**3GPP TSG-CT WG1 Meeting #130-eC1-21xxxx**

**Electronic meeting, 20-28 May 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.501** | **CR** | **3321** | **rev** | **1** | **Current version:** | **17.2.1** |  |
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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:*** | De-registration for SNPN onboarding registered UE | | | | | | | | | |
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| ***Source to WG:*** | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNPN | | | | |  | ***Date:*** | | | 2021-04-28 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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:*** | | SA2 agreed CR#2755 to TS 23.501 (S2-2102976) has specified following requirements for the de-registration for SNPN onboarding:  "*Once remote provisioning of SO-SNPN credentials is completed, the UE should initiate de-registration from the ON-SNPN."* | | | | | | | | |
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| ***Summary of change:*** | | It proposes that if the UE is registered for onboarding services in SNPN, after completing the configuration of one or more entries of the "list of subscriber data" for the SNPN, the UE should perform UE-initiated de-registration procedure. | | | | | | | | |
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| ***Consequences if not approved:*** | | The stage 2 requirements are not implemented in stage 3 on the de-registration for SNPN onboarding. | | | | | | | | |
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| ***Clauses affected:*** | | 5.5.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 23.501 ... CR 2755 | | |
| ***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 \* \* \* \*

#### 5.5.2.1 General

The de-registration procedure is used:

a) by the UE to de-register for 5GS services over 3GPP access when the UE is registered over 3GPP access;

b) by the UE to de-register for 5GS services over non-3GPP access when the UE is registered over non-3GPP access;

c) by the UE to de-register for 5GS services over 3GPP access, non-3GPP access or both when the UE is registered in the same PLMN over both accesses;

d) by the network to inform the UE that it is deregistered for 5GS services over 3GPP access when the UE is registered over 3GPP access;

e) by the network to inform the UE that it is deregistered for 5GS services over non-3GPP access when the UE is registered over non-3GPP access;

f) by the network to inform the UE that it is deregistered for 5GS services over 3GPP access, non-3GPP access or both when the UE is registered in the same PLMN over both accesses; and

g) by the network to inform the UE to re-register to the network.

The de-registration procedure with appropriate de-registration type shall be invoked by the UE:

a) if the UE is switched off;

b) as part of the eCall inactivity procedure defined in subclause 5.5.3; and

c) as part of USIM removal.

The de-registration procedure with appropriate de-registration type shall be invoked by the network:

a) if the network informs whether the UE should re-register to the network.

The de-registration procedure with appropriate access type shall be invoked by the UE:

a) if the UE needs to de-register for 5GS services over 3GPP access when the UE is registered over 3GPP access;

b) if the UE needs to de-register for 5GS services over non-3GPP access when the UE is registered over non-3GPP access; or

c) the UE needs to de-register for 5GS services over 3GPP access, non-3GPP access or both when the UE is registered in the same PLMN over both accesses.

The de-registration procedure with appropriate access type shall be invoked by the network:

a) if the network needs to inform the UE that it is deregistered over 3GPP access when the UE is registered over 3GPP access;

b) if the network needs to inform the UE that it is deregistered over non-3GPP access when the UE is registered over non-3GPP access; or

c) if the network needs to inform the UE that it is deregistered over 3GPP access, non-3GPP access or both when the UE is registered in the same PLMN over both accesses.

If the de-registration procedure is triggered due to USIM removal, the UE shall indicate "switch off" in the de-registration type IE.

If the de-registration procedure is requested by the network for a UE that has an emergency PDU session, the AMF shall not send a DEREGISTRATION REQUEST message to the UE and indicate to the SMF to release all non-emergency PDU sessions as specified in 3GPP TS 23.502 [9].

If the de-registration procedure for 5GS services is performed, a local release of the PDU sessions, if any, for this particular UE is performed.

The UE is allowed to initiate the de-registration procedure even if the timer T3346 is running.

NOTE 1: When the UE has no PDU sessions over non-3GPP access, or the UE moves all the PDU sessions over a non-3GPP access to a 3GPP access, the UE and the AMF need not initiate de-registration over the non-3GPP access.

The AMF shall provide the UE with a non-3GPP de-registration timer.

When the AMF enters the state 5GMM-DEREGISTERED for 3GPP access, the AMF shall delete the stored UE radio capability information or the UE radio capability ID, if any.

When upper layers indicate that emergency services are no longer required, the UE if still registered for emergency services, may perform UE-initiated de-registration procedure followed by a re-registration to regain normal services, if the UE is in or moves to a suitable cell.

If the UE is registered for onboarding services in SNPN, after completing the configuration of one or more entries of the "list of subscriber data", the UE should perform UE-initiated de-registration procedure.

NOTE 2: How to determine the completion of the configuration of one or more entries of the "list of subscriber data" is UE implementation specific.

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