**3GPP TSG-SA5 Meeting #143-e *S5-223084rev3***

e-meeting, 9 - 17 May 2022

**Source: China Mobile, Huawei**

**Title: Rel-18 pCR 28.828 Introduction of charging modes**

**Document for: Approval**

**Agenda Item: 7.5.4**

# 1 Decision/action requested

***The group is asked to discuss and agree on the proposal.***

# 2 References

[1] 3GPP TR 28.828: "Charging management; Study on charging aspects for enhanced support of non-public networks".

# 3 Rationale

This pCR proposes to introduce charging modes to TR 28.828 [1].

# 4 Detailed proposal

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

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| **First change** |

4.x Charging modes

As per TS 23.501 [2], in the context of Non-Public Networks, responsibilities regarding operations have to be clearly defined and assigned to roles. NPN charging can be built upon the roles related to NPN management specified in the clause 4.2 of TS 28.557 [X] without the consideration on the network equipment and infrastructure. Non-public networks in 5G environment involves the services or capabilities provided by multiple service providers in the form of following business roles:

- NPN Operator (NPN-OP): a Network Operator (NOP) is limited to 5G networks for non-public use, i.e. NPNs.

- NPN Service Provider (NPN-SP): a Communication Service Provider (CSP) which provides communication services for non-public use, e.g. vertical, tenant, NOP.

- NPN Service Customer (NPN-SC): a Communication Service Customer (CSC) which consumes communication services for non-public use, e.g. end user, vertical, tenant.

Considering the different business models such as B2B, B2C, and B2B2X, charging modes for non-public networks include (but not limited to):

- End user charging;

- Inter-provider charging.

Depending on the scenarios an organisation can play one or several roles simultaneously, and apply charging models based on corresponding business relationship, e.g.:

- Charging models for NPN-SP to charge NPN-SC for using NPN services.

- Charging models for NPN-OP to charge NPN-SP for using their networks and related network services.

- When NPN-OP and NPN-SP role are provided by the same enterprise, to charge NPN-SC role for using their networks and NPN services.

In deployments, there could be business scenarios where one or more of the business roles are supported by a single enterprise. The present document does not impose any restrictions to the possible deployment scenarios.

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| **End of changes** |