**3GPP TSG-CT WG1 Meeting #133-eC1-216761**

**E-meeting, 11-19 November 2021 (was C1-216208, 5776)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **23.122** | **CR** | **0802** | **rev** | **2** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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:*** | a higher prioritized SNPN selection | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo, Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNPN | | | | |  | ***Date:*** | | | 2021-11-01 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | Based on the requirement from Stage 2 as following:  +++  *When the Credentials Holder updates a UE with the Credentials Holder controlled prioritized lists of preferred SNPNs and GINs the UE may perform SNPN selection again, e.g. to potentially select a higher prioritized SNPN.*  +++  If the UE registers successfully to an SNPN using credentials from a credentials holder, and the CH provides the updated Credentials Holder controlled prioritized lists of preferred SNPNs and GINs to the UE, then the UE may perform SNPN selection again, to potentially select a higher prioritized SNPN. | | | | | | | | |
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| ***Summary of change:*** | | For the MS successfully registered to an SNPN using credentials from a credentials holder, if the MS receives the updated Credentials Holder controlled prioritized lists of preferred SNPNs and GINs, then the MS may attempt to obtain service on a higher priority SNPN listed in "Credentials Holder controlled prioritized lists of preferred SNPNs and GINs". | | | | | | | | |
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| ***Consequences if not approved:*** | | Misalignment with the requirement from Stage 2. | | | | | | | | |
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| ***Clauses affected:*** | | 4.9.3.1.1 | | | | | | | | |
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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 \* \* \* \*

##### 4.9.3.1.1 Automatic SNPN selection mode procedure

If:

- there is at least one entry in the "list of subscriber data"; or

- there is zero or more entries in the "list of subscriber data", the MS has a USIM with a PLMN subscription and the ME is provisioned with the SNPN selection parameters associated with the PLMN subscription,

the MS shall select one entry in the "list of subscriber data", if any, or the PLMN subscription, if any, to be used for automatic SNPN selection. How the MS selects the entry in the "list of subscriber data" or the PLMN subscription is MS implementation specific.

The MS selects an SNPN, if available and allowable, in the following order:

a) the SNPN with which the UE was last registered;

b) the SNPN identified by an SNPN identity of the subscribed SNPN in the selected entry of the "list of subscriber data" in the ME, if any;

c) if the MS supports access to an SNPN using credentials from a credentials holder, using the SNPN selection parameters in the selected entry of the "list of subscriber data" or associated with the selected PLMN subscription:

1) each SNPN which broadcasts the indication that access using credentials from a credentials holder is supported and which is identified by an SNPN identity contained in the user controlled prioritized list of preferred SNPNs (in priority order);

2) each SNPN which broadcasts the indication that access using credentials from a credentials holder is supported and which is identified by an SNPN identity contained in the credentials holder controlled prioritized list of preferred SNPNs (in priority order);

3) each SNPN which broadcasts the indication that access using credentials from a credentials holder is supported and which broadcast a GIN contained in the credentials holder controlled prioritized list of GINs (in priority order). If more than one such SNPN broadcast the same GIN, the order in which the MS attempts registration on those SNPNs 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, which does not broadcast a GIN which is included in the credentials holder controlled prioritized list of GINs, and which broadcasts an indication that the SNPN allows registration attempts from MSs that are not explicitly configured to select the SNPN. If more than one such SNPN is available, the order in which the MS attempts registration on those SNPNs is MS implementation specific.

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

Once the MS selects the SNPN, the MS attempts registrations on the selected 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 the USIM, if the PLMN subscription is selected.

If successful registration is achieved, the MS indicates the selected SNPN.

If registration cannot be achieved because no SNPNs are available, allowable, and identified by an SNPN identity in an entry of the "list of subscriber data" in the ME, the MS indicates "no service" to the user, waits until a new SNPN is available, allowable, and identified by an SNPN identity in an entry of the "list of subscriber data" in the ME and then repeats the procedure.

If there were one or more SNPNs which were available, allowable, and identified by an SNPN identity in an entry of the "list of subscriber data" in the ME but an LR failure made registration on those SNPNs unsuccessful, the MS selects one of those SNPNs again and enters a limited service state.

For the MS successfully registered to a non-subscribed SNPN using credentials from a credentials holder, if the MS receives the updated credentials holder controlled prioritized list of preferred SNPNs or credentials holder controlled prioritized list of GINs, then the MS may attempt to obtain service on a higher priority SNPN per received credentials holder controlled prioritized list of preferred SNPNs or credentials holder controlled prioritized list of GINs as specified in Annex C.

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