**3GPP TSG-SA WG6 Meeting #52-Bis-e meeting S6-230128**

**e-meeting, 11th – 20th January 2023**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.700-78** | **CR** | **0002** | **rev** | **-** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Requirement update for PIN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | vivo | | | | | | | | | |
| ***Source to TSG:*** | SA6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | FS\_PINAPP | | | | |  | ***Date:*** | | | 2023-01-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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:*** | | The requirements part of PINAPP is empty, some of the requirements are added in section 5, to clarify the requirements clearly. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This paper updates the requirement parts of PINAPP.  The requirements include the PIN management, PIN communication, service switch, application server discovery and the service continuity. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The requirements of PINAPP is unclear. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

# 5 Architecture requirements

## 5.1 General

## 5.2 Requirements

5.2.1 General requirements

5.2.1.1 General

This clause specifies general requirements for the architecture.

5.2.1.2 Requirements

[AR-5.2.1.2-a] The application layer architecture shall support deployment of personal IoT network.

[AR-5.2.1.2-b] The application layer architecture shall support different deployment models in conjunction with an operator's 3GPP network.

[AR-5.2.1.2-c] The application layer architecture shall be compatible with the 3GPP network system.

5.2.2 PIN Management

5.2.2.1 General

This clause specifies PIN management requirements for the architecture.

5.2.2.2 Requirements

[AR-5.2.2.2-a] The application layer architecture shall provide mechanisms to create PIN for UE or PIN elements.

[AR-5.2.2.2-b] The application layer architecture shall provide mechanisms to delete PIN, either triggered by PINEs or by PIN server.

[AR-5.2.2.2-c] The application layer architecture shall support the mechanisms of PIN modification procdure, for example, PEMC/PEGC relocation.

[AR-5.2.2.2-d] The application layer architecture shall support the deployment and mechanism of multiple PEMCs/PEGCs.

[AR-5.2.2.2-e] The application layer architecture shall support mechanisms to obtain PIN server endpoint address.

[AR-5.2.2.2-f] The application layer architecture shall support the mechanisms to perform PIN discovery, and enable the PINEs to join/leave the PIN.

[AR-5.2.2.2-g] The application layer architecture shall support the mechanisms of PINE registration to PIN server.

[AR-5.2.2.2-h] The application layer architecture shall support mechanisms to maintain, configure, update the PIN profile/PIN client profile.

5.2.3 PIN enable 5GS communication

5.2.3.1 General

This clause specifies PIN communication requirements for the architecture.

5.2.3.2 Requirements

[AR-5.2.3.2-a] The application layer architecture shall provide mechanisms to configure routing information in PEGC to enable the PINE to access the network provided by PEGC.

[AR-5.2.3.2-b] The application layer architecture shall provide mechanisms to support the PIN and the PINEs in PIN to consume the 5GS communication.

[AR-5.2.3.2-c] The application layer architecture shall provide mechanisms to support the PEMC/PEGC to request the 5GS resource for PIN.

5.2.4 Service Switch

5.2.4.1 General

This clause specifies service switch requirements for the architecture.

5.2.4.2 Requirements

[AR-5.2.4.2-a] The application layer architecture shall provide mechanisms to support the service switching in a PIN between different PINE for achieving better service experience.

5.2.5 Application server discovery

5.2.5.1 General

This clause specifies application server discovery requirements for the architecture.

5.2.5.2 Requirements

[AR-5.2.5.2-a] The application layer architecture shall provide mechanisms to support the application server discovery for PIN.

5.2.6 Service continuity

5.2.6.1 General

This clause specifies service continuity requirements for the architecture.

5.2.6.2 Requirements

[AR-5.2.6.2-a] The application layer architecture shall provide mechanisms to support the PEGC relocation procedure to enable service continuity.

[AR-5.2.6.2-b] The application layer architecture shall provide mechanisms to change the communication from via PEGC to via 5GS, and enable the service continuity.

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