of the emergency services fallback (see 3GP P TS 24.229 [14]). Otherwise, the UE shall proceed as described below.

d) REGISTRATION REJECT message, other 5GMM cause values than those treated in subclause 5.5.1.3.5, and cases of 5GMM cause values #11, #15, #22, #31, #72, #73, #74, #75, #76, #77 and #78, if considered as abnormal cases according to subclause 5.5.1.3.5.

Upon reception of the 5GMM causes #95, #96, #97, #99 and #111 the UE should set the registration attempt counter to 5.

The UE shall proceed as described below.

e) Lower layer failure, release of the NAS signalling connection received from lower layers or the lower layers indicate that the RRC connection has been suspended without a cell change before the REGISTRATION ACCEPT or REGISTRATION REJECT message is received.

The UE shall abort the registration procedure and proceed as described below.

f) Change of cell into a new tracking area.

If a cell change into a new tracking area occurs before the registration procedure for mobility and periodic registration update is completed, the registration procedure for mobility and periodic registration update shall be aborted and re-initiated immediately. The UE shall set the 5GS update status to 5U2 NOT UPDATED.

g) Registration procedure for mobility and periodic registration update and de-registration procedure collision.

If the UE receives a DEREGISTRATION REQUEST message without 5GMM cause value #11, #12, #13 or #15 before the registration procedure for mobility and periodic registration update has been completed, the registration procedure for mobility and periodic registration update shall be aborted and the de-registration procedure shall be progressed.

If the UE receives a DEREGISTRATION REQUEST message with 5GMM cause value #11, #12, #13 or #15 before the registration procedure for mobility and periodic registration update has been completed, the registration procedure for mobility and periodic registration update shall be progressed and the de-registration procedure shall be aborted.

NOTE 2: The registration procedure for mobility and periodic registration update shall be aborted only if the DEREGISTRATION REQUEST message indicates in the access type that the access in which the registration procedure for mobility and periodic registration update was attempted shall be de-registered. Otherwise both the procedures shall be progressed.

h) Void

i) Transmission failure of REGISTRATION REQUEST message indication from the lower layers or the lower layers indicate that the RRC connection has been suspended with a cell change.

The registration procedure for mobility and periodic registration update shall be aborted and re-initiated immediately. The UE shall set the 5GS update status to 5U2 NOT UPDATED.

j) Transmission failure of REGISTRATION COMPLETE message indication with TAI change from lower layers.

If the current TAI is not in the TAI list, the registration procedure for mobility and periodic registration update shall be aborted and re-initiated immediately. The UE shall set the 5GS update status to 5U2 NOT UPDATED.

If the current TAI is still part of the TAI list, it is up to the UE implementation how to re-run the ongoing procedure.

k) Transmission failure of REGISTRATION COMPLETE message indication without TAI change from lower layers.

It is up to the UE implementation how to re-run the ongoing procedure.

l) UE-initiated de-registration required.

De-registration due to removal of USIM or entry update in the "list of subscriber data" or due to switch off:

The registration procedure for mobility and periodic registration update shall be aborted, and the UE initiated de-registration procedure shall be performed.

De-registration not due to removal of USIM or entry update in the "list of subscriber data" and not due to switch off:

the UE initiated de-registration procedure shall be initiated after successful completion of the registration procedure for mobility and periodic registration update.

m) Timer T3447 is running

The UE shall not start any mobility and periodic registration update procedure with Uplink data status IE or Follow-on request indicator set to "Follow-on request pending" unless:

- the UE received a paging;

- the UE is a UE configured for high priority access in selected PLMN;

- the UE has an emergency PDU session established or is establishing an emergency PDU session;

- the UE receives a request from the upper layers to perform emergency services fallback; or

- the MUSIM capable UE needs to request a new 5G-GUTI assignment.

The UE stays in the current serving cell and applies the normal cell reselection process. The mobility and periodic registration update procedure is started, if still necessary, when timer T3447 expires or timer T3447 is stopped.

n) Timer T3448 is running

The UE in 5GMM-IDLE mode shall not start any mobility and periodic registration update procedure with Follow-on request indicator set to "Follow-on request pending" unless:

1) the UE is a UE configured for high priority access in selected PLMN;

2) the UE which is only using 5GS services with control plane CIoT 5GS optimization received a paging request; or

3) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]).

The UE stays in the current serving cell and applies the normal cell reselection process. The mobility and periodic registration update procedure is started, if still necessary, when timer T3448 expires.

For the cases c, d and e the UE shall proceed as follows:

Timer T3510 shall be stopped if still running.

If the registration procedure is not for initiating an emergency PDU session, the registration attempt counter shall be incremented, unless it was already set to 5.

If the registration attempt counter is less than 5:

- if the TAI of the current serving cell is not included in the TAI list or the 5GS update status is different to 5U1 UPDATED or if the registration procedure was triggered due to cases c, g, n, v in subclause 5.5.1.3.2, the UE shall start timer T3511, shall set the 5GS update status to 5U2 NOT UPDATED and change to state 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE. When timer T3511 expires, the registration update procedure is triggered again.

- if the TAI of the current serving cell is included in the TAI list, the 5GS update status is equal to 5U1 UPDATED, and the UE is not performing the registration procedure after an inter-system change from S1 mode to N1 mode, the UE shall keep the 5GS update status to 5U1 UPDATED and enter state 5GMM-REGISTERED.NORMAL-SERVICE or 5GMM-REGISTERED.NON-ALLOWED-SERVICE (as described in subclause 5.3.5.2). The UE shall start timer T3511. If in addition the REGISTRATION REQUEST message did not include the MICO indication IE or the Extended DRX IE, and:

- the REGISTRATION REQUEST message indicated "periodic registration updating";

- the registration procedure was initiated to recover the NAS signalling connection due to "RRC Connection failure" from the lower layers; or

- the registration procedure was initiated by the UE in 5GMM-CONNECTED mode with RRC inactive indication entering a cell in the current registration area belonging to an equivalent PLMN of the registered PLMN and not belonging to the registered PLMN,

and none of the other reasons for initiating the registration updating procedure listed in subclause 5.5.1.3.2 was applicable, the timer T3511 may be stopped when the UE enters 5GMM-CONNECTED mode.

- if the TAI of the current serving cell is included in the TAI list, the 5GS update status is equal to 5U1 UPDATED and the UE is performing the registration procedure after an inter-system change from S1 mode to N1 mode, the UE shall change the 5GS update status to 5U2 NOT UPDATED and enter state 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE. The UE shall start timer T3511.

- If the procedure is performed via 3GPP access and the UE is operating in single-registration mode, the UE shall in addition handle the EPS update status as specified in 3GPP TS 24.301 [15] for the abnormal cases when a normal or periodic tracking area updating procedure fails and the tracking area attempt counter is less than 5 and the EPS update status is different from EU1 UPDATED.

If the registration attempt counter is equal to 5

- the UE shall start timer T3502, shall set the 5GS update status to 5U2 NOT UPDATED.

- the UE shall delete the list of equivalent PLMNs (if any) and shall change to state 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE or optionally to 5GMM-REGISTERED.PLMN-SEARCH in order to perform a PLMN selection or SNPN selection according to 3GPP TS 23.122 [5].

- if the procedure is performed via 3GPP access and the UE is operating in single-registration mode:

- the UE shall in addition handle the EPS update status as specified in 3GPP TS 24.301 [15] for the abnormal cases when a normal or periodic tracking area updating procedure fails and the tracking area attempt counter is equal to 5; and

- if the UE does not change to state 5GMM-REGISTERED.PLMN-SEARCH, the UE shall attempt to select E-UTRAN radio access technology. The UE may disable the N1 mode capability as specified in subclause 4.9.

\* \* \* Next Change \* \* \* \*

5.6.1.7 Abnormal cases in the UE

The following abnormal cases can be identified:

a) T3517 expired.

The UE shall enter the state 5GMM-REGISTERED.

If the UE triggered the service request procedure in 5GMM-IDLE mode sending a:

1) SERVICE REQUEST message and the service type of the SERVICE REQUEST message was not set to "emergency services fallback"; or

2) CONTROL PLANE SERVICE REQUEST message and the control plane service type of the CONTROL PLANE SERVICE REQUEST message was not set to "emergency services fallback";

then the 5GMM sublayer shall increment the service request attempt counter, abort the procedure and release locally any resources allocated for the service request procedure. The service request attempt counter shall not be incremented, if:

1) the service request procedure is initiated to establish an emergency PDU session;

2) the UE has an emergency PDU session established;

3) the UE is a UE configured for high priority access in selected PLMN;

4) the service request procedure is initiated in response to paging or notification from the network; or

5) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]).

If the service request attempt counter is greater than or equal to 5, the UE shall start timer T3525. Additionally, if the service request procedure was initiated for an MO MMTEL voice call or for an MO MMTEL video call or for an MO IMS registration related signalling, a notification that the service request was not initiated due to the UE having started timer T3525 shall be provided to the upper layers.

NOTE 1: This can result in the upper layers requesting implementation specific mechanisms, e.g. the MMTEL voice call being attempted to another IP-CAN, or establishment of a CS voice call (if supported and not already attempted in the CS domain).

The UE shall not attempt service request until expiry of timer T3525 unless:

1) the service request procedure is initiated in response to paging or notification from the network;

2) the UE is a UE configured for high priority access in selected PLMN;

3) the service request procedure is initiated to establish an emergency PDU session;

4) the UE has an emergency PDU session established;

5) the service request procedure is initiated for emergency services fallback;

6) the UE is registered in a new PLMN; or

NOTE 2: According to Table 10.2.1, when "UE camped on a new PLMN other than the PLMN on which timer started", timer T3525 is stopped, hence this check may be skipped.

7) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]).

NOTE 3: The NAS signalling connection can also be released if the UE deems that the network has failed the authentication check as specified in subclause 5.4.1.3.7.

If the UE triggered the service request procedure in 5GMM-CONNECTED mode sending a:

1) SERVICE REQUEST message and the service type of the SERVICE REQUEST message was not set to "emergency services fallback"; or

2) CONTROL PLANE SERVICE REQUEST message and the control plane service type of the CONTROL PLANE SERVICE REQUEST message was not set to "emergency services fallback",

the 5GMM sublayer shall abort the procedure, and stay in 5GMM-CONNECTED mode.

If the service type of the SERVICE REQUEST message was set to "emergency services fallback" or the control plane service type of the CONTROL PLANE SERVICE REQUEST message was set to "emergency services fallback" and:

1) the service request procedure was triggered in 5GMM-IDLE mode, the 5GMM sublayer shall abort the procedure, release locally any resources allocated for the service request procedure; or

2) the service request procedure was triggered in 5GMM-CONNECTED mode, the 5GMM sublayer shall abort the procedure, stay in 5GMM-CONNECTED mode.

b) The lower layers indicate that the access attempt is barred.

The UE shall not start the service request procedure. The UE stays in the current serving cell and applies the normal cell reselection process. Receipt of the access barred indication shall not trigger the selection of a different core network type (EPC or 5GCN).

The service request procedure is started, if still needed, when the lower layers indicate that the barring is alleviated for the access category with which the access attempt was associated.

ba) The lower layers indicate that:

1) access barring is applicable for all access categories except categories 0 and 2 and the access category with which the access attempt was associated is other than 0 and 2; or

2) access barring is applicable for all access categories except category 0 and the access category with which the access attempt was associated is other than 0.

If the SERVICE REQUEST message or CONTROL PLANE SERVICE REQUEST has not been sent, the UE shall proceed as specified for case b.

If the SERVICE REQUEST message or CONTROL PLANE SERVICE REQUEST has been sent:

1) the UE shall abort the service request procedure and stop timer T3517. The UE stays in the current serving cell and applies the normal cell reselection process; and

2) the service request procedure is started, if still needed, when the lower layers indicate that the barring is alleviated for the access category with which the access attempt was associated.

For additional UE requirements for both cases see subclause 4.5.5.

c) Timer T3346 is running.

The UE shall not start the service request procedure unless:

1) the UE receives a paging;

2) the UE receives a NOTIFICATION message over non-3GPP access when the UE is in 5GMM-CONNECTED mode over non-3GPP access and in 5GMM-IDLE mode over 3GPP access;

3) the UE receives a NOTIFICATION message over 3GPP access when the UE is in 5GMM-CONNECTED mode over 3GPP access and in 5GMM-IDLE mode over non-3GPP access;

4) the UE is a UE configured for high priority access in selected PLMN;

5) the UE has an emergency PDU session established or is establishing an emergency PDU session;

6) the service request procedure is initiated for emergency services fallback;

7) the service request procedure is initiated for elevated signalling; or

8) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and:

- the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]); and

- timer T3346 was not started when N1 NAS signalling connection was established with RRC establishment cause set to "mo-ExceptionData".

If the UE is in 5GMM-IDLE mode, the UE stays in the current serving cell and applies normal cell reselection process. The service request procedure is started, if still necessary, when timer T3346 expires or is stopped.

If the service request procedure was triggered for an MO MMTEL voice call (i.e. access category 4), or for an MO MMTEL video call (i.e. access category 5) or for an MO IMS registration related signalling (i.e. access category 9), a notification that the service request procedure was not initiated due to congestion shall be provided to the upper layers.

If the UE receives a paging with access type set to "Non-3GPP access" and the non-3GPP access is available and UE is in 5GMM-REGISTERED.NORMAL SERVICE over non-3GPP access, the UE shall stop timer T3346 and send the SERVICE REQUEST message over non-3GPP access.

d) Registration procedure for mobility and periodic registration update is triggered.

The UE shall abort the service request procedure, stop timer T3517, if running and perform the registration procedure for mobility and periodic registration update. The Follow-on request indicator shall be set to "Follow-on request pending" in the REGISTRATION REQUEST message.

e) Switch off.

If the UE is in state 5GMM-SERVICE-REQUEST-INITIATED at switch off, the de-registration procedure shall be performed.

f) De-registration procedure collision.

If the UE receives a DEREGISTRATION REQUEST message from the network in state 5GMM-SERVICE-REQUEST-INITIATED, the UE shall progress the DEREGISTRATION REQUEST message and the service request procedure shall be aborted.

NOTE 4: The above collision case is valid if the DEREGISTRATION REQUEST message indicates the access type over which the service request procedure is attempted otherwise both the procedures are progressed.

g) Transmission failure of SERVICE REQUEST or CONTROL PLANE SERVICE REQUEST message indication with TAI change from lower layers.

If the current TAI is not in the TAI list, UE shall abort the service request procedure to perform the registration procedure for mobility and periodic registration update as specified in subclause 5.5.1.3.2. If the current TAI is part of the TAI list, the UE shall restart the service request procedure.

h) Transmission failure of SERVICE REQUEST or CONTROL PLANE SERVICE REQUEST message indication without TAI change from lower layers.

The UE shall restart the service request procedure.

i) SERVICE REJECT message received with other 5GMM cause values than those treated in subclause 5.6.1.5, and cases of 5GMM cause values #11, #15, #22, #31, #72, #73, #74, #75, #76, #77 and #78 that are considered as abnormal cases according to subclause 5.6.1.5.

The UE shall enter state 5GMM-REGISTERED.

The UE shall abort the service request procedure, stop timer T3517 and locally release any resources allocated for the service request procedure.

j) The UE in 5GMM-CONNECTED mode with RRC inactive indication over the 3GPP access, and in 5GMM-CONNECTED mode over non-3GPP access, receives a NOTIFICATION message over the non-3GPP access with access type indicating 3GPP access.

The UE shall transition from 5GMM-CONNECTED mode with RRC inactive indication to 5GMM-IDLE mode over 3GPP access and initiate the service request procedure over the 3GPP access.

k) Timer T3447 is running

The UE shall not start any service request procedure unless:

1) the UE in 5GMM-IDLE receives a paging request;

2) the UE is a UE configured for high priority access;

3) the UE has a PDU session for emergency services established or is establishing a PDU session for emergency services;

4) the service request procedure is initiated for emergency services fallback;

5) the UE in 5GMM-CONNECTED mode receives mobile terminated signalling or downlink data over the user-plane;

6) the service request procedure is initiated for elevated signalling; or

7) the UE supporting MUSIM:

- is in 5GMM-CONNECTED mode and requests the network to release the NAS signalling connection;

- is in 5GMM-CONNECTED mode with RRC inactive indication and requests the network to release the NAS signalling connection; or

- is in 5GMM-CONNECTED mode with RRC inactive indication, rejects the RAN paging and requests the network to release the NAS signalling connection.

The UE stays in the current serving cell and applies the normal cell reselection process. The service request procedure is started, if still necessary, when timer T3447 expires or timer T3447 is stopped.

l) Lower layer failure, release of the N1 signalling connection received from lower layers or the lower layers indicate that the RRC connection has been suspended before the service request procedure is completed or SERVICE REJECT message is received.

The UE shall abort the service request procedure, stop timer T3517, locally release any resources allocated for the service request procedure and enters state 5GMM-REGISTERED.

m) Timer T3448 is running

The UE in 5GMM-IDLE mode shall not initiate the service request procedure for transport of user data via the control plane unless:

1) the UE is a UE configured for high priority access in selected PLMN;

2) the UE which is only using 5GS services with control plane CIoT 5GS optimization received a paging request;

3) the UE in NB-N1 mode is requested by the upper layer to transmit user data related to an exceptional event and the UE is allowed to use exception data reporting (see the ExceptionDataReportingAllowed leaf of the NAS configuration MO in 3GPP TS 24.368 [17] or the USIM file EFNASCONFIG in 3GPP TS 31.102 [22]); or

4) the UE is initiating the service request procedure to request emergency services or emergency services fallback.

The UE stays in the current serving cell and applies the normal cell reselection process. The service request procedure is started, if still necessary, when timer T3448 expires.

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