**3GPP TSG-CT WG1 Meeting #123-eC1-202145**

**Electronic meeting, 16-24 April 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.501** | **CR** | **2051** | **rev** | **-** | **Current version:** | **16.4.1** |  |
|  | | | | | | | | |
| *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:*** | Specify UE behaviour for NOTIFICATION message for additional state/sub-states | | | | | | | | | |
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| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc16 | | | | |  | ***Date:*** | | | 2020-04-09 |
|  |  | | | |  | |  | | |  |
| ***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 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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The existing text for the handling of NOTIFICATION procedure on the UE side has handling of the message only in two sub-states of 5GMM REGISTERED state.  But there are scenarios where the UE can be in a different sub-state of REGISTERED on 3GPP access when it receives a NOTIFICATION via non-3GPP access.  These states/sub-states too need to be handled. | | | | | | | | |
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| ***Summary of change:*** | | Handle NOTIFICATION message in 5GMM-REGISTERED.LIMITED-SERVICE and 5GMM-REGISTERED.UPDATE-NEEDED | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Missing UE handling of NOTIFICATION message in certain states/sub-states | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.6.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\* Begin change \*\*\*\*\*

#### 5.6.3.2 Notification procedure initiation

The network shall initiate the notification procedure by sending the NOTIFICATION message to the UE and start timer T3565 (see example in figure 5.6.3.2.1).

For case a) in subclause 5.6.3.1, the NOTIFICATION message is sent from the network to the UE via 3GPP access with access type indicating non-3GPP access.

For case b) in subclause 5.6.3.1, the NOTIFICATION message is sent from the network to the UE via non-3GPP access with access type indicating 3GPP access when the UE is not in MICO mode.



Figure 5.6.3.2.1: Notification procedure

For case a) in subclause 5.6.3.1, upon reception of NOTIFICATION message, the UE shall initiate a service request procedure over 3GPP access as specified in subclauses 5.6.1.

For case b) in subclause 5.6.3.1, upon reception of NOTIFICATION message:

a) if the UE is in 5GMM-REGISTERED.NORMAL-SERVICE state over 3GPP access , the UE shall initiate a service request procedure over 3GPP access as specified in subclauses 5.6.1;

b) if the UE is in 5GMM-REGISTERED.ATTEMPTING-REGISTRATION-UPDATE state over 3GPP access, the UE shall initiate a registration procedure for mobility and periodic registration update over 3GPP access as specified in subclauses 5.5.1.3; or

c) if the UE is in 5GMM-REGISTERED.NO-CELL-AVAILABLE state, 5GMM-REGISTERED.PLMN-SEARCH state, 5GMM-REGISTERED.LIMITED-SERVICE state or 5GMM-REGISTERED.UPDATE-NEEDED state over 3GPP access, the UE shall respond with NOTIFICATION RESPONSE message indicating failure to re-establish the user-plane resources of PDU sessions and may include the PDU session status information element to indicate the PDU session(s) available in the UE associated with the 3GPP access type.

Upon reception of NOTIFICATION message:

For case b) in subclause 5.6.3.1, if the UE is in 5GMM-REGISTERED.NO-CELL-AVAILABLE state or 5GMM-REGISTERED.PLMN-SEARCH state and a local release was performed in the UE for the PDU sessions associated with the 3GPP access;

then the UE shall respond with NOTIFICATION RESPONSE message indicating with the PDU session status information element that the local release of its PDU sessions was performed.

Upon reception of a NOTIFICATION message, the UE shall stop the timer T3346, if running.

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