**3GPP TSG-SA1 Meeting #95-e *S1-213020r4***

**Online, , 23rd Aug 2021 - 2nd Sep 2021**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **22.261** | **CR** | **0536** | **rev** | **-** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | KPN, vivo Mobile Communications Co. LTD | | | | | | | | | |
| ***Source to TSG:*** | SA1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | Pirates | | | | |  | ***Date:*** | | | 2021-08-15 |
|  |  | | | |  | |  | | |  |
| ***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 FS\_Resident and FS\_PIN study resulted in consolidated requirements for CPN and PIN. The Pirates WID has been agreed to add these requirements to TS22.261. This CR adds a section to introduce descriptions of CPN and PIN and then a section of CPN and PIN requirements | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding introduction text on Personal IoT Networks and Customer Premises Networks | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Missing introduction for the Pirates requirements | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.38, 6.38.1 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 is dependent on CR0535 for definitions | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## 6.38 Personal IoT Networks and Customer Premises Networks

### 6.38.1 Description

Personal IoT Networks (PINs) and Customer Premises Networks (CPNs) provide local connectivity between UEs and/or non-3GPP devices. The CPN via an eRG, or PIN Elements via a PIN Element with Gateway Capability can be connected to the 5G network, thus providing 5G network services for the UEs and/or non-3GPP devices on the CPN or PIN. CPNs and PINs have in common that they are owned, installed and/or (at least partially) configured by an authorized administrator.

A Customer Premises Network (CPN) is a network located within a premises (e.g. a residence, office or shop). Via an evolved Residential Gateway (eRG), the CPN provides connectivity to the 5G network. The eRG can be connected to the 5G core network via wireline, wireless, or hybrid access. The eRG is an evolution of the 5G-RG. A Premises Radio Access Station (PRAS) is a base station installed in a CPN. Through the PRAS, UEs can get access to the CPN and/or the 5G service. The PRAS can be configured to use licensed, unlicensed, or both frequency bands. Connectivity between the eRG and the UE, non-3GPP Device, or PRAS can use any suitable non-3GPP technology (e.g. Ethernet, optical, WLAN).

A Personal IoT Network (PIN) consists of PIN Elements that communicate using PIN Direct Connection or direct network connection and is managed locally (using a PIN Element with Management Capability). Examples of PINs include networks of wearables and smart home / smart office equipment. Via a PIN Element with Gateway Capability, PIN Elements have connectivity to the 5G network and can communicate with PIN Elements that are not within range to use PIN Direct Connection.

A PIN Element with Management Capability is a PIN Element that provides a means for an authorised administrator to configure and manage a PIN.