**3GPP TSG SA WG5 Meeting #139e S5-215145**

**Online, , 11 Oct 2021- 20 Oct 2021**

**Source: Samsung**

**Title: pCR 28.538 EES Lifecycle Management usecase and requirements**

**Document for: Approval**

**Agenda Item: 6.X.X**

# 1 Decision/action requested

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

# 2 References

None

# 3 Rationale

The lifecycle management of EES is an integral part of edge computing. This contribution provides the use case and requirements for the same.

# 4 Detailed proposal

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| **First modification** |

### 5.1.X EES Deployment

The provisioning MnS producer is requested to instantiate the EES, as 3GPP network functions, aiming to server the particular location. The instantiated EES may serve one or multiple EAS.

A consumer request for EES(s) instantiation providing EES deployment requirements. The provisioning MnS producer determines the EDN where the EES(s) will be instantiated, instantiate the EES VNF and establish the connection with 5GC network functions. The provisioning MnS producer will accept the request and notify the consumer about the instantiation in-progress. Thereafter, the notification will be sent to indicate the successful EES instantiation.

### 5.1.X EES Termination

The goal is to enable the termination of one or more EES(s) on the EDN. A consumer consumes the provisioning MnS to terminate the EES with the EES identifier. The provisioning MnS producer terminates the EES VNF based on the EES identifier, and disconnects the EES from the 5GC network functions. The provisioning MnS producer will accept the request and notify the consumer about the termination in-progress. Thereafter , the notification will be send to indicate that the EES has been terminated successfully.

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| **End of First modification** |

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| **Second modification** |

### 5.1.3 Requirements

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| **Requirement label** | **Description** | **Related use case(s)** |
| **REQ-EAS-INST-FUN-1** | Generic provisioning MnS producer should have a capability allowing an authorized consumer to request the deployment of EAS based on the given deployment requirements. | EAS Deployment |
| **REQ-EAS-INST-FUN-2** | Generic Provisioning MnS Producershould have the capability to deploy EAS at a suitable EDN which can support the EAS requirements e.g serving location, required latency, affinity/anti-affinity with other EAS, service continuity. | EAS Deployment |
| **REQ-EAS-INST-FUN-3** | Generic provisioning MnS producer should have a capability to inform the authorized consumer about the progress of instantiation as the response to the deployment request. | EAS Deployment |
| **REQ-EAS-INST-FUN-4** | Generic provisioning MnS producer should have a capability to notify the authorized consumer the result (e.g., success, failure, or partially failure) of instantiation operation. | EAS Deployment |
| **REQ-EAS-TERM-FUN-1** | Generic provisioning MnS producer should have a capability allowing an authorized consumer to request the termination of the EAS VNF instance. | EAS Termination |
| **REQ-EAS-TERM-FUN-2** | Generic provisioning MnS producer should have a capability to inform the authorized consumer about the progress of termination as the response to the termination request. | EAS Termination |
| **REQ-EAS-TERM-FUN-3** | Generic provisioning MnS producer should have a capability to notify the authorized consumer the result (e.g., success, failure, partially failure) of termination operation. | EAS Termination |
| **REQ-EES-INST-FUN-x** | Generic provisioning MnS producer should have the capability to instantiate the EES, as per request from authorized consumers. | EES Deployment |
| **REQ-EES-INST-FUN-x** | Generic provisioning MnS producer should have the capability to send the notification indicating the status of EES instantiation | EES Deployment |
| **REQ-EES-INST-FUN-x** | Generic provisioning MnS producer should have the capability to relate instantiated EES with one or multiple served EAS(s). | EES Deployment |
| **REQ-EES-TERM-FUN-x** | Generic provisioning MnS producer should have the capability to terminate the EES with the EES identifier, as per request from authorized consumers | EES Termination |
| **REQ-EES-TERM-FUN-x** | Generic provisioning MnS producer should have the capability to send the notification indicating the status of EES termination | EES Termination |
| **REQ-EES-TERM-FUN-x** | Generic provisioning MnS producer should have a capability to inform the authorized consumer about the progress of EES instantiation as the response to the deployment request. | EES Deployment |
| **REQ-EES-TERM-FUN-x** | Generic provisioning MnS producer should have a capability to inform the authorized consumer about the progress of EES termination as the response to the termination request. | EES Termination |

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| **End of Second modification** |