**3GPP TSG-SA WG6 Meeting #49-e S6-221376**

**e-meeting, 16th – 25th May 2022 ( revision of S6-221068)**

**Source: China Mobile**

**Title: Update Annex A.4-** **ETSI MEC and EDGEAPP system comparison**

**Spec: 3GPP TR 23.700-98**

**Agenda item: 9.8**

**Document for: Approval**

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**1. Introduction**

This paper proposes a solution for service differentiation in KI#5.

**2. Reason for Change**

Supplemet of ETSI MEC and EDGEAPP system comparison on Service consumer and service provider

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TR 23.700-98.

\* \* \* First Change \* \* \* \*

## A.2 Service consumer and service provider

The functionalities enabled via the Mp1 reference point between MEC applications and MEC platform is mainly described in ETSI GS MEC011 [14]. The related functionality includes MEC service registration/deregistration, MEC service discovery and event notifications. Other functionality includes MEC service availability, traffic rules, DNS and time of day.

From ETSI MEC's perspective, there are two types of MEC Applications, i.e., MEC Application that consumes MEC Services and MEC Application that provides MEC service(s). For the MEC Application that provides MEC service(s), the MEC Application sends a service registration request to the MEC platform to register the MEC service during the MEC Application start-up procedure. As for the MEC Application that consumes MEC Services, the MEC Application can send a service query request to the MEC platform to discover a MEC service. It should be noted that the API of registration and discovery is defined for MEC service.

In R17 of SA6, the EES can take the role of the CAPIF core function, and the vertical application enabler server acting the AEF and publish the vertical application enabler server APIs to the EES. Further, the vertical application enabler server APIs is discovered by the EASs acting as the API invoker during the service API discover procedure as specified in 3GPP TS 23.222 [16].

In clause 4.2, the Key issue #2 plans to study Enablement of Service APIs exposed by EAS. The R17 of EDGEAPP only defines the functionality of EAS acting as an invoker, which is similar to MEC Application that consumes MEC Services defined in ETSI MEC:

**[Observation A.2-1]** The R17 of EDGEAPP only defines the functionality of EAS acting as an invoker, which is similar to MEC Application that consumes MEC Services defined in ETSI MEC. According to the Key issue #2 in clause 4.2, The EAS acting as a service provider is expected to be defined in R18 and expose service APIs.

**[Observation A.2-2]** According to the Key issue #2 in clause 4.2, ~~T~~the EAS can act as a service provider and EES ~~act as a CAPIF provider by implementing~~ can act as ~~implement~~ CAPIF core function so different services will be ~~available~~ discoverable at different EESs. How the information of a service registered at one MEC platform is made available to other platforms in the same MEC system is not explicitly specified within ETSI MEC, while in EDGEAPP, as EES supports CAPIF core function, the EAS service ~~exposed~~ published on EES1 can be discovered by EAS registered on EES2 through CAPIF-6 or CAPIF-6e.

## A.4 EAS registration and EAS discovery

In R17 of EDGEAPP, the EAS Registration procedure is defined to allow an EAS to provide its information to an EES in order to enable its discovery as defined in clause 8.4.3 of 3GPP TS 23.558 [2]. The EAS discovery procedure is used to provide EAS information to the EEC. After the EEC is provisioned with the EAS information, it can establish a connection to the EAS. Besides, in the service continuity scenario, the source EAS may send an EAS discovery request to the EES to discover a target EAS (providing same functionality as the source EAS) to serve the UE as defined in clause 8.8.3.2 of 3GPP TS 23.558 [2].

However, in current ETSI MEC specification, no APIs for MEC Application registration is defined because it is assumed that all MEC Application are on-boarded and managed by MEC Orchestrator, which was specified in ETSI GS MEC 010-2 [13]. API for MEC Application discovery is not defined since the existing MEC service is either defined from the MEC Application's perspective or it is consumed by the MEC Application rather than the UE.

Therefore, the comparison EAS registration and EAS discovery of EDGEAPP [2] and ETSI MEC specification [13] shows that:

**[Observation A.4-1]** The EAS registration and EAS discovery mechanism is defined in R17 of SA6 and ETSI MEC introduced MEC application registration (ETSI GS MEC 011 v3.0.6). It is FFS whether and how to address such differences in SA6, e.g., in support of ETSI MEC.

**[Observation A.4-2]** ETSI MEC platform (MEP) supports service registration. In the registration parameter “ServiceInfo”，there is a mandatory field“consumedLocalOnly”used to indicate that the service can only be consumed by the MEC applications located in the same locality, which means ETSI MEC services (produced by Authorized MEC APPs) registered and exposed on MEP can be invoked by MEC consumer APPs deployed on the same or another MEC host.

#### **7.X.2.2 Procedure**

### **7.X.3 Solution evaluation**

This clause provides an evaluation of the solution.