**Agenda item:** 8.7

**Source:** Qualcomm Inc.

**Title: EMSA Architecture**

**Document for** Discussion andAgreement

# Introduction

In this contribution, we propose a solution for the mapping of the 5G edge architecture as developed by SA6 and the management architecture for edge as developed by SA5 onto the 5GMS architecture. This is a follow-up on an earlier contribution that offered 2 options for the mapping. The goal is to avoid the definition of any new interfaces between the 5GMS elements and the other architecture elements.

# EMSA Architecture

The EMSA architecture is an integration of the 5GMS architecture, the SA6 Edge architecture and the SA5 management architecture. The EMSA architecture is depicted in the following figure:



In this approach, the EEC, EES, and EAS are implemented as part of the MSH, 5GMS AF, and 5GMS AS, respectively. This approach does not exclude the standalone existence of these functions, it merely implies that for the media vertical, these functions are implemented as part of 5GMS architecture functions.

This also implies the following:

* The Media Session Handler is required to implement the EDGE-5 API, which could be part of the M6 interface.
* A 5GMS AF that realises the EES function is required to expose the EDGE-3 interface towards the EAS function of 5GMS AS instances.
* A 5GMS AF that realises the EES function is required to register with an ECS function using the EDGE-6 interface.
* A 5GMS AF that realises the EES function may be required to implement the EDGE-9 interface to support media session relocation.
* A 5GMS AF that realises the EES function is required to implement the EDGE-1 interface to support registration and provisioning of EEC functions, and discovery by them of EAS instances.
* A 5GMS AF may perform compute resource allocation using the MnS-C interface.

This architecture supports both client-driven as well as AP-driven management of the edge processing session. In the latter, the UE application transparently discovers and connects to the closest EAS without significant support from the EEC. The 5GSM AF acts on behalf of the 5GMS Application Provider to allocate processing resources based on the application needs. In order for the transparent resolution to work, SA2 is expected to define a solution to allow the AF to influence the DNS resolution for the domain name(s) related to the media distribution by the Application Provider.

# Proposal

We propose to agree the proposed architecture mapping and to add the content of section 2 to the EMSA TR 26.803.