**3GPP TSG-CT WG1 Meeting #125-eC1-204894**

**Electronic meeting, 20-28 August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.501** | **CR** | **2495** | **rev** | **-** | **Current version:** | **16.5.1** |  |
|  | | | | | | | | |
| *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:*** |  | | | | | | | | | |
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| ***Source to WG:*** | BlackBerry UK Ltd. | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17 | | | | |  | ***Date:*** | | | 2020-08-13 |
|  |  | | | |  | |  | | |  |
| ***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-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:*** | | TS 23.122 contains the following requirement:  *If the user does not select a PLMN, the selected PLMN shall be the one that was selected before the PLMN selection procedure started. If no such PLMN was selected or that PLMN is no longer available, then the MS shall attempt to camp on any acceptable cell and enter the limited service state.*  It is thus possible to enter the LIMITED-SERVICE substate from the PLMN-SEARCH state if the UE was in manual network selection mode. | | | | | | | | |
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| ***Summary of change:*** | | Correct the conditions for entry of the LIMITED-SERVICE substate according to TS 23.122, the UE may enter the LIMITED-SERVICE substate during manual network selection mode.  NIT: correct font color in 5.1.3.2.2 | | | | | | | | |
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| ***Consequences if not approved:*** | | Incorrect 5GMM-DEREGISTERED.LIMITED-SERVICE and 5GMM-REGISTERED.LIMITED-SERVICE substate entry conditions. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.3.2.1.3.3, 5.1.3.2.1.4.5, 5.1.3.2.2 | | | | | | | | |
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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 \*\*\*

5.1.3.2.1.3.3 5GMM-DEREGISTERED.LIMITED-SERVICE

The substate 5GMM-DEREGISTERED.LIMITED-SERVICE is chosen in the UE:

- when it is known that a selected cell for 3GPP access or TA for non-3GPP access is unable to provide normal service (e.g. the selected cell over 3GPP access is in a forbidden PLMN or SNPN or is in a forbidden tracking area or TA for non-3GPP access is forbidden) or the selected cell is a CAG cell whose CAG ID is not included in the "Allowed CAG list" in the entry of the "CAG information list" for the PLMN, the selected cell is a non-CAG cell in a PLMN for which there exists an "indication that the UE is only allowed to access 5GS via CAG cells" in the entry of the "CAG information list" for the PLMN); or

- in accordance with 3GPP TS 23.122 [5] when the UE is in the 5GMM-DEREGISTERED.PLMN-SEARCH substate.

\*\*\* Next change \*\*\*

5.1.3.2.1.4.5 5GMM-REGISTERED.LIMITED-SERVICE

The substate 5GMM-REGISTERED.LIMITED-SERVICE is chosen in the UE:

- if the cell the UE selected is known not to be able to provide normal service; or

- in accordance with 3GPP TS 23.122 [5] when the UE is in the 5GMM-REGISTERED.PLMN-SEARCH substate.

\*\*\* Next change \*\*\*

##### 5.1.3.2.2 5GS update status in the UE

In order to describe the detailed UE behaviour, the 5GS update (5U) status pertaining to a specific subscriber is defined.

If the UE is not operating in SNPN access mode (see 3GPP TS 23.501 [8]), the 5GS update status is stored in a non-volatile memory in the USIM if the corresponding file is present in the USIM, else in the non-volatile memory in the ME, as described in annex C.

If the UE is operating in SNPN access mode, the 5GS update status for each SNPN whose SNPN identity is included in the "list of subscriber data" configured in the ME (see 3GPP TS 23.122 [5]) is stored in the non-volatile memory in the ME as described in annex C.

The 5GS update status value is changed only after the execution of a registration, network-initiated de-registration, 5GS based primary authentication and key agreement, service request, paging procedure or due to change in TAI which does not belong to the current registration area while T3346 is running.

5U1: UPDATED

The last registration attempt was successful.

5U2: NOT UPDATED

The last registration attempt failed procedurally, e.g. no response or reject message was received from the AMF.

5U3: ROAMING NOT ALLOWED

The last registration, service request, or registration for mobility or periodic registration update attempt was correctly performed, but the answer from the AMF was negative (because of roaming or subscription restrictions).