**3GPP TSG-CT WG3 Meeting #134 *C3-242382***

**Changsha, China, 15 - 19 April, 2024 Revision of C3-241319**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- |
|  |
| ***Title:***  | Definition of Eecs\_ECSServiceProvisioning service API  |
|  |  |
| ***Source to WG:*** | , Ericsson |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | To support the roaming and federation scenarios, ECS exposes Eecs\_ECSServiceProvisioning service API to allow retrieval and updates related to service provisioning information. This is specified by stage-2 in TS 23.558, clause 8.17. The stage-3 aspects of this API needs to be defined. |
|  |  |
| ***Summary of change:*** | This CR proposes, service operations descriptions, API data model and open API specification file for Eecs\_ECSServiceProvisioning API. |
|  |  |
| ***Consequences if not approved:*** | The stage-3 aspects of Eecs\_ECSServiceProvisioning API are unspecified. |
|  |  |
| ***Clauses affected:*** | 6.1, (new) 6.5 and its sub-clauses, (new) 9.4 and its sub-clauses, (new Annex) A.18 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR proposes backwards compatible new feature with a new OpenAPI description for Eecs\_ECSServiceProvisioning API in this specification. |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* \* Start of changes \* \* \* \*

## 6.1 Introduction

The table 6.1-1 lists the Edge Configuration Server APIs below the service name. A service description clause for each API gives a general description of the related API.

Table 6.1-1: List of ECS Service APIs

|  |  |  |  |
| --- | --- | --- | --- |
| Service Name | Service Operations | Operation Semantics | Consumer(s) |
| Eecs\_EESRegistration | Request | Request/Response | e.g., EES |
| Update | Request/Response | e.g., EES |
| Deregister | Request/Response | e.g., EES |
| Eecs\_TargetEESDiscovery(NOTE) | Request | Request/Response | e.g., EES, CES |
| Eecs\_EASInfoManagement | Get | Request/Response | EES |
| Store | Request/Response | EES |
| Eecs\_ECSServiceProvisioning | Request | Request/Response | e.g., ECS |
| Subscribe | Subscribe/Notify |
| UpdateSubscription |
| Unsubscribe |
| Notify |
| NOTE: In this release of the specification, this API is extended to enable to discover the target Enabler Server, which can be either the target EES or the target CES, not only the target EES, in order to support cloud enabler services. |

Table 6.1-2 summarizes the corresponding Edge Configuration Server APIs defined in this specification.

Table 6.1-2: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Name** | **Clause** | **Description** | **OpenAPI Specification File** | **apiName** | **Annex** |
| Eecs\_EESRegistration | 9.1 | ECS EES registration service. | TS29558\_Eecs\_EESRegistration.yaml | eecs-eesregistration | A.11 |
| Eecs\_TargetEESDiscovery | 9.2 | ECS Service to discover the target EES information. | TS29558\_Eecs\_TargetEESDiscovery.yaml | eecs-targeteesdiscovery | A.12 |
| Eecs\_EASInfoManagement | 9.3 | ECS EAS Information Management Service. | TS29558\_Eecs\_EASInfoManagement.yaml | eecs-eim | A.16 |
| Eecs\_ECSServiceProvisioning | 9.4 | ECS Service Provisioning Service | TS29558\_Eecs\_ECSServiceProvisioning.yaml | eecs-esp | A.18 |

\* \* \* \* Next change \* \* \* \*

## 6.5 Eecs\_ECSServiceProvisioning

### 6.5.1 Service Description

The Eecs\_ECSServiceProvisioning service exposed by the ECS (e.g., partner ECS) enables a service consumer (e.g., ECS) to:

- request to retrieve service provisioning information;

- create/update/delete a service provisioning subscription; and

- receive service provisioning event(s) related notifications.

This API shall be exposed by an ECS (e.g., partner ECS) only in roaming or federation scenarios.

#### 6.5.2.1 Introduction

The service operations defined for the Eecs\_ECSServiceProvisioning service are shown in table 6.5.2.1-1.

Table 6.5.2.1-1: Eecs\_ECSServiceProvisioning Service Operations

|  |  |  |
| --- | --- | --- |
| Service Operation Name | Description | Initiated by |
| Eecs\_ECSServiceProvisioning\_Request | This service operation enables a service consumer to request to retrieve service provisioning information from the partner ECS. | e.g., ECS |
| Eecs\_ECSServiceProvisioning\_Subscribe | This service operation enables a service consumer to request the creation of a Service Provisioning Subscription at the partner ECS. | e.g., ECS |
| Eecs\_ECSServiceProvisioning\_UpdateSubscription | This service operation enables a service consumer to request the update of an existing Service Provisioning Subscription at the partner ECS. | e.g., ECS |
| Eecs\_ECSServiceProvisioning\_Unsubscribe | This service operation enables a service consumer to request the deletion of an existing Service Provisioning Subscription at the partner ECS. | e.g., ECS |
| Eecs\_ECSServiceProvisioning\_Notify | This service operation enables a service consumer to receive service provisioning event(s) related notifications from the partner ECS. | ECS |

#### 6.5.2.2 Eecs\_ECSServiceProvisioning\_Request

##### 6.5.2.2.1 General

This service operation is used by a service consumer to request to retrieve service provisioning information from the ECS.

The following procedures are supported by the "Eecs\_ECSServiceProvisioning\_Request" service operation:

- Service Provisioning Information Retrieval Request.

##### 6.5.2.2.2 Service Provisioning Information Retrieval Request

This procedure enables a service consumer to send a request to the ECS to request to retrieve service provisioning information (see also clause 8.17 of 3GPP°TS°23.558°[2]).

1. In order to request to retrieve service provisioning information, the service consumer shall send an HTTP POST request to the ECS targeting the URI of the corresponding custom operation (i.e., "Request"), with the request body including the ServProvReq data structure.

2a. Upon success, the ECS shall respond with an HTTP "200 OK" status code with the response body containing the requested service provisioning information within the ServProvResp data structure.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 9.4.7.

#### 6.5.2.3 Eecs\_ECSServiceProvisioning\_Subscribe

##### 6.5.2.3.1 General

This service operation is used by a service consumer to request the creation of a Service Provisioning Subscription at the ECS.

The following procedures are supported by the "Eecs\_ECSServiceProvisioning\_Subscribe" service operation:

- Service Provisioning Subscription Creation.

##### 6.5.2.3.2 Service Provisioning Subscription Creation

This procedure enables a service consumer to send a request to the ECS to request the creation of a Service Provisioning Subscription (see also clause 8.17 of 3GPP°TS°23.558°[2]).

1. In order to create a new Service Provisioning Subscription, the service consumer shall send an HTTP POST request to the ECS targeting the URI of the "Service Provisioning Subscriptions" collection resource, with the request body including the ServProvSubsc data structure.

2a. Upon success, the ECS shall respond with an HTTP "201 Created" status code, with the response body containing a representation of the created "Individual Service Provisioning Subscription" resource within the ServProvSubsc data structure, and an HTTP "Location" header field containing the URI of the created resource.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 9.4.7.

#### 6.5.2.4 Eecs\_ECSServiceProvisioning\_UpdateSubscription

##### 6.5.2.4.1 General

This service operation is used by a service consumer to request the update of an existing Service Provisioning Subscription at the ECS.

The following procedures are supported by the "Eecs\_ECSServiceProvisioning\_UpdateSubscription" service operation:

- Service Provisioning Subscription Update.

##### 6.5.2.4.2 Service Provisioning Subscription Update

This procedure enables a service consumer to send a request to the ECS to request the update of an existing Service Provisioning Subscription (see also clause 8.17 of 3GPP°TS°23.558°[2]).

1. In order to request the update of an existing Service Provisioning Subscription, the service consumer shall send an HTTP PUT/PATCH request to the ECS, targeting the URI of the corresponding "Individual Service Provisioning Subscription" resource, with the request body including either:

- the updated representation of the resource within the ServProvSubsc data structure, in case the HTTP PUT method is used; or

- the requested modifications to the resource within the ServProvSubscPatch data structure, in case the HTTP PATCH method is used.

2a. Upon success, the ECS shall update the targeted "Individual Service Provisioning Subscription" resource accordingly and respond with either:

- an HTTP "200 OK" status code with the response body containing a representation of the updated "Individual Service Provisioning Subscription" resource within the ServProvSubsc data structure; or

- an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP PUT/PATCH response body, as specified in clause 9.4.7.

#### 6.5.2.5 Eecs\_ECSServiceProvisioning\_Unsubscribe

##### 6.5.2.5.1 General

This service operation is used by a service consumer to request the deletion of an existing Service Provisioning Subscription at the ECS.

The following procedures are supported by the "Eecs\_ECSServiceProvisioning\_Unsubscribe" service operation:

- Service Provisioning Subscription Deletion.

##### 6.5.2.5.2 Service Provisioning Subscription Deletion

This procedure enables a service consumer to send a request to the ECS to request the deletion of an existing Service Provisioning Subscription (see also clause 8.17 of 3GPP°TS°23.558°[2]).

1. In order to request the deletion of an existing Service Provisioning Subscription, the service consumer shall send an HTTP DELETE request to the ECS targeting the corresponding "Individual Service Provisioning Subscription" resource.

2a. Upon success, the ECS shall respond with an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP DELETE response body, as specified in clause 9.4.7.

#### 6.5.2.6 Eecs\_ECSServiceProvisioning\_Notify

##### 6.5.2.6.1 General

This service operation is used by an ECS to notify a previously subscribed service consumer on:

- service provisioning related event(s).

The following procedures are supported by the "Eecs\_ECSServiceProvisioning\_Notify" service operation:

- Service Provisioning Notification.

##### 6.5.2.6.2 Service Provisioning Notification

This procedure enables the ECS to send a request to notify a previously subscribed service consumer on service provisioning related event(s) (see also clause 8.17 of 3GPP°TS°23.558°[2]).

1. In order to notify a previously subscribed service consumer on service provisioning related event(s), the ECS shall send an HTTP POST request to the service consumer with the request URI set to "{notifUri}", where the "notifUri" is set to the value received from the service consumer during the creation/update of the corresponding Service Provisioning Subscription using the procedures defined in clauses 6.5.2.3 and 6.5.2.4, and the request body including the ServProvNotif data structure.

2a. Upon success, the service consumer shall respond to the ECS with an HTTP "204 No Content" status code to acknowledge the successful reception and processing of the notification.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 9.4.7.

\* \* \* \* Next change \* \* \* \*

## 9.4 Eecs\_ECSServiceProvisioning API

### 9.4.1 Introduction

The Eecs\_ECSServiceProvisioning service shall use the Eecs\_ECSServiceProvisioning API.

The API URI of the Eecs\_ECSServiceProvisioning Service API shall be:

**{apiRoot}/<apiName>/<apiVersion>**

The request URIs used in HTTP requests shall have the Resource URI structure defined in clause 5.2.4 of 3GPP TS 29.122 [6], i.e.:

**{apiRoot}/<apiName>/<apiVersion>/<apiSpecificSuffixes>**

with the following components:

- The {apiRoot} shall be set as described in clause 5.2.4 of 3GPP TS 29.122 [6].

- The <apiName>shall be "eecs-esp".

- The <apiVersion> shall be "v1".

- The <apiSpecificSuffixes> shall be set as described in clause 5.2.4 of 3GPP TS 29.122 [6].

NOTE: When 3GPP TS 29.122 [6] is referenced for the common protocol and interface aspects for API definition in the clauses under clause 9.4, the ECS takes the role of the SCEF and the service consumer takes the role of the SCS/AS.

### 9.4.2 Usage of HTTP

The provisions of clause 5.2 of 3GPP TS 29.122 [6] shall apply for the Eecs\_ECSServiceProvisioning API.

### 9.4.3 Resources

#### 9.4.3.1 Overview

This clause describes the structure for the Resource URIs and the resources and methods used for the service.

Figure 9.4.3.1-1 depicts the resource URIs structure for the Eecs\_ECSServiceProvisioning API.



Figure 9.4.3.1-1: Resource URIs structure of the Eecs\_ECSServiceProvisioning API

Table 9.4.3.1-1 provides an overview of the resources and applicable HTTP methods for the Eecs\_ECSServiceProvisioning API.

Table 9.4.3.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| Service Provisioning Subscriptions | /subscriptions | POST | Request the creation of a Service Provisioning Subscription. |
| Individual Service Provisioning Subscription | /sbscriptions/{subscId} | GET | Retrieve an existing "Individual Service Provisioning Subscription" resource. |
| PUT | Request the update of an existing "Individual Service Provisioning Subscription" resource. |
| PATCH | Request the modification of an existing "Individual Service Provisioning Subscription" resource. |
| DELETE | Request the deletion of an existing "Individual Service Provisioning Subscription" resource. |

#### 9.4.3.2 Resource: Service Provisioning Subscriptions

##### 9.4.3.2.1 Description

This resource represents the collection of Service Provisioning Subscriptions managed by the ECS.

##### 9.4.3.2.2 Resource Definition

Resource URI: **{apiRoot}/eecs-esp/<apiVersion>/subscriptions**

This resource shall support the resource URI variables defined in table 9.4.3.2.2-1.

Table 9.4.3.2.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 9.4.1. |

##### 9.4.3.2.3 Resource Standard Methods

###### 9.4.3.2.3.2 POST

The HTTP POST method allows a service consumer to request the creation of a Service Provisioning Subscription at the ECS.

This method shall support the URI query parameters specified in table 9.4.3.2.3.2-1.

Table 9.4.3.2.3.2-1: URI query parameters supported by the POST method on this resource

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

This method shall support the request data structures specified in table 9.4.3.2.3.2-2 and the response data structures and response codes specified in table 9.4.3.2.3.2-3.

Table 9.4.3.2.3.2-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServProvSubsc | M | 1 | Represents the parameters to request the creation of a Service Provisioning Subscription. |

Table 9.4.3.2.3.2-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServProvSubsc | M | 1 | 201 Created | Successful case. The Service Provisioning Subscription is successfully created and a representation of the created "Individual Service Provisioning Subscription" resource shall be returned.An HTTP "Location" header that contains the URI of the created resource shall also be included. |
| NOTE: The mandatory HTTP error status codes for the HTTP POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.3.2.3.2-4: Headers supported by the 201 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains the URI of the newly created resource, according to the structure:{apiRoot}/eecs-esp/<apiVersion>/subscriptions/{subscId} |

##### 9.4.3.2.4 Resource Custom Operations

There are no resource custom operations defined for this resource in this release of the specification.

#### 9.4.3.3 Resource: Individual Service Provisioning Subscription

##### 9.4.3.3.1 Description

This resource represents a Service Provisioning Subscription managed by the ECS.

##### 9.4.3.3.2 Resource Definition

Resource URI: **{apiRoot}/eecs-esp/<apiVersion>/subscriptions/{subscId}**

This resource shall support the resource URI variables defined in table 9.4.3.3.2-1.

Table 9.4.3.3.2-1: Resource URI variables for this resource

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 9.4.1. |
| subscId | string | Represents the identifier of the "Individual Service Provisioning Subscription" resource. |

##### 9.4.3.3.3 Resource Standard Methods

###### 9.4.3.3.3.1 GET

The HTTP GET method allows a service consumer to retrieve an existing "Individual Service Provisioning Subscription" resource at the ECS.

This method shall support the URI query parameters specified in table 9.4.3.3.3.1-1.

Table 9.4.3.3.3.1-1: URI query parameters supported by the GET method on this resource

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

This method shall support the request data structures specified in table 9.4.3.3.3.1-2 and the response data structures and response codes specified in table 9.4.3.3.3.1-3.

Table 9.4.3.3.3.1-2: Data structures supported by the GET Request Body on this resource

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

Table 9.4.3.3.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServProvSubsc | M | 1 | 200 OK | Successful case. The requested "Individual Service Provisioning Subscription" resource shall be returned. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status codes for the HTTP GET method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.3.3.3.1-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

Table 9.4.3.3.3.1-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

###### 9.4.3.3.3.2 PUT

The HTTP PUT method allows a service consumer to request the update of an existing "Individual Service Provisioning Subscription" resource at the ECS.

This method shall support the URI query parameters specified in table 9.4.3.3.3.2-1.

Table 9.4.3.3.3.2-1: URI query parameters supported by the PUT method on this resource

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

This method shall support the request data structures specified in table 9.4.3.3.3.2-2 and the response data structures and response codes specified in table 9.4.3.3.3.2-3.

Table 9.4.3.3.3.2-2: Data structures supported by the PUT Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServProvSubsc | M | 1 | Represents the updated representation of the "Individual Service Provisioning Subscription" resource. |

Table 9.4.3.3.3.2-3: Data structures supported by the PUT Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServProvSubsc | M | 1 | 200 OK | Successful case. The "Individual Service Provisioning Subscription" resource is successfully updated and a representation of the updated resource shall be returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The "Individual Service Provisioning Subscription" resource is successfully updated and no content is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status codes for the HTTP PUT method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.3.3.3.2-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

Table 9.4.3.3.3.2-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

###### 9.4.3.3.3.3 PATCH

The HTTP PATCH method allows a service consumer to request the modification of an existing "Individual Service Provisioning Subscription" resource at the ECS.

This method shall support the URI query parameters specified in table 9.4.3.3.3.3-1.

Table 9.4.3.3.3.3-1: URI query parameters supported by the PATCH method on this resource

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

This method shall support the request data structures specified in table 9.4.3.3.3.3-2 and the response data structures and response codes specified in table 9.4.3.3.3.3-3.

Table 9.4.3.3.3.3-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServProvSubscPatch | M | 1 | Represents the parameters to request the modification of the "Individual Service Provisioning Subscription" resource. |

Table 9.4.3.3.3.3-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServProvSubsc | M | 1 | 200 OK | Successful case. The "Individual Service Provisioning Subscription" resource is successfully modified and a representation of the updated resource shall be returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The "Individual Service Provisioning Subscription" resource is successfully modified and no content is returned in the response body. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status codes for the HTTP PATCH method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.3.3.3.3-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

Table 9.4.3.3.3.3-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

###### 9.4.3.3.3.4 DELETE

The HTTP DELETE method allows a service consumer to request the deletion of an existing "Individual Service Provisioning Subscription" resource at the ECS.

This method shall support the URI query parameters specified in table 9.4.3.3.3.4-1.

Table 9.4.3.3.3.4-1: URI query parameters supported by the DELETE method on this resource

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

This method shall support the request data structures specified in table 9.4.3.3.3.4-2 and the response data structures and response codes specified in table 9.4.3.3.3.4-3.

Table 9.4.3.3.3.4-2: Data structures supported by the DELETE Request Body on this resource

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

Table 9.4.3.3.3.4-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| n/a |  |  | 204 No Content | Successful case. The "Individual Service Provisioning Subscription" resource is successfully deleted. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative URI of the resource located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status codes for the HTTP DELETE method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.3.3.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

Table 9.4.3.3.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative ECS. |

### 9.4.4 Custom Operations without associated resources

#### 9.4.4.1 Overview

The structure of the custom operation URIs of the Eecs\_ECSServiceProvisioning API is shown in Figure 9.4.4.1-1.



Figure 9.4.4.1-1: Custom operation URI structure of the Eecs\_ECSServiceProvisioning API

Table 9.4.4.1-1 provides an overview of the custom operations and applicable HTTP methods defined for the Eecs\_ECSServiceProvisioning API.

Table 9.4.4.1-1: Custom operations without associated resources

|  |  |  |  |
| --- | --- | --- | --- |
| Custom operation name | Custom operation URI | Mapped HTTP method | Description |
| Request | /request | POST | Enables a service consumer to request service provisioning information. |

The custom operations shall support the URI variables defined in table 9.4.4.1-2.

Table 9.4.4.1-2: URI variables for this custom operation

|  |  |  |
| --- | --- | --- |
| Name | Data type | Definition |
| apiRoot | string | See clause 9.4.1. |

#### 9.4.4.2 Operation: Request

##### 9.4.4.2.1 Description

The custom operation enables a service consumer to request service provisioning information to the ECS.

##### 9.4.4.2.2 Operation Definition

This operation shall support the request data structures specified in table 9.4.4.2.2-1 and the response data structures and response codes specified in table 9.4.4.2.2-2.

Table 9.4.4.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServProvReq | M | 1 | Contains the parameters to request service provisioning information. |

Table 9.4.4.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| ServProvResp | M | 1 | 200 OK | Successful case. The requested service provisioning information shall be returned in the response body. |
| n/a |  |  | 204 No Content | Successful case. The requested service provisioning information does not exist. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative target URI located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative target URI located in an alternative ECS.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6] |
| NOTE: The mandatory HTTP error status codes for the HTTP POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.4.2.2-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative target URI located in an alternative ECS. |

Table 9.4.4.2.2-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative target URI located in an alternative ECS. |

### 9.4.5 Notifications

#### 9.4.5.1 General

Notifications shall comply to clause 5.2.5 of 3GPP TS 29.122 [6].

Table 9.4.5.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description(service operation) |
| Service Provisioning Notification | {notifUri} | POST | This service operation enables an ECS to notify a previously subscribed service consumer on service provisioning event(s). |

#### 9.4.5.2 Service Provisioning Notification

##### 9.4.5.2.1 Description

The Service Provisioning Notification is used by the ECS to notify a previously subscribed service consumer on service provisioning event(s).

##### 9.4.5.2.2 Target URI

The Callback URI **"{notifUri}"** shall be used with the callback URI variables defined in table 9.4.5.2.2-1.

Table 9.4.5.2.2-1: Callback URI variables

|  |  |
| --- | --- |
| Name | Definition |
| notifUri | Represents the callback URI encoded as a string formatted as a URI. |

##### 9.4.5.2.3 Standard Methods

9.4.5.2.3.1 POST

This method shall support the request data structures specified in table 9.4.5.2.3.1-1 and the response data structures and response codes specified in table 9.4.5.2.3.1-2.

Table 9.4.5.2.3.1-1: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ServProvNotif | M | 1 | Represents the Service Provisioning Notification. |

Table 9.4.5.2.3.1-2: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | Successful case. The Service Provisioning Notification is successfully received and processed. |
| n/a |  |  | 307 Temporary Redirect | Temporary redirection.The response shall include a Location header field containing an alternative URI representing the end point of an alternative service consumer where the notification should be sent.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| n/a |  |  | 308 Permanent Redirect | Permanent redirection.The response shall include a Location header field containing an alternative URI representing the end point of an alternative service consumer where the notification should be sent.Redirection handling is described in clause 5.2.10 of 3GPP TS 29.122 [6]. |
| NOTE: The mandatory HTTP error status codes for the HTTP POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [6] shall also apply. |

Table 9.4.5.2.3.1-3: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI representing the end point of an alternative service consumer towards which the notification should be redirected. |

Table 9.4.5.2.3.1-4: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI representing the end point of an alternative service consumer towards which the notification should be redirected. |

### 9.4.6 Data Model

#### 9.4.6.1 General

This clause specifies the application data model supported by the API.

Table 9.4.6.1-1 specifies the data types defined for the Eecs\_ECSServiceProvisioning API.

Table 9.4.6.1-1: Eecs\_ECSServiceProvisioning API specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| FederationInfo | 9.4.6.2.7 | Represents federation agreements related information. |  |
| ServProvNotif | 9.4.6.2.6 | Represents a Service Provisioning Notification. |  |
| ServProvReq | 9.4.6.2.2 | Represents a Service Provisioning information retrieval request. |  |
| ServProvResp | 9.4.6.2.3 | Represents a Service Provisioning information retrieval response. |  |
| ServProvSubsc | 9.4.6.2.4 | Represents a Service Provisioning Subscription. |  |
| ServProvSubscPatch | 9.4.6.2.5 | Represents the requested modifications to a Service Provisioning Subscription. |  |

Table 9.4.6.1-2 specifies data types re-used by the Eecs\_ECSServiceProvisioning API from other specifications, including a reference to their respective specifications, and when needed, a short description of their use within the Eecs\_ECSServiceProvisioning API.

Table 9.4.6.1-2: Eecs\_ECSServiceProvisioning API re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| ACProfile | 3GPP TS 24.558 [14] | Represents an AC profile. |  |
| ConnectivityInfo | 3GPP TS 24.558 [14] | Represents connectivity information. |  |
| DateTime | 3GPP TS 29.122 [6] | Represents a date and a time. |  |
| DurationSec | 3GPP TS 29.122 [6] | Represents a time duration in seconds. |  |
| EDNConfigInfo | 3GPP TS 24.558 [14] | Represents EDN related configuration information. |  |
| LocationInfo | 3GPP TS 29.122 [6] | Represents location information. |  |
| SupportedFeatures | 3GPP TS 29.571 [18] | Represents the list of supported feature(s) and used to negotiate the applicability of the optional features. |  |
| Uri | 3GPP TS 29.122 [6] | Represents a time duration. |  |

#### 9.4.6.2 Structured data types

##### 9.4.6.2.1 Introduction

This clause defines the data structures to be used in resource representations.

##### 9.4.6.2.2 Type: ServProvReq

Table 9.4.6.2.2-1: Definition of type ServProvReq

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| federationInfo | array(FederationInfo) | O | 1..N | Contains list of federation agreements related information. |  |
| acProfs | array(ACProfile) | O | 1..N | Contains the AC profile(s) information indicating the required service(s). |  |
| connInfo | array(ConnectivityInfo) | O | 1..N | Contains the set(s) of connectivity information where the services are required. |  |
| locInfo | LocationInfo | O | 0..1 | Contains the location information of the concerned UE. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features among the ones defined in clause 9.4.8.This attribute shall be present only when feature negotiation needs to take place. |  |

##### 9.4.6.2.3 Type: ServProvResp

Table 9.4.6.2.3-1: Definition of type ServProvResp

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| ednConfigInfo | array(EDNConfigInfo) | M | 1..N | Contains the list of EDN configuration information.  |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features among the ones defined in clause 9.4.8.This attribute shall be present only when feature negotiation needs to take place. |  |

##### 9.4.6.2.4 Type: ServProvSubsc

Table 9.4.6.2.4-1: Definition of type ServProvSubsc

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| notifUri | Uri | M | 1 | Contains the URI via which the service provisioning event(s) notifications shall be delivered. |  |
| federationInfo | array(FederationInfo) | O | 1..N | Contains list of federation agreements related information. |  |
| acProfs | array(ACProfile) | O | 1..N | Contains the AC profile(s) information indicating the required service(s). |  |
| connInfo | array(ConnectivityInfo) | O | 1..N | Contains the set(s) of connectivity information where the services are required. |  |
| locInfo | LocationInfo | O | 0..1 | Contains the location information of the concerned UE. |  |
| expTime | DateTime | O | 0..1 | Contains the expiration time of the subscription.If this attribute is not present, this means that the subscription does not expires until explicitly terminated by the service consumer. |  |
| suppFeat | SupportedFeatures | C | 0..1 | Contains the list of supported features among the ones defined in clause 9.4.8.This attribute shall be present only when feature negotiation needs to take place. |  |

##### 9.4.6.2.5 Type: ServProvSubscPatch

Table 9.4.6.2.5-1: Definition of type ServProvSubscPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| notifUri | Uri | O | 0..1 | Contains the updated URI via which the service provisioning event(s) notifications shall be delivered. |  |
| federationInfo | array(FederationInfo) | O | 1..N | Contains the updated list of federation agreements related information. |  |
| acProfs | array(ACProfile) | O | 1..N | Contains the updated AC profile(s) information indicating the required services. |  |
| connInfo | array(ConnectivityInfo) | O | 1..N | Contains the updated set(s) of connectivity information where the services are required. |  |
| locInfo | LocationInfo | O | 0..1 | Contains the updated location information of the concerned UE. |  |
| expTime | DateTime | O | 0..1 | Contains the updated expiration time of the subscription. |  |

##### 9.4.6.2.6 Type: ServProvNotif

Table 9.4.6.2.6-1: Definition of type ServProvNotif

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| subscId | string | M | 1 | Contains the identifier of the subscription to which the notification is related. |  |
| ednConfigInfo | array(EDNConfigInfo) | M | 1..N | Contains the list of EDN configuration information.  |  |
| lifetime | DurationSec | O | 0..1 | Contains the time duration that the the provided EDN configuration information can be cached. |  |

##### 9.4.6.2.7 Type: FederationInfo

Table 9.4.6.2.7-1: Definition of type FederationInfo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| federationId | string | M | 1 | Contains the identifier of the federation.  |  |
| prefEcspIds | array(string) | O | 1..N | The list of ECSPs preferred by the ECS. |  |

#### 9.4.6.3 Simple data types and enumerations

##### 9.4.6.3.1 Introduction

This clause defines simple data types and enumerations that can be referenced from data structures defined in the previous clauses.

##### 9.4.6.3.2 Simple data types

The simple data types defined in table 9.4.6.3.2-1 shall be supported.

Table 9.4.6.3.2-1: Simple data types

|  |  |  |  |
| --- | --- | --- | --- |
| Type Name | Type Definition | Description | Applicability |
|  |  |  |  |

#### 9.4.6.4 Data types describing alternative data types or combinations of data types

There are no data types describing alternative data types or combinations of data types defined for this API in this release of the specification.

#### 9.4.6.5 Binary data

##### 9.4.6.5.1 Binary Data Types

Table 9.4.6.5.1-1: Binary Data Types

|  |  |  |
| --- | --- | --- |
| Name | Clause defined | Content type |
|  |  |  |

### 9.4.7 Error Handling

#### 9.4.7.1 General

For the Eecs\_ECSServiceProvisioning API, HTTP error responses shall be supported as specified in clause 5.2.6 of 3GPP TS 29.122 [6]. Protocol errors and application errors specified in clause 5.2.6 of 3GPP TS 29.122 [6] shall be supported for the HTTP status codes specified in table 5.2.6-1 of 3GPP TS 29.122 [6].

In addition, the requirements in the following clauses are applicable for the Eecs\_ECSServiceProvisioning API.

#### 9.4.7.2 Protocol Errors

No specific protocol errors for the Eecs\_ECSServiceProvisioning API are specified.

#### 9.4.7.3 Application Errors

The application errors defined for the Eecs\_ECSServiceProvisioning API are listed in Table 9.4.7.3-1.

Table 9.4.7.3-1: Application errors

|  |  |  |  |
| --- | --- | --- | --- |
| Application Error | HTTP status code | Description | Applicability |
|  |  |  |  |

### 9.4.8 Feature negotiation

The optional features listed in table 9.4.8-1 are defined for the Eecs\_ECSServiceProvisioning API. They shall be negotiated using the extensibility mechanism defined in clause 5.2.7 of 3GPP TS 29.122 [6].

Table 9.4.8-1: Supported Features

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

### 9.4.9 Security

The provisions of clause 6 of 3GPP TS 29.122 [6] shall apply for the Eecs\_ECSServiceProvisioning API.

\* \* \* \* Next change \* \* \* \*

# A.18 Eecs\_ECSServiceProvisioning API

openapi: 3.0.0

info:

 title: ECS Service Provisioning Service

 version: 1.0.0-alpha.1

 description: |

 ECS Service Provisioning Service.

 © 2024, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

externalDocs:

 description: >

 3GPP TS 29.558 V18.6.0; Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.558/

servers:

 - url: '{apiRoot}/eecs-esp/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /request:

 post:

 summary: Enables to request service provisioning information.

 operationId: ServProvRetReq

 tags:

 - Service Provisioning Information Retrieval Request

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvReq'

 responses:

 '200':

 description: >

 OK. The requested service provisioning information shall be returned in the response

 body.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvResp'

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /subscriptions:

 post:

 summary: Request the creation of a Service Provisioning Subscription.

 operationId: CreateServProvSubsc

 tags:

 - Service Provisioning Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 responses:

 '201':

 description: >

 Created. The Service Provisioning Subscription is successfully created and a

 representation of the created Individual Service Provisioning Subscription resource

 shall be returned.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 headers:

 Location:

 description: >

 Contains the URI of the created Individual Service Provisioning Subscription

 resource.

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 callbacks:

 ServProvNotif:

 '{$request.body#/notifUri}':

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvNotif'

 responses:

 '204':

 description: >

 No Content. The Service Provisioning Notification is successfully received and

 acknowledged.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscId}:

 parameters:

 - name: subscId

 in: path

 description: >

 Represents the identifier of the Individual Service Provisioning Subscription resource.

 required: true

 schema:

 type: string

 get:

 summary: Retrieve an existing Individual Service Provisioning Subscription resource.

 operationId: GetIndServProvSubsc

 tags:

 - Individual Service Provisioning Subscription (Document)

 responses:

 '200':

 description: >

 OK. The requested Individual Service Provisioning Subscription resource shall be

 returned.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 put:

 summary: Request the update of an existing Individual Service Provisioning Subscription resource.

 operationId: UpdateIndServProvSubsc

 tags:

 - Individual Service Provisioning Subscription (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 responses:

 '200':

 description: >

 OK. The Individual Service Provisioning Subscription resource is successfully updated

 and a representation of the updated resource shall be returned in the response body.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 '204':

 description: >

 No Content. The Individual Service Provisioning Subscription resource is successfully

 updated and no content is returned in the response body.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 patch:

 summary: Request the modification of an existing Individual Service Provisioning Subscription resource.

 operationId: ModifyIndServProvSubsc

 tags:

 - Individual Service Provisioning Subscription (Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

 $ref: '#/components/schemas/ServProvSubscPatch'

 responses:

 '200':

 description: >

 OK. The Individual Service Provisioning Subscription resource is successfully modified

 and a representation of the updated resource shall be returned in the response body.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/ServProvSubsc'

 '204':

 description: >

 No Content. The Individual Service Provisioning Subscription resource is successfully

 modified and no content is returned in the response body.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

 delete:

 summary: Request the deletion of an existing Individual Service Provisioning Subscription resource.

 operationId: DeleteIndServProvSubsc

 tags:

 - Individual Service Provisioning Subscription (Document)

 responses:

 '204':

 description: >

 No Content. The Individual Service Provisioning Subscription resource is successfully

 deleted.

 '307':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/500'

 '503':

 $ref: 'TS29122\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

#

# STRUCTURED DATA TYPES

#

 ServProvReq:

 description: >

 Represents a Service Provisioning information retrieval request.

 type: object

 properties:

 federationInfo:

 $ref: '#/components/schemas/FederationInfo'

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 minItems: 1

 connInfo:

 type: array

 items:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/ConnectivityInfo'

 minItems: 1

 locInfo:

 $ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/LocationInfo'

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 ServProvResp:

 description: >

 Represents a Service Provisioning information retrieval response.

 type: object

 properties:

 ednConfigInfo:

 type: array

 items:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/EDNConfigInfo'

 minItems: 1

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 required:

 - ednConfigInfo

 ServProvSubsc:

 description: >

 Represents a Service Provisioning Subscription.

 type: object

 properties:

 notifUri:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 federationInfo:

 $ref: '#/components/schemas/FederationInfo'

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 minItems: 1

 connInfo:

 type: array

 items:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/ConnectivityInfo'

 minItems: 1

 locInfo:

 $ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/LocationInfo'

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 suppFeat:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

 required:

 - notifUri

 ServProvSubscPatch:

 description: >

 Represents the requested modifications to a Service Provisioning Subscription.

 type: object

 properties:

 notifUri:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

 federationInfo:

 $ref: '#/components/schemas/FederationInfo'

 acProfs:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EECRegistration.yaml#/components/schemas/ACProfile'

 minItems: 1

 connInfo:

 type: array

 items:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/ConnectivityInfo'

 minItems: 1

 locInfo:

 $ref: 'TS29122\_MonitoringEvent.yaml#/components/schemas/LocationInfo'

 expTime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

 ServProvNotif:

 description: >

 Represents a Service Provisioning Notification.

 type: object

 properties:

 subscId:

 type: string

 ednConfigInfo:

 type: array

 items:

 $ref: 'TS24558\_Eecs\_ServiceProvisioning.yaml#/components/schemas/EDNConfigInfo'

 minItems: 1

 lifetime:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/DurationSec'

 required:

 - subscId

 - ednConfigInfo

 FederationInfo:

 description: >

 Represents federation agreements related information.

 type: object

 properties:

 federationId:

 type: string

 prefEcspIds:

 items:

 type: string

 minItems: 1

 description: The list of ECSPs preferred by the ECS..

 required:

 - federationId

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

\* \* \* \* End of changes \* \* \* \*