**3GPP TSG-SA5 Meeting #141-eS5-221090rev1**

**e-meeting, 17 - 26 January 2022**

**Source: Huawei**

**Title: Possible solution for exposure of network slice as a service**

**Document for: Approval**

**Agenda Item: 6.5.2**

# 1 Decision/action requested

***For approval***

# 2 References

[1] 3GPP TR 28.824 V0.4.0 Study on network slice management capability exposure

# 3 Rationale

It is proposed to add a possible solution for "Network slice management capability exposure" case and "Exposure of network slice as a service" case in TR 28.824 [1]. The proposed numbers of new clauses have taken consideration of the skeleton restructuring proposal S5-221090.

# 4 Detailed proposal

This contribution proposes to make the following changes in [1].

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| **1st change** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] TM Forum TMF622 Product Order API REST Specification

[3] TM Forum TMF641 Service Ordering API

[4] TM Forum TMF652 Resource Order Management API

[5] 3GPP TS 28.531: "Management and orchestration; Concepts, use cases and requirements"

[6] 3GPP TS 28.202: "Charging management; Network slice management charging in the 5G System (5GS); Stage 2"

[7] 3GPP TR23.700-99 “Study on Network Slice Capability Exposure for Application Layer Enablement (NSCALE)”

 [8] 3GPP TS23.434 “Service Enabler Architecture Layer for Verticals (SEAL); Functional architecture and information flows.”

[9] 3GPP TS 28.541: "Management and orchestration; 5G Network Resource Model (NRM); Stage 2 and stage 3"

[1x] 3GPP TS 28.545: "Management and orchestration; Fault Supervision (FS)"

[1y] 3GPP TS 28.552: "Management and orchestration; 5G performance measurements"

[1z] 3GPP TS 28.554: "Management and orchestration; 5G end to end Key Performance Indicators (KPI)"

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| **2nd change** |

### 5.6.2 Potential solutions

#### 5.6.2.1 Potential solution #1: Network slice management capability exposure

The eMnS consumers can obtain the eMnS data that are accessible via the eMnS discovery service (see clause 7.2) from EGMF in the 3GPP management system. After that, the eMnS consumers may send a request to EGMF for consuming the specific eMnS exposed by the operator.

An overall category conclusion of the management capability that may be exposed to eMnS consumers are given as follows:

a) Fault Supervision capability: It is exposed to external fault supervision management services consumers to obtain fault supervision data report and have control on fault supervision data via Fault Supervision management services (see TS 28.545 [1x]) exposed by EGMF.

b) Performance Assurance capability: It is exposed to analytic applications to collect real-time performance data, such as performance measurements and assurance data (see TS 28.552 [1y]) and one or multiple KPIs (see TS 28.554 [1z]), for potential issues detection in advance via EGMF.c) Provisioning capability: It is exposed to external network management services consumers to obtain certain management capability to manage the network (e.g., network slice instance provisioning, see TS 28.541 [9] and 28.531 [5]) through the exposure interface via EGMF.

The details of management capabilities exposed to external customers, such as in which services with which operations and which data, depend on the business agreements that are made between eMnS consumers and network operators. During the exposure procedure via EGMF, the exposed capabilities or exposed data may be aggregated or translated to increase the information readability for external consumers.

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| **End of changes** |