**3GPP TSG CT WG3 Meeting #137 *C3-245451***

**Hefei, CN, 14 - 18 October, 2024** (Revision of C3-245234)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **558** | **CR** |  | **rev** | **1** | **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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Application group profile – end to end response time | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | EDGEAPP\_Ph3 | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | 9 |
|  | *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 can be 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:*** | | As per stage-2, the application group profile consists of end to end response time. There are no related editor notes in stage-2 for end to end response time attribute. The AppGrpProfile datatype needs to updated with end to end response time. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add end to end response time for AppGrpProfile data type. Related updates in Open API file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | End to end response time not supported for application group profile, aligning to stage-2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.4.6.1, 9.4.6.2.9, 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 backward compatible feature to Eecs\_ECSServiceProvisioning Open API file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 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 |
| AppGrpProfile | 9.4.6.2.9 | Represents the application group profile. | EdgeApp\_3 |
| AppInfo | 9.4.6.2.8 | Represents the application information. | EdgeApp\_3 |
| 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. |  |
| GeographicArea | 3GPP TS 29.572 [11] | Represents the geographical information. | EdgeApp\_3 |
| 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. |  |
| Uinteger | 3GPP TS 29.571 [8] | Represents the end to end response time. | EdgeApp\_3 |
| Uri | 3GPP TS 29.122 [6] | Represents a time duration. |  |

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

##### 9.4.6.2.9 Type: AppGrpProfile

Table 9.4.6.2.9-1: Definition of type AppGrpProfile

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| appGrpId | string | M | 1 | Contains the targeted application group identifier. |  |
| e2eRespTime | Uinteger | O | 0..1 | Contains the required response time for end to end communications between ACs one two UEs via EAS(s), expressed in units of milliseconds. |  |
| easId | string | M | 1 | Contains the identifier of the EAS. |  |
| expGeoAreas | array(GeographicArea) | O | 0..1 | Contains the expected location(s) (e.g., route) of the group of UE(s) during the AC's operation schedule. |  |

Editor's note: The contents of the AppGrpProfile data type is FFS depends on SA6 to resolve the related editor's notes.

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

# A.18 Eecs\_ECSServiceProvisioning API

openapi: 3.0.0

info:

title: ECS Service Provisioning Service

version: 1.1.0-alpha.1

description: |

ECS Service Provisioning Service.

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externalDocs:

description: >

3GPP TS 29.558 V19.0.0; 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

appInfos:

type: array

items:

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

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

required:

- federationId

AppInfo:

description: >

Represents the application informations.

type: object

properties:

acProf:

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

appGrpProf:

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

required:

- acProf

AppGrpProfile:

description: >

Represents application group profile.

type: object

properties:

appGrpId:

type: string

e2eRespTime:

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

easId:

type: string

expGeoAreas:

type: array

items:

$ref: 'TS29572\_Nlmf\_Location.yaml#/components/schemas/GeographicArea'

minItems: 1

description: A list of geographic area information.

required:

- appGrpId

- easId

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

\* \* \* \* End of Change \* \* \* \*