3GPP TSG SA WG5 Meeting 135-e TDoc S5-211138rev1

electronic meeting, online, 25 January - 3 February 2021

**Source: Huawei**

**Title: Roles related to 5G PLMN management and NPN management**

**Document for: Approval**

**Agenda Item: 6.4.1**

# 1 Decision/action requested

***Discuss and approve on the proposal.***

# 2 References

[1] TS 28.557 Management of non-public networks; Stage 1 and stage 2 v0.2.0

# 3 Rationale

It is proposed to add the roles related to 5G PLMN management and NPN management in clause 4.2 in draft TS 28.557 [1] to give a full view for all the roles related to 5G PLMN management and NPN management.

# 4 Detailed proposal

This document proposes the following changes in TS 28.557 [1].

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| **1st Change** |

## 4.2 Roles related to NPN management

In the context of NPNs, responsibilities regarding operations have to be clearly defined and assigned to roles.

In clause 4.8 of TS 28.530 [2], the roles related to 5G networks and network slicing management are presented. An NPN represents a 5G network with a delimited scope in its use (i.e. non-public use). This means that NPN management can be built upon the roles related to 5G networks management, as long as the scope of these roles is limited to acting on network and services for non-public use.

According to the above rationale, the roles related to NPN management include:

* NPN Service Customer (NPN-SC): a Communication Service Customer (CSC) which consumes communication services for non-public use, i.e. communication services offered over NPNs. An NPN-SC is the realization of the CSC role (see definition in TS 28.530 [2], clause 4.8) in NPN environments.
* NPN Service Provider (NPN-SP): a Communication Service Provider (CSP) which provides communication services for non-public use, i.e. communication services offered over NPNs. An NPN-SP is the realization of the CSP role (see definition in TS 28.530 [2], clause 4.8) in NPN environments.
* NPN Operator (NPN-OP): a Network Operator (NOP) whose management scope is limited to 5G networks for non-public use, i.e. NPNs. An NPN operator is the realization of the NOP role (see definition in TS 28.530 [2], clause 4.8) in NPN environments.
* Network Equipment Provider (NEP), including VNF supplier: see definition in TS 28.530 [2], clause 4.8.
* Virtualization Infrastructure Service Provider (VISP): see definition in TS 28.530 [2], clause 4.8.
* Data Centre Service Provider (DSCP): see definition in TS 28.530 [2], clause 4.8.
* NFVI Supplier: see definition in TS 28.530 [2], clause 4.8.
* Hardware Supplier: see definition in TS 28.530 [2], clause 4.8.

Note that NEP, VISP, DSCP, NFVI supplier and Hardware Supplier roles are the same as defined for 5G networks and network slicing management. This is because their managed/provided assets are unaware of the public or non-public nature of 5G network and services running atop.



Depending on actual scenarios and the type of NPNs under consideration, i.e. SNPN or PNI-NPN, different relationships can be found between NPN management roles and potential stakeholders. These relationships will be analysed together with the management aspects specific to each NPN category.

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| **End of change** |