**3GPP TSG-SA5 Meeting #142-e *S5-222322rev3***

**e-meeting, 4 - 12 April 2022**

**Source: Huawei**

**Title: Add background of mapping in TS 28.531**

**Document for: Approval**

**Agenda Item: 6.5. 4**

# 1 Decision/action requested

This document is to request approval of the proposed text.

# 2 Rational

This document is to add background information on use cases of network slice provisioning in TS 28.531.

# 3 Proposed changes

The start of the 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".

[x] 3GPP TS 28.530: "Management and orchestration; Concepts, use cases and requirements"

[y] 3GPP TS 28.531: "Management and orchestration; Provisioning"

The second change

### 4 Background

### 4.1 General

Network slicing is one of the key 5G features. The lifecycle of a Network slice instance includes the four phases which are preparation, commissioning, operation and decommissioning, as described in TS 28.530 [x].

### 4.x Mapping of use cases in TS 28.531

The use cases of provisioning of network slice instance include as described in TS 28.530 [x] and TS 28.531 [y]:

- Create a network slice instance;

- Activate a network slice instance;

- De-active a network slice instance;

- Modify a network slice instance;

- Terminate a network slice instance.

The technical specification TS 28.531 describes specification level use cases related to network slice management. Table 4.x-1 provides the mapping between use cases related to network slice instance and network slice subnet and management capabilities required by those use cases. The detail information about use cases and operations supporting those use cases are described in TS 28.531.

The management capabilities can be derived by management activities in real use, for example the provisioning of a network slice, modification of a network slice. The mapping relations between use cases and management capabilities can be used to analysis alignment and requirements in the real management activities read by human.

**Table 4.x-1: The use cases in TS 28.531 and the mapping to management capabilities.**

|  |  |  |
| --- | --- | --- |
| Clause | use case | Management capabilities required |
| 5.1.1 | Network slice instance allocation | Provisioning of a network slice |
| 5.1.2 | Network slice instance subnet allocation | Provisioning of a network slice subnet |
| 5.1.3 | Network slice instance deallocation | Provisioning of a network slice |
| 5.1.4 | Network slice subnet instance deallocation | Provisioning of a network slice subnet |
| 5.1.5 | Obtaining network slice subnet instance information | Query information |
| 5.1.6 | Network slice feasibility check | Provisioning of a network slice (subnet) |
| 5.1.7 | Network slice instance activation | Provisioning of a network slice |
| 5.1.8 | Network slice instance deactivation | Provisioning of a network slice |
| 5.1.9 | Network slice instance modification | Modification of a network slice |
| 5.1.10 | Network slice subnet instance activation | Provisioning of a network slice subnet |
| 5.1.11 | Network slice subnet instance deactivation | Provisioning of a network slice subnet |
| 5.1.12 | Network slice subnet instance modification | Modification of a network slice subnet |
| 5.1.13 | Network slice subnet configuration | Modification of a network slice subnet |
| 5.1.14 | Exposure of network slice management data | Query information |
| 5.1.15 | Exposure of network slice management capability | Management capability exposure |
| 5.1.16 | Network slice subnet instance management capability exposure | Management capability exposure |

Editor’ note: the table Table 4.x-1 may be updated according to the outcome of release 17 work item eNETSLIKCE\_PRO.

End of change