**3GPP TSG- Meeting # *r2***

**, , -**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *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:*** |  |
| ***Source to TSG:*** | SA1 |
|  |  |
| ***Work item code:*** | Pirates |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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)* |
|  |  |
| ***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. Via a gateway, the CPN or PIN 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 a customer of a public network operator. When discussed together they are known as Personal IoT and Resident (PIR) Networks.

A Customer Premises Network (CPN) is a network located within a premises (e.g. a residence, office or shop). ~~It provides local connectivity for UEs and/or non-3GPP devices.~~ 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 network. The PRAS can be configured to use licensed or 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 CPN is at least partially configured and managed by an authorised administrator (e.g. the home owner).~~

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 include wearables and smart home / office. 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 Gateway Capability is the gateway between the public operator network (fixed/mobile/cable) and PIN Elements in a PIN~~

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