**3GPP TSG-SA5 Meeting #143-e *S5-223294rev1***

**e-meeting, 9th – 17th April 2022**

**Source: Huawei**

**Title: Add the Use Case for SNPN**

**Document for: Discussion**

**Agenda Item: 7.5.4**

# 1 Decision/action requested

***This is a pCR to add use case for SNPN in TR 28.828.***

# 2 References

[1] SP-211447 Study on Charging Aspects for Enhanced Support of Non-Public Networks.

[2] S5-222381 TR 28.828 v0.0.0 Initial skeleton.

# 3 Rationale

This pCR proposes to add use case for SNPN in TR 28.828[2].

# 4 Detailed proposal

The following changes are proposed to be incorporated into TR 28.828 [2].

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| **First change** |

# 5 Charging scenarios and key issues for SNPN

## 5.1 Topic 1: Converged charging for data connectivity in SNPN

### 5.1.1 Use cases

#### 5.1.1.1 Use case #1a: End users access the SNPN service directly

SNPN 5GS deployments are based on the 5G system architecture depicted in clause 4.2.3 of TS 23.501.

Charged Party: An End user (UE) who accessed SNPN services.

Charging Party: SNPN operator who charges the End user for using SNPN services.

#### 5.1.1.2 Use case #1b: End users access the SNPN via PLMN

SNPN 5GS deployments are based on the 5G system architecture depicted in clause 4.2.3 of TS 23.501, the architecture for 5GC with untrusted non-3GPP access for access to SNPN services via a PLMN (and vice versa).

Charged Party: An End user (UE) who has a subscription with the PLMN which allows access of the SNPN service.

Charging Party:

- SNPN operator who charges the End user for using SNPN services

- PLMN operator who charges the 5G data connectivity for the End user.

#### 5.2.1.1 Use case #1c: Access the SNPN services via PLMN

The scenario description is the same with the use case #1b.

### Charging Party: PLMN operator 5.1.2 Potential charging requirements

**REQ-CH\_SNPN\_E-01:** The SNPN should support collecting charging information of SNPN services usage per UE.

**REQ-CH\_SNPN\_E-02:** The 5G system should support collecting charging information based on the 5G data connectivity usage per UE for SNPN services

**REQ-CH\_SNPN\_E-01:** The 5G system should support collecting charging information based on the 5G data connectivity usage per SNPN services.

### 5.1.3 Key issues

The following key issues are identified:

- **Key Issue #1a**: the charging information collection and reporting in SNPN for services usage per End User.

- **Key Issue #1b**: the charging information collection and reporting in 5G system for 5G data connectivity usage for SNPN services per end user

- **Key Issue #1c**: the charging information collection and reporting in PLMN for 5G data connectivity usage per SNPN service.

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| **End of changes** |