**3GPP TSG-SA WG1 Meeting #94e S1-21xxxx**

**Electronic Meeting, 10 – 20 May 2021** *(revision of S1-21xxxx)*

Title: PIN – Definitions update

Agenda Item: 7.12.1

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*Abstract: This document proposes to update some definitions based on offline email discussions.*

Discussion

Two email discussions and 2 conference calls took place to help refine some definitions. The outcome of those offline discussions is below.

\*\*\*\*Changes\*\*\*\*

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**direct device connection:** See definition in TS 22.261 [2].

**direct network connection:** See definition in TS 22.261 [2].

**Guest PIN Element:** Is a PIN Element that is a member of one PIN (Home PIN) and can access any other PIN, if allowed to by that PIN to communicate with the Home PIN.

**IoT device:** See definition in TS 22.261 [2].

**PIN direct connection:** the connection between two PIN elements without any 3GPP RAN or core network entity in the middle.

NOTE 1: A PIN direct connection could internally be relayed amongst other PIN elements or other entities (such as a WLAN access point).

Editor's Note: It is for FFS if further clarification to the term is needed and whether a separate term for an indirect connection or relayed connection is needed.

Editor’s Note: The above term PIN direct connection was agreed at SA1#93e, it needs to be applied to all usecases in this TR. This will be via contribution to the next SA1 meeting.

**PIN Element:** UE’s and devices authorised to communicate within a PIN.

**PIN Element with Gateway Capability:** a UE PIN Element with the ability to provide access (for other PIN Elements) or indirect Network connection (for other PIN Elements) to and from the 5G network ~~for intra-PIN communications~~.

NOTE 2: A PIN Element can have both PIN management capability and Gateway Capability.

Editor’s Note: The relationship with FS\_RESIDENT Evolved Residential Gateway still needs FFS.

**PIN Element with Management Capability:** A PIN Element with PIN management Capability has capability to manage the PIN.

**Personal IoT Network:** A configured and managed group of at least one UE and one or more devices or UEs, that are (pre-) authorised to communicate with each other .

NOTE: The PIN may be used for user-plane communication between devices, and also for routing and managing the non-PIN services consumed by PIN Elements.

NOTE: The configuration and management of the PIN may be maintained locally or by the 3GPP Network

**PIN-User:** The PIN-User is the person who owns the PIN with respective subscriptions at one service provider.