**3GPP TSG- Meeting #e *S1-214084***

**Electronic Meeting, 08 November – 18 November 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **22.261** | **CR** | **0599** | **rev** | **-** | **Current version:** | **18.4.0** |  |
|  | | | | | | | | |
| *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 | **X** | Core Network | **X** |

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| ***Title:*** | Update the general section of PIRates | | | | | | | | | |
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| ***Source to WG:*** | vivo, KPN, Futurewei | | | | | | | | | |
| ***Source to TSG:*** | SA1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PIRates | | | | |  | ***Date:*** | | | 2021-10-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***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:*** | | In clause 6.38.2.1, it is not straightforward to understand how the requirement “The 5G system shall be able to support PINs with PIN Elements subscribed to more than one network operator” is implemented, some example is needed for better understanding.  In clause 6.38.2.1, clarification of minimizing service disruption  - | | | | | | | | |
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| ***Summary of change:*** | | * Add example for the requirement “The 5G system shall be able to support PINs with PIN Elements subscribed to more than one network operator.”. * Further clarify the requirement of minimizing service disruption for PIN | | | | | | | | |
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| ***Consequences if not approved:*** | | The requirements for PIRates are not clear. | | | | | | | | |
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| ***Clauses affected:*** | | 6.38.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

**\*\*\*\*START OF CHANGES\*\*\*\***

## 6.38 Personal IoT Networks and Customer Premises Networks

### 6.38.2 Requirements

#### 6.38.2.1 General

The 5G system shall support mechanisms to identify a PIN, a PIN Element, an eRG and a PRAS.

Subject to local regulations, the 5G system shall support regulatory requirements for emergency calls, PWS and eCall for UEs connected via a CPN. Subject to local regulations, the 5G system shall support LI for data traffic to/from individual UEs in a CPN or PIN (i.e., UEs behind the PIN Element with Gateway Capability or eRG and/or PRAS).

The 5G system shall support applications on an Application Server connected to a CPN or PIN.

The 5G system shall be able to support PINs with PIN Elements subscribed to more than one network operator (e.g., a PIN Element that is a MUSIM UE and subscribes to different operators respectively, one PIN Element subscribed to network operator A and another PIN Element subscribed to network operator B).

Subject to regulatory requirements and operator policy, the 5G system shall support an efficient data path within the CPN for intra-CPN communications.

NOTE 1: For services an operator deploys in the 5G network (i.e. not in the CPN), local data routed via eRG does not apply.

Subject to regulatory requirements and operator policy, the 5G system shall support a data path not traversing the 5G network for intra-PIN communications via direct connections.

The 5G system shall enable the network operator to provide any 5G services to any UE via a PRAS connected via an eRG.

NOTE 2: Whether the PRAS can be used by UEs from other PLMNs in the same country as the PLMN associated with the PRAS is subject to regulatory policy on national roaming.

The 5G system shall minimize service disruption for a UE that is moving between CPN access and operator provided mobile access.

NOTE 3: CPN access can imply access via a PRAS or can imply access directly via an eRG. Operator provided mobile access implies access via an operator owned base station.

The 5G system shall minimize service disruption when a CPN communication path changes between two PRASes

The 5G system shall be able to minimize service disruption when a PIN Element changes the communication path from one PIN Element (e.g., PIN Element with Gateway Capability) to another PIN Element or operator provided mobile access. The communication path between PIN Elements may include licensed and unlicensed spectrum as well as 3GPP and non-3GPP access.

The 5G system shall be able to support PRAS sharing between multiple PLMNs.

The 5G system shall support mechanisms to aggregate, switch or split the service between non-3GPP RAT and PIN direct connections using licensed spectrum.

**\*\*\*\*END OF CHANGES\*\*\*\***