**3GPP TSG-CT WG3 Meeting #114eC3-211504**

**E-Meeting, 24th February – 05th March 2021** *(revision of C3-211366)*

**Source: Samsung**

**Title: Pseudo-CR on Eees\_EASRegistration service description**

**Spec: 3GPP TS 29.558 v0.1.0**

**Agenda item: 17.9**

**Document for: Decision**

**1. Introduction**

This contribution proposes the service description for Eees\_EASRegistration API.

**2. Reason for Change**

TS 23.558 specifies the procedures and information flows for an EAS to register itself, update its registration and deregister at a given EES, using the Eees\_EASRegisration service API. This service needs to be described in TS 29.558 with further details.

Also, the EES services introduction is updated with Eees\_EASRegistration service API information.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.558 v0.1.0.

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

## 5.1 Introduction

*This clause will provide the list of Edge Enabler Server services with their respective service operations.*

The table 5.1-1 lists the Edge Enabler Server APIs below the service name. A service description clause for each API gives a general description of the related API.

Table 5.1-1: List of EES Service APIs

|  |  |  |  |
| --- | --- | --- | --- |
| Service Name | Service Operations | Operation Semantics | Consumer(s) |
| Eees\_EASRegistration | Request | Request/Response | EAS |
| Update | Request/Response | EAS |
| Deregister | Request/Response | EAS |

Table 5.1-2 summarizes the corresponding Edge Enabler Server APIs defined in this specification.

Table 5.1-2: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Name** | **Clause** | **Description** | **OpenAPI Specification File** | **apiName** | **Annex** |
|  |  |  |  |  |  |

\* \* \* Next Change \* \* \* \*

## 5.y Eees\_EASRegistration Service

### 5.y.1 Service Description

The Eees\_EASRegistration API, as defined in 3GPP TS 23.558 [2], allows an Edge Application Server via Eees interface to register, update its registration and deregister at a given Edge Enabler Server.

Editor’s Note: Details about EAS security credentials, verification and authorization of Eees\_EASRegistration Request, Update and Delete, by the EES, to be aligned with security aspects defined by SA3.

### 5.y.2 Service Operations

#### 5.y.2.1 Introduction

The service operation defined for Eees\_EASRegistration API is shown in the table 5.y.2.1-1.

Table 5.y.2.1-1: Operations of the Eees\_EASRegistration API

|  |  |  |
| --- | --- | --- |
| Service operation name | Description | Initiated by |
| Eees\_EASRegistration\_Request | This service operation is used by the EAS to register itself to a given EES. | EAS |
| Eees\_EASRegistration\_Update | This service operation is used by the EAS to update its registration information at EES. | EAS |
| Eees\_EASRegistration\_Deregister | This service operation is used by the EAS to deregister itself from a given EES. | EAS |

#### 5.y.2.2 Eees\_EASRegistration\_Request

##### 5.y.2.2.1 General

This service operation is used by EAS to register itself to a given EES.

##### 5.y.2.2.2 EAS registering to EES using Eees\_EASRegistration\_Request operation

To register itself as an Edge Application Server at the EES, the EAS shall send an HTTP POST message to the Edge Enabler Server on the "EAS Registrations" collection resource. The body of the HTTP POST message shall include the EAS profile information, may include proposed expiration time for the registration, as specified in clause 8.y.2.2.3.1.

Upon receiving the HTTP POST message from the EAS, the EES shall:

1. Process the EAS registration request information;

2. verify the identity of the Edge Application Server and check if the EAS is authorized to register itself at EES ;

3. if the EAS is authorized to register to EES, then the EES shall;

a. store the EAS profile and create a new resource with the EAS registration information as specified in clause 8.y.2.1;

b. return the EAS registration information, the resource URI of the EAS registration information, in the response message. The response message may include expiration time to indicate when the EAS registration will automatically expire.

If the expiration time is provided, then to maintain the registration, the EAS shall send a registration update request (as described in clause 5.y.2.3) prior to the expiration time. If the registration update request is not sent before the expiry time, then the EES shall treat the EAS as deregistered and remove the corresponding EAS registration resource.

#### 5.y.2.3 Eees\_EASRegistration\_Update

##### 5.y.2.3.1 General

This service operation is used by EAS to update its registration information at a given EES.

##### 5.y.2.3.2 EAS updating registration information using Eees\_EASRegistration\_Update operation

To update the EAS registration information at the EES, the EAS shall send a HTTP PUT message to the Edge Enabler Server on resource URI identifying the Individual EAS registration resource representation as specified in clause 8.y.2.3.3.2, requesting to replace all properties in the existing resource with the EAS registration information in the request. The body of the HTTP PUT message shall include the EAS profile information, may include proposed expiration time to update the registration. This request shall not replace the easId property of the existing resource.

Upon receiving the HTTP PUT message from the EAS, the EES shall:

1. .check the registration update message from the EAS to see if the EAS is authorized to modify the requested registration resource;

2. if the EAS is authorized to update the registration information and the easId information in the request and the resource match, then the EES shall;

a. update the resource identified by Resource URI of the EAS registration information with the updated EAS registration information received in the HTTP PUT request message;

b. return the updated EAS registration information in the response. In the response message, the EES may provide an updated expiration time to indicate to the EAS when the updated registration will automatically expire.

If the expiration time is provided, then to maintain the registration, the EAS shall send a registration update prior to registration expiry time. If the registration update request is not sent before the expiry time, then the EES shall treat EAS as deregistered and remove the corresponding EAS registration resource.

#### 5.y.2.4 Eees\_EASRegistration\_Deregister

##### 5.y.2.4.1 General

This service operation is used by EAS to deregister itself from a given EES.

##### 5.y.2.4.2 EAS deregistering from EES using Eees\_EASRegistration\_Deregister operation

To deregister itself from the EES, the EAS shall send HTTP DELETE message to the EES, on the resource URI identifying the Individual EAS registration resource representation as specified in clause 8.y.2.3.3.3. Upon receiving the HTTP DELETE request, the EES shall:

1. verify the identity of the EAS and check if the EAS is authorized to deregister the EAS registration information;

2. if the EAS is authorized to deregister the EAS registration information, then the EES shall deregister the EAS profile from the EES and delete the resource representing EAS registration information;

3. return the "204 Not Content" message to the EAS, indicating the successful deregistration of the EAS information.

\* \* \* End of Changes \* \* \* \*