**3GPP TSG-CT WG3 Meeting #116eC3-213547**

**E-Meeting, 19th – 28th May 2021** (Revision of C3-213272)

**Source: Samsung**

**Title: Pseudo-CR on Eees\_TargetEASDiscovery service definition**

**Spec: 3GPP TS 29.558 v0.3.0**

**Agenda item: 17.9**

**Document for: Decision**

**1. Introduction**

TS 23.558 specifies the Eees\_TargetEASDiscovery service, for the EAS and EES to discover the target EAS information from the EES with a given criteria.

**2. Reason for Change**

This pCR proposes the service description and API definition of the Eees\_TargetEASDiscovery API.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.558 v0.3.0.

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

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

AC Application Client

ACID Application Client Identification

AF Application Function

ASP Application Service Provider

DN Data Network

DNAI Data Network Access Identifier

DNN Data Network Name

EAS Edge Application Server

EASID Edge Application Server Identification

ECS Edge Configuration Server

ECSP Edge Computing Service Provider

EDN Edge Data Network

EEC Edge Enabler Client

EECID Edge Enabler Client Identification

EES Edge Enabler Server

EESID Edge Enabler Server Identification

EHE Edge Hosting Environment

FQDN Fully Qualified Domain Name

GPSI Generic Public Subscription Identifier

LADN Local Area Data Network

NEF Network Exposure Function

S-EAS Source Edge Application Server

S-EES Source Edge Enabler Server

SCEF Service Capability Exposure Function

SSID Service Set Identifier

T-EAS Target Edge Application Server

T-EES Target Edge Enabler Server

TAI Tracking Area Identity

\* \* \* Next 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 |
| Eees\_UELocation | Get | Request/Response | EAS |
| Subscribe | Subscribe/Notify | EAS |
| Notify |
| UpdateSubscription |
| Unsubscribe |
| Eees\_UEIdentifier | Get | Request/Response | EAS |
| Eees\_TargetEASDiscovery | Request | Request/Response | EAS, EES |

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.a Eees\_TargetEASDiscovery Service

### 5.a.1 Service Description

The Eees\_TargetEASDiscovery API, as defined in 3GPP TS 23.558 [2], allows S-EAS and S-EES to discover the T-EAS information from the EES.

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

### 5.a.2 Service Operations

#### 5.a.2.1 Introduction

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

Table 5.a.2.1-1: Operations of the Eees\_TargetEASDiscovery API

|  |  |  |
| --- | --- | --- |
| Service operation name | Description | Initiated by |
| Eees\_TargetEASDiscovery\_Request | This service operation is used by the S-EAS and S-EES to discover the target EAS (T-EAS) information from a given EES. | EAS, EES |

#### 5.a.2.2 Eees\_TargetEASDiscovery\_Request

##### 5.a.2.2.1 General

This service operation is used by S-EAS and S-EES to fetch T-EAS information, as specified in 3GPP TS 23.558 [2]), from a given EES.

##### 5.a.2.2.2 EAS and EES fetching the T-EAS information from the EES using Eees\_TargetEASDiscovery\_Request operation

Editor’s Note: The service description of this service operation is FFS.

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

## 8.a Eees\_TargetEASDiscovery API

### 8.a.1 API URI

The Eees\_TargetEASDiscovery service shall use the Eees\_TargetEASDiscovery API.

The request URIs used in HTTP requests from the Edge Application Server towards the Edge Enabler Server shall have the Resource URI structure as defined in clause 7.5 with the following clarifications:

- The <apiName>shall be "eees-targeteasdiscovery".

- The <apiVersion> shall be "v1".

- The <apiSpecificResourceUriPart> shall be set as described in clause 8.a.2.

### 8.a.2 Resources

#### 8.a.2.1 Overview



Figure 8.a.2.1-1: Resource URI structure of the Eees\_TargetEASDiscovery API

Table 8.a.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 8.a.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| EAS Profiles | /eas-profiles | GET | Discover the T-EAS information. |

#### 8.a.2.2 Resource: EAS Profiles

##### 8.a.2.2.1 Description

This resource represents all the EAS profiles that are registered or cached at a given Edge Enabler Server.

##### 8.a.2.2.2 Resource Definition

Resource URI: **{apiRoot}/eees-targeteasdiscovery/<apiVersion>/eas-profiles**

This resource shall support the resource URI variables defined in the table 8.a.2.2.2-1.

Table 8.a.2.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data Type | Definition |
| apiRoot | string | See clause 7.5 |
| apiVersion | string | See clause 8.a.1 |

##### 8.a.2.2.3 Resource Standard Methods

###### 8.a.2.2.3.1 GET

This method allows the S-EAS and S-EES to fetch the T-EAS information as specified in 3GPP TS 23.558 [2], from the EES with a given discovery filters. This method shall support the URI query parameters specified in table 8.a.2.2.3.1-1.

Table 8.a.2.2.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| TBD |  |  |  |  |

This method shall support the request data structures specified in table 8.a.2.2.3.1-2 and the response data structures and response codes specified in table 8.a.2.2.3.1-3.

Table 8.a.2.2.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Editor’s Note: Details of how the EAS security credentials are submitted in the HTTP GET message is FFS and to be updated based on security aspects defined by SA3.

Table 8.a.2.2.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TBD |  |  |  |  |
| NOTE: The manadatory HTTP error status code for the GET method listed in Table 5.2.6-1 of 3GPP TS 29.122 [6] also apply. | | | | |

Editor’s Note: The details of POST Request and Response body is FFS.

Table 8.a.2.2.3.1-4: Headers supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.a.2.2.3.1-5: Headers supported by the 200 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.a.2.2.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

##### 8.a.2.2.4 Resource Custom Operations

None.

### 8.a.3 Custom Operations without associated resources

None.

### 8.a.4 Notifications

None.

### 8.a.5 Data Model

#### 8.a.5.1 General

This clause specifies the application data model supported by the API. Data types listed in clause 7.2 apply to this API

Table 8.a.5.1-1 specifies the data types defined specifically for the Eees\_TargetEASDiscovery API service.

Table 8.a.5.1-1: Eees\_TargetEASDiscovery API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
|  |  |  |  |

Table 8.a.5.1-2 specifies data types re-used by the Eees\_TargetEASDiscovery API service.

Table 8.a.5.1-2: Re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
|  |  |  |  |

#### 8.a.5.2 Structured data types

Editor’s Note: The definition of structured data types is FFS

#### 8.a.5.3 Simple data types and enumerations

Editor’s Note: The definition of simple data types and enumerations is FFS.

### 8.a.6 Error Handling

General error responses are defined in clause 7.7.

### 8.a.7 Feature negotiation

General feature negotiation procedures are defined in clause 7.8. Table 8.a.7-1 lists the supported features for Eees\_TargetEASDiscovery API.

Table 8.a.7-1: Supported Features

|  |  |  |
| --- | --- | --- |
| **Feature number** | **Feature Name** | **Description** |
|  |  |  |

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