**3GPP TSG-SA5 Meeting #145-e *S5-225129rev1***

**e-meeting, 15 - 24 August 2022**

**Source: MATRIXX Software**

**Title: pCR TR 32.847 Solve Editor’s Note on clause 4.1**

**Document for: Approval**

**Agenda Item: 7.5.1**

# 1 Decision/action requested

**This pCR is to Solve Editor’s Note on clause 4.1**

# 2 References

[1] 3GPP TR 32.847 "Study on Charging Aspects for Network Slicing Phase 2"

# 3 Rationale

This pCR is to Solve Editor’s Note on clause 4.1.

Network Slice Instance (NSI) as used in this document relates to 3GPP defined terminology, and it is introduced in clause 4.3. There is no need to have this more detailed in GSMA part.

# 4 Detailed proposal

The following changes are proposed to be incorporated into TR 32.847 [1]

|  |
| --- |
| **First change** |

## 4.1 Background from GSMA

GSMA 5GJA has specified in NG.116 [6] the concept of Generic Network Slice Template (GST) from which several Network Slice Types (NESTs) can be derived by assigning values to applicable attributes defined in the GST.

As per 3GPP TS 23.501 [7] is the network slice a logical network that provides specific network capabilities and network characteristics, and GSMA tailored the network slice based on the specific requirements adhered to a Service Level Agreement (SLA) agreed between Network Slice Customer (NSC) and Network Slice Provider (NSP).

Multiple roles related to network slicing are defined by GSMA and displayed in figure 4.1-1, based on some roles specified in 3GPP TS 28.530 [8] and described in 3GPP TR 32.845 [2].

The Charging model will fullfill the following used roles:

- Communication Service Customer (CSC**)**: Uses communication services, e.g. end user, tenant, vertical.

- Communication Service Provider (CSP**)**: Provides communication services. Designs, builds and operates its communication services. The CSP provided communication service can be built with or without network slice.

- Network Operator (NOP): Designs, builds and operates networks and provides related services, including network services and network slices.

- Network Slice Customer (NSC): The CSP or CSC who uses Network Slice as a Service.

- Network Slice Provider (NSP): The CSP or NOP who provides Network Slice as a Service.

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 CSP to charge CSC for using communication services

- Charging models for NOP to charge CSP for using their Networks and related Network services

- Charging models for NOP playing NSP Role to charge CSP playing NSC Role for using their Networks and related network slices



Figure 4.1-1: Model roles in network slicing

The GST is a set of generic attributes that can characterise a type of network slice/service and is not tied to any specific network deployment.

The NEST is a GST filled with values. The attributes and their values are assigned to fulfil a given set of requirements derived from a network slice customer use case. The NEST is an input to the network slice preparation performed by NSP. NEST-related attributes can be differentiated by a Service Category. For instance, when an attribute of a NEST includes a Service Category parameter and the UE subscription information includes a parameter value associated with that Service Category, then the UE will be subject to the differentiated service associated with the Service Category in the network slice.

Figure 4.1-2 places the GST and NEST in the context of the network slice lifecycle. As first step, the NSC provides the service requirements for the use case that it would like to fulfil, to the NSP. The NSP maps the service requirements into the attributes of the GST with the appropriate values generating a NEST.



Figure 4.1-2: GST and NEST in context of the network slice lifecycle

In GSMA 5GJA NG.116 [6], there are two attributes the maximum number of UEs and the maximum number of PDU sessions, which characterising the network slice (one S-NSSAI) and defined as the maximum number of UEs and the maximum number of PDU sessions that can use the network slice simultaneously.

The Network Slice Instance (NSI) concept is as used in 3GPP TS 28.202 [3].

|  |
| --- |
| **End of changes** |