**3GPP TSG SA WG5 Meeting #141e S5-221290**

**Online, , 15 Nov 2021- 24 Nov 2021**

**Source: Samsung**

**Title: pCR 28.538 EES LCM Procedure**

**Document for: Approval**

**Agenda Item: 6.4.18**

# 1 Decision/action requested

***The group is asked to discuss and approve the proposals.***

# 2 References

None

# 3 Rationale

This contribution provides EAS LCM procedures.

# 4 Detailed proposal

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| **First modification** |

### 7.1.x EES lifecycle management

#### 7.1.x.1 EES instantiation

Figure 7.1.1-1 shows that the PLMN operator or ECSP as the consumer requests the EES instantiation via the provisioning MnS.



Figure 7.1.1-1: EES instantiation procedure

1. Provisioning MnS Producer receives a request (this will use createMOI operation defined in 3GPP TS 28.532 [5]) with EES related requirements. The following are the list of requirements, which can be provided with the request as part of attributeListIn parameter of createMOI operation.

a. EDN identifier: Identifying the EDN to contain the EES in.

b. EAS identifier: Identifying the list of EAS registered with the EES. This is optional depending on the availability of the EAS.

2. Provisioning MnS Producer returns a response indicating that the instantiation operation is in progress

3. The NF instance creation procedure as described in 7.10 of [5] is reused to instantiate the EES VNF instance with the requirements provided in the instantiation request.

4. In case of EES VNF instantiation failure, a Notification to indicate the creation of EESFunction instance has failed.

5. In case of EES VNF instantiation success, the producer creates the MOI (Managed Object Instance) for EESFunction IOC. The MOI shall contain attributes as defined in EESFunction IOC. The Provisioning MnS Producer sends a Notification to indicate the EESFunction instance has been created.

#### 7.1.x.2 EES Termination

Figure 7.1.3.x-1 shows that the PLMN operator or ECSP as the consumer requests the EES termination via the provisioning MnS.



Figure 7.1.3.x-1: EES termination procedure

1. PLMN operator or ECSP consumes the provisioning MnS with deleteMOI operation (see clause 11.1.1.4. in TS 28.532 [5]) for EESFunction MOI to request ECSP management system provisioning MnS producer to terminate the EES VNF instance.

2. ECSP management system provisioning MnS producer sends a response to the consumer indicating that the termination operation is in progress..

3. ECSP management system provisioning MnS producer invokes the TerminateNsRequest or UpdateNsRequest operation (see clause 7.3.7 and 7.3.5 in ETSI GS NFV-IFA 013 [6]) to request NFVO via the Os-Ma-nfvo interface to terminate EES VNF instance.

4. NFVO sends the NS Lifecycle Change notification to ECSP provisioning MnS producer indicating the result of termination procedure (see clause 7.3.12 of ETSI GS NFV-IFA 013 [6]).

5. If the VNF termination has been successful then:

5.1. ECSP management system provisioning MnS producer deletes the MOI for EESFunction IOC.

5.2. ECSP management system provisioning MnS producer notifies the consumer about the successful termination of the EES.

Otherwise :

5.3. ECSP management system provisioning MnS producer notifies the consumer about the un-successful termination of the EES.