**3GPP TSG-CT WG1 Meeting #134-eC1-221612**

**E-meeting, 17-25 February 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **23.122** | **CR** | **0892** | **rev** | **-** | **Current version:** | **17.5.0** |  |
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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:***  | Exiting manual network SNPN selection mode by a UE in the limited service state |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | eNPN |  | ***Date:*** | 2022-02-09 |
|  |  |  |  |  |
| ***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 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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | If the user initiates an emergency call while the UE is in limited service state and either the SNPN does not broadcast the indication of support of emergency calls in limited service state, the registration request for emergency services is rejected by the network, the UE should be allowed to exit manual selection mode. |
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| ***Summary of change:*** | A condition to exit manual selection mode is added. |
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| ***Consequences if not approved:*** | Delay in emergency call |
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| ***Clauses affected:*** | 4.9.3.1.2 |
|  |  |
|  | **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:*** |  |

##### 4.9.3.1.2 Manual SNPN selection mode procedure

The MS indicates to the user any available SNPNs which meet the criteria specified in bullets a) and b). If the MS does not support access to an SNPN using credentials from a credentials holder, this includes SNPNs in the list of "permanently forbidden SNPNs", and the list of "temporarily forbidden SNPNs". The MS may indicate to the user whether the available SNPNs are present in the list of "temporarily forbidden SNPNs" or the list of "permanently forbidden SNPNs". If the MS supports access to an SNPN using credentials from a credentials holder, this includes SNPNs in the lists of "permanently forbidden SNPNs", and the lists of "temporarily forbidden SNPNs" associated with each entry of the "list of subscriber data" or the PLMN subscription. The MS may indicate to the user whether the available SNPNs are present in a list of "temporarily forbidden SNPNs" or a list of "permanently forbidden SNPNs" for an entry of the "list of subscriber data" or the PLMN subscription.

a) SNPNs identified by an SNPN identity in an entry of the "list of subscriber data" in the ME, if any. The order in which those SNPNs are indicated is MS implementation specific;

b) if the MS supports access to an SNPN using credentials from a credentials holder, for the SNPNs which broadcast the indication that access using credentials from a credentials holder is supported:

1) each SNPN which is identified by an SNPN identity contained in one of the user controlled prioritized lists of preferred SNPNs configured in the ME. SNPNs included in the same list are indicated in the order in which they are included in the list. Prioritization between the different lists is MS implementation specific;

2) each SNPN which is identified by an SNPN identity contained in one of the credentials holder controlled prioritized lists of preferred SNPNs configured in the ME. SNPNs included in the same list are indicated in the order in which they are included in the list. Prioritization between the different lists is MS implementation specific;

3) each SNPN which broadcasts a GIN contained in one of the credentials holder controlled prioritized lists of GINs configured in the ME. SNPNs broadcasting a GIN included in the same list are indicated in the order in which the GIN is included in the list. Prioritization between the different lists is MS implementation specific. If more than one SNPN broadcast the same GIN, the order in which those SNPNs are indicated is MS implementation specific; and

4) each SNPN identified by an SNPN identity which is included neither in the SNPN selection parameters of the entries of the "list of subscriber data" nor in the SNPN selection parameters associated with the PLMN subscription and which does not broadcast a GIN which is included in one of the credentials holder controlled prioritized lists of GINs configured in the ME. The order in which those SNPNs are indicated is MS implementation specific.

For each of the SNPNs indicated to the user, the MS shall forward a human-readable network name along with the SNPN identity to the upper layers if the system information broadcasted for the SNPN includes the human-readable network name for the SNPN.

The MS shall limit its search for the SNPN to the NG-RAN access technology.

The user may select an SNPN and the MS then initiates registration on this SNPN using the NG-RAN access technology, the subscriber identifier and the credentials from the selected entry of the "list of subscriber data" or from USIM, if the PLMN subscription is selected, determined as follows:

- for bullet a) above, the entry of the "list of subscriber data", with the SNPN identity matching the selected SNPN (this may take place at any time during the presentation of SNPNs), shall be considered as selected;

- for bullet b-1) above:

i) the entry of the "list of subscriber data" which contains the user controlled prioritized lists of preferred SNPNs that includes the SNPN identity of the selected SNPN shall be considered as selected, if the user controlled prioritized list of preferred SNPNs that includes the SNPN identity of the selected SNPN is included in the entry of the "list of subscriber data"; or

- the PLMN subscription shall be considered as selected, if the user controlled prioritized list of preferred SNPNs associated with the PLMN subscription includes the SNPN identity of the selected SNPN;

- for bullet b-2) above:

i) the entry of the "list of subscriber data" which contains the credentials holder controlled prioritized list of preferred SNPNs that includes the SNPN identity of the selected SNPN shall be considered as selected, if the credentials holder controlled prioritized list of preferred SNPNs that includes the SNPN identity of the selected SNPN is included in the entry of the "list of subscriber data"; or

ii) the PLMN subscription shall be considered as selected, if the credentials holder controlled prioritized list of preferred SNPNs associated with the PLMN subscription includes the SNPN identity of the selected SNPN;

- for bullet b-3) above:

i) the entry of the "list of subscriber data" which contains the credentials holder controlled prioritized list of GINs that includes the GIN broadcast by the selected SNPN shall be considered as selected, if the credentials holder controlled prioritized list of GINs that includes the GIN broadcast by the selected SNPN is included in the entry of the "list of subscriber data"; or

ii) the PLMN subscription shall be considered as selected, if the credentials holder controlled prioritized list of GINs associated with the PLMN subscription includes the GIN broadcast by the selected SNPN; and

- for bullet b-4) above, the entry of the "list of subscriber data" or the PLMN subscription shall be selected by MS implementation specific means.

NOTE 1: If the SNPN identity of the selected SNPN is included in more than one of the following: one or more user controlled prioritized list(s) of preferred SNPNs configured in the ME, one or more credentials holder controlled prioritized list(s) of preferred SNPNs configured in the ME or the list of SNPNs which are broadcasting a GIN included in one or more credentials holder controlled prioritized list(s) of GINs configured in the ME, which subscription is selected is MS implementation specific.

Once the MS has registered on an SNPN selected by the user, the MS shall not automatically register on a different SNPN unless:

a) the user selects automatic SNPN selection mode; or

b) the user initiates an emergency call while the MS is in limited service state and either the SNPN does not broadcast the indication of support of emergency calls in limited service state, the registration request for emergency services is rejected by the network.

NOTE 2: If case b) occurs, the MS can provide an indication to the upper layers that the MS has exited manual network SNPN selection mode.

If the user does not select an SNPN, the selected SNPN shall be the one that was selected either automatically or manually before the SNPN selection procedure started. If no such SNPN was selected or that SNPN is no longer available, then the MS shall attempt to camp on any acceptable cell and enter the limited service state.