**3GPP TSG-CT WG3 Meeting #****125 C3-225243\_r1**

**Toulouse, France, 14th - 18th, November, 2022**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.558** | **CR** | **0029** | **rev** | **-** | **Current version:** | **17.1.0** |  |
|  |
| *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:***  | Adding operationId and tags fields |
|  |  |
| ***Source to WG:*** | Ericsson, Samsung Electronics Co., Ltd |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | NBI18 |  | ***Date:*** | 2022-11-01 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | TS 29.122 specifies in:* clause 5.2.9.13 that to each service operation defined in an OpenAPI specification file should be assigned operation identifier (included in the "operationId" field). In accordance with the OpenAPI 3.0.0 Specification each "operationId" field must be unique among all operations described in the API.
* clause 5.2.9.14 that all HTTP operations belonging to the same resource should include a "tags" field containing the same value, briefly describing that resource.

Since the "operationId" and "tags" fields are missing from the OpenAPI files of the Eees\_EASRegistration, Eees\_UELocation, Eees\_AppClientInformation, Eees\_SessionWithQoS, Eees\_ACRManagementEvent, Eees\_EECContextRelocation, Eecs\_EESRegistration and Eecs\_TargetEESDiscovery APIs they need to be added.Also, "summary" fields with a short summary what each operation does as shown in examples from TS 29.122, clauses 5.2.9.13 and 5.2.9.14, should also be added.Furthermore, the OpenAPI file of the Eees\_SessionWithQoS API contains unbreakable spaces.As specified in clause 5.2.9.2 of TS 29.122, unbreakable spaces should not be used in the OpenAPI file and they need to be removed. Also, the reference identity of TS 29.122 has no meaning in the OpenAPI file and should be removed. |
|  |  |
| ***Summary of change:*** | Clauses A.2, A.3, A.5, A.7, A.8, A.11, A.12:* Added "operationId", "tags" and "summary" fields.

Clause A.6:* Added "operationId", "tags" and "summary" fields.
* Unbreakable spaces replaced with normal spaces.
* The reference identity of TS 29.122 removed.
 |
|  |  |
| ***Consequences if not approved:*** | The OpenAPI files of the Eees\_EASRegistration, Eees\_UELocation API, Eees\_AppClientInformation, Eees\_SessionWithQoS, Eees\_ACRManagementEvent, Eees\_EECContextRelocation, Eecs\_EESRegistration and Eecs\_TargetEESDiscovery APIs will remain to be incomplete since it is not aligned with the OpenAPI requirements specified in TS 29.122. |
|  |  |
| ***Clauses affected:*** | A.2, A.3, A.5, A.6, A.7, A.8, A.11, A.12 |
|  |  |
|  | **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 introduces backward compatible correction to the OpenAPI files of the Eees\_EASRegistration, Eees\_UELocation API, Eees\_AppClientInformation, Eees\_SessionWithQoS, Eees\_ACRManagementEvent, Eees\_EECContextRelocation, Eecs\_EESRegistration and Eecs\_TargetEESDiscovery APIs. |
|  |  |
| ***This CR's revision history:*** |  |

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

# A.2 Eees\_EASRegistration API

openapi: 3.0.0

info:

 title: EES EAS Registration\_API

 description: |

 API for EAS Registration.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.0

externalDocs:

 description: >

 3GPP TS 29.558 V17.0.0 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}/eees-easregistration/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /registrations:

 post:

 summary: Creates a new Individual EAS Registration resource

 operationId: CreateEASRegistration

 tags:

 - EAS Registrations (Collection)

 description: Registers a new EAS at an EES.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: EAS information is registered successfully at EES.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created 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'

 /registrations/{registrationId}:

 get:

 summary: Read an Individual EAS Registration resource

 operationId: ReadIndEASRegistration

 tags:

 - Individual EAS Registration (Document)

 description: Retrieve an Individual EAS registration resource.

 parameters:

 - name: registrationId

 in: path

 description: Registration Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (The EAS registration information at the EES).

 content:

 application/json:

 schema:

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

 '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: Update an Individual EAS Registration resource

 operationId: UpdateIndEASRegistration

 tags:

 - Individual EAS Registration (Document)

 description: Fully replace an existing EAS Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: EAS registration Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The EAS registration information is updated successfully).

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The individual EAS registration information is updated successfully.

 '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'

 patch:

 summary: Modify an Individual EAS Registration resource

 operationId: ModifyIndEASRegistration

 tags:

 - Individual EAS Registration (Document)

 description: Partially update an existing EAS Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: EAS registration Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update of an existing EAS registration resource.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The Individual EAS registration is successfully modified and the updated

 registration information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The individual EAS registration information is updated successfully.

 '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'

 delete:

 summary: Delete an Individual EAS Registration resource

 operationId: DeleteIndEASRegistration

 tags:

 - Individual EAS Registration (Document)

 description: Delete an existing EAS registration at EES.

 parameters:

 - name: registrationId

 in: path

 description: EAS registration Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual EAS registration is 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'

 '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:

 EASRegistration:

 type: object

 description: Represents an EAS registration information.

 properties:

 easProf:

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

 expTime:

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

 suppFeat:

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

 required:

 - easProf

 EASProfile:

 type: object

 description: Represents the EAS profile information.

 properties:

 easId:

 type: string

 description: Identifier of the EAS.

 endPt:

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

 acIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Identities of application clients that are served by the EAS.

 provId:

 type: string

 description: Identifier of the ASP that provides the EAS.

 type:

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

 scheds:

 type: array

 items:

 $ref: 'TS29122\_CpProvisioning.yaml#/components/schemas/ScheduledCommunicationTime'

 minItems: 1

 description: The availability schedule of the EAS.

 svcArea:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ServiceArea'

 svcKpi:

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

 permLvl:

 type: array

 items:

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

 minItems: 1

 description: level of service permissions supported by the EAS.

 easFeats:

 type: array

 items:

 type: string

 minItems: 1

 description: Service specific features supported by EAS.

 appLocs:

 type: array

 items:

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

 minItems: 1

 description: List of DNAI(s) and the N6 traffic information associated with the EAS.

 svcContSupp:

 type: array

 items:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ACRScenario'

 minItems: 1

 description: The ACR scenarios supported by the EAS for service continuity.

 avlRep:

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

 status:

 type: string

 description: EAS status information.

 required:

 - easId

 - endPt

 EASRegistrationPatch:

 type: object

 description: Represents partial update request of individual EAS registration information.

 properties:

 easProf:

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

 expTime:

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

 EASServiceKPI:

 type: object

 description: Represents the EAS service KPI information.

 properties:

 maxReqRate:

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

 maxRespTime:

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

 avail:

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

 avlComp:

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

 avlGraComp:

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

 avlMem:

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

 avlStrg:

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

 connBand:

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

 EndPoint:

 type: object

 description: The end point information to reach EAS.

 properties:

 fqdn:

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

 ipv4Addrs:

 type: array

 items:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

 minItems: 1

 description: IPv4 addresses of the edge server.

 ipv6Addrs:

 type: array

 items:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv6Addr'

 minItems: 1

 description: IPv6 addresses of the edge server.

 uri:

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

 oneOf:

 - required: [uri]

 - required: [fqdn]

 - required: [ipv4Addrs]

 - required: [ipv6Addrs]

 PermissionLevel:

 anyOf:

 - type: string

 enum:

 - TRIAL

 - GOLD

 - SILVER

 - OTHER

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Possible values are:

 - TRIAL: Level of service permission supported is TRIAL.

 - GOLD: Level of service permission supported is GOLD.

 - SILVER: Level of service permission supported is SILVER.

 - OTHER: Any other level of service permissions supported.

 EASCategory:

 anyOf:

 - type: string

 enum:

 - UAS

 - V2X

 - OTHER

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Possible values are:

 - UAS: Category of EAS is for Uncrewed Aerial Services.

 - V2X: Category of EAS is for V2X Services.

 - OTHER: Any other type of EAS category.

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

# A.3 Eees\_UELocation API

openapi: 3.0.0

info:

 title: EES UE Location Information\_API

 description: |

 API for EES UE Location Information.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.0

externalDocs:

 description: >

 3GPP TS 29.558 V17.0.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-uelocation/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /fetch:

 post:

 summary: Fetch an UE location information.

 operationId: FetchUELocation

 tags:

 - Fetch an UE location information

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The requested location information)

 content:

 application/json:

 schema:

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

 '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: Creates a new Individual Location Information Subscription resource

 operationId: CreateLocationInfoSubscription

 tags:

 - Location Information Subscriptions (Collection)

 description: >

 Create a Subscription resource for continious reporting of UE location

 information to the EAS.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: >

 Created (The individual location information subscription resource

 is created successfully)

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created 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:

 LocationInformationNotification:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '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'

 UserConsentRevocationNotif:

 '{request.body#/revocationNotifUri}':

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification).

 '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/{subscriptionId}:

 get:

 summary: Read an Individual Location Information Subscription resource

 operationId: ReadIndLocationInfoSubscription

 tags:

 - Individual Location Information Subscription (Document)

 description: Retrieve an Individual location information subscription information.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successfully get the location information subscription).

 content:

 application/json:

 schema:

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

 '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: Update an Individual Location Information Subscription resource

 operationId: UpdateIndLocationInfoSubscription

 tags:

 - Individual Location Information Subscription (Document)

 description: Fully replace an existing Individual location information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The individual location information subscription was modified successfully).

 content:

 application/json:

 schema:

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

 '204':

 description: No Content.

 '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'

 patch:

 summary: Modify an Individual Location Information Subscription resource

 operationId: ModifyIndLocationInfoSubscription

 tags:

 - Individual Location Information Subscription (Document)

 description: Partially update an existing Individual location information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update an existing Individual AC information Subscription.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 OK (The Individual location information Subscription is successfully

 modified and the updated subscription information is returned in the response).

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content (The individual location information subscription was modified successfully).

 '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'

 delete:

 summary: Delete an Individual Location Information Subscription resource

 operationId: DeleteIndLocationInfoSubscription

 tags:

 - Individual Location Information Subscription (Document)

 description: Delete an existing Individual location information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual subscription is 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'

 '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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 LocationSubscription:

 type: object

 description: Represents an Individual Location Information Subscription.

 properties:

 easId:

 type: string

 description: Identifier of the EAS subscribing for location information report.

 ueId:

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

 intGrpId:

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

 extGrpId:

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

 expTime:

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

 locGran:

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

 locQos:

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

 eventReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: >

 Set to true by the EAS to request the EES to send a test notification.

 Set to false or omitted otherwise.

 revocationNotifUri:

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

 websockNotifConfig:

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

 suppFeat:

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

 oneOf:

 - required: [ueId]

 - required: [intGrpId]

 - required: [extGrpId]

 required:

 - easId

 LocationSubscriptionPatch:

 type: object

 description: Represents the partial update of Individual AC Information Subscription.

 properties:

 eventReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 expTime:

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

 notificationDestination:

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

 revocationNotifUri:

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

 locGran:

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

 locQos:

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

 LocationNotification:

 type: object

 description: Represents the filters information for AC Information Subscription.

 properties:

 subId:

 type: string

 description: >

 Identifier of the location information subscription for which the

 location information notification is related to.

 locEvs:

 type: array

 items:

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

 minItems: 1

 description: List of notifications with location information.

 required:

 - subId

 - locEvs

 LocationEvent:

 type: object

 description: Location Information event notification.

 properties:

 ueId:

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

 locInf:

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

 locInfPred:

 $ref: 'TS29522\_AnalyticsExposure.yaml#/components/schemas/UeMobilityExposure'

 oneOf:

 - required: [locInf]

 - required: [locInPred]

 required:

 - ueId

 LocationRequest:

 type: object

 description: To request location information request.

 properties:

 ueId:

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

 gran:

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

 locQos:

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

 suppFeat:

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

 required:

 - ueId

 LocationResponse:

 type: object

 description: Contains the response location information request.

 properties:

 ueLocation:

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

 suppFeat:

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

 required:

 - ueLocation

 ConsentRevocNotif:

 description: >

 Represents the user consent revocation information conveyed in a user consent

 revocation notification.

 type: object

 properties:

 subscriptionId:

 type: string

 consentsRevoked:

 type: array

 items:

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

 minItems: 1

 required:

 - subscriptionId

 - consentsRevoked

 ConsentRevoked:

 description: Represents the information related to a revoked user consent.

 type: object

 properties:

 ucPurpose:

 $ref: 'TS29503\_Nudm\_SDM.yaml#/components/schemas/UcPurpose'

 externalId:

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

 ueId:

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

 required:

 - ucPurpose

 oneOf:

 - required: [externalId]

 - required: [ueId]

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

# A.5 Eees\_AppClientInformation API

openapi: 3.0.0

info:

 title: EES Application Client Information\_API

 description: |

 API for EES Application Client Information.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.0

externalDocs:

 description: >

 3GPP TS 29.558 V17.0.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-appclientinformation/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /subscriptions:

 post:

 summary: Creates a new Individual Application Client Information Subscriptions resource

 operationId: CreateAppClientInfoSubscription

 tags:

 - Application Client Information Subscriptions (Collection)

 description: Create a Subscription resource for reporting of AC information to the EAS.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (The individual AC information subscription resource is created successfully)

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created 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:

 ACInformationNotification:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '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/{subscriptionId}:

 get:

 summary: Read an Individual Application Client Information Subscriptions resource

 operationId: ReadIndAppClientInfoSubscription

 tags:

 - Individual Application Client Information Subscription (Document)

 description: Retrieve an Individual AC information subscription information.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successfully get the AC information subscription).

 content:

 application/json:

 schema:

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

 '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: Update an Individual Application Client Information Subscriptions resource

 operationId: UpdateIndAppClientInfoSubscription

 tags:

 - Individual Application Client Information Subscription (Document)

 description: Fully replace an existing Individual AC information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The individual AC information subscription was modified successfully).

 content:

 application/json:

 schema:

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

 '204':

 description: No Content.

 '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'

 patch:

 summary: Modify an Individual Application Client Information Subscriptions resource

 operationId: ModifyIndAppClientInfoSubscription

 tags:

 - Individual Application Client Information Subscription (Document)

 description: Partially update an existing Individual AC information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update an existing Individual AC information Subscription.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 OK (The Individual AC information Subscription is successfully modified

 and the updated subscription information is returned in the response).

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content (The individual AC information subscription was modified successfully).

 '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'

 delete:

 summary: Delete an Individual Application Client Information Subscriptions resource

 operationId: DeleteIndAppClientInfoSubscription

 tags:

 - Individual Application Client Information Subscription (Document)

 description: Delete an existing Individual AC information Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual subscription is 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'

 '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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 ACInfoSubscription:

 type: object

 description: Represents an Individual AC Information Subscription.

 properties:

 easId:

 type: string

 description: Identifier of the EAS subscribing for AC information report.

 acFltrs:

 type: array

 items:

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

 minItems: 1

 description: Filters to retrieve the information about specific ACs.

 expTime:

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

 eventReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: >

 Set to true by the EAS to request the EES to send a test notification.

 Set to false or omitted otherwise.

 websockNotifConfig:

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

 suppFeat:

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

 required:

 - easId

 ACInfoSubscriptionPatch:

 type: object

 description: Represents the partial update of Individual AC Information Subscription.

 properties:

 acFltrs:

 type: array

 items:

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

 minItems: 1

 description: Filters to retrieve the information about specific ACs.

 expTime:

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

 eventReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 notificationDestination:

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

 ACFilters:

 type: object

 description: Represents the filters information for AC Information Subscription.

 properties:

 acTypes:

 items:

 type: string

 minItems: 1

 description: List of AC Types or categories.

 ecspIds:

 items:

 type: string

 minItems: 1

 description: The list of identifiers of ECSPs associated with the EEC.

 acIds:

 items:

 type: string

 minItems: 1

 description: List of identifiers of ACs to be matched.

 svcArea:

 $ref: 'TS29558\_Eecs\_EESRegistration.yaml#/components/schemas/ServiceArea'

 maxAcKpi:

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

 minAcKpi:

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

 opSchds:

 type: array

 items:

 $ref: 'TS29122\_CpProvisioning.yaml#/components/schemas/ScheduledCommunicationTime'

 minItems: 1

 description: Operation schedule of EAS to be matched with operation schedule of the AC.

 ueIds:

 type: array

 items:

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

 minItems: 1

 description: List of UE identifiers hosting the AC.

 locInfs:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 ACInfoNotification:

 type: object

 description: AC Information notification.

 properties:

 subId:

 type: string

 description: >

 Identifier of the AC information subscription for which this notification is related to.

 acInfs:

 type: array

 items:

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

 minItems: 1

 description: Notifications that include the ACs information matching filter criteria.

 required:

 - subId

 - acInfs

 ACInformation:

 type: object

 description: AC Information matching the filter criteria.

 properties:

 acProfs:

 type: array

 items:

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

 minItems: 1

 description: List of profile information of ACs.

 ueIds:

 type: array

 items:

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

 minItems: 1

 description: List of UE identifiers hosting the AC.

 ueLocInfs:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 required:

 - acProfs

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

# A.6 Eees\_SessionWithQoS API

openapi: 3.0.0

info:

 title: EES Session with QoS API

 description: |

 API for EES Session with Qos service.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.0

externalDocs:

 description: >

 3GPP TS 29.558 V17.0.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-session-with-qos/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /sessions:

 post:

 summary: Create a new Individual Session with QoS resource

 operationId: CreateIndSessionWithQoS

 tags:

 - Sessions with QoS (Collection)

 description: >

 Request reservation of resources for a data session between AC and EAS with a specific QoS.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created 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:

 notificationDestination:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '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'

 get:

 summary: Read all Sessions with QoS resource

 operationId: ReadAllSessionsWithQoS

 tags:

 - Sessions with QoS (Collection)

 description: Retrieve all the Session With QoS information.

 parameters:

 - name: eas-id

 in: query

 description: Identifier of the EAS which querying the status of subscriptions.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get all of the active subscriptions)

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 description: >

 All the subscription information related to the request URI is returned

 '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'

 /sessions/{sessionId}:

 put:

 summary: Update an Individual Session with QoS resource

 operationId: UpdateIndSessionWithQoS

 tags:

 - Individual Session with QoS (Document)

 description: >

 Fully replace an existing Individual Session with QoS resource identified by a sessionId.

 parameters:

 - name: sessionId

 in: path

 description: Session Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 The individual Session with QoS is successfully modified and the updated

 session with QoS context information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content

 '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'

 patch:

 summary: Modify an Individual Session with QoS resource

 operationId: ModifyIndSessionWithQoS

 tags:

 - Individual Session with QoS (Document)

 parameters:

 - name: sessionId

 in: path

 description: session Id.

 required: true

 schema:

 type: string

 requestBody:

 description: >

 Partial update an existing Individual Session with QoS resource identified by a sessionId.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The individual Session with QoS is successfully modified and the updated

 session with QoS context information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content.

 '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'

 delete:

 summary: Delete an Individual Session with QoS resource

 operationId: DeleteIndSessionWithQoS

 tags:

 - Individual Session with QoS (Document)

 description: Remove an Individual Session with QoS resource identified by a sessionId.

 parameters:

 - name: sessionId

 in: path

 description: session Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

 The individual Session with QoS resource matching the sessionId 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'

 '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'

 get:

 summary: Read Individual Session with QoS resource

 operationId: ReadIndSessionWithQoS

 tags:

 - Individual Session with QoS (Document)

 description: Read a subscription resource for a sessionId.

 parameters:

 - name: sessionId

 in: path

 description: Session Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: The subscription information related to the request URI is returned.

 content:

 application/json:

 schema:

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

 '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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 SessionWithQoS:

 type: object

 description: Represents an Individual Session with QoS Subscription.

 properties:

 self:

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

 easId:

 type: string

 description: Identifier of an EAS.

 ueIpv4Addr:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

 ueIpv6Addr:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv6Addr'

 ipDomain:

 type: string

 ueId:

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

 intGrpId:

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

 extGrpId:

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

 ipFlows:

 type: array

 items:

 $ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/FlowDescription'

 minItems: 1

 description: Contains the flow description for the Uplink and/or Downlink IP flows.

 qosReference:

 type: string

 description: Identifies a pre-defined QoS information.

 altQosReference:

 type: array

 items:

 type: string

 description: >

 Identifies an ordered list of pre-defined QoS information.

 The lower the index of the array for a given entry, the higher the priority.

 events:

 type: array

 items:

 $ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/UserPlaneEvent'

 description: Indicates the events subscribed by the EAS.

 sponsorInformation:

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

 qosMonInfo:

 $ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/QosMonitoringInformation'

 notificationDestination:

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

 dnn:

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

 snssai:

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

 maxbrUl:

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

 maxbrDl:

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

 disUeNotif:

 type: boolean

 requestTestNotification:

 type: boolean

 description: >

 Set to true by Subscriber to request the EES to send a test notification

 as defined in 3GPP TS 29.122. Set to false or omitted otherwise.

 websockNotifConfig:

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

 suppFeat:

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

 required:

 - easId

 - ipFlows

 SessionWithQoSPatch:

 type: object

 description: Represents a modification request of Individual Session with QoS Subscription.

 properties:

 ipFlows:

 type: array

 items:

 $ref: 'TS29514\_Npcf\_PolicyAuthorization.yaml#/components/schemas/FlowDescription'

 minItems: 1

 description: Contains the flow description for the Uplink and/or Downlink IP flows.

 qosReference:

 type: string

 description: Identifies a pre-defined QoS information.

 altQosReference:

 type: array

 items:

 type: string

 description: >

 Identifies an ordered list of pre-defined QoS information.

 The lower the index of the array for a given entry, the higher the priority.

 events:

 type: array

 items:

 $ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/UserPlaneEvent'

 description: Indicates the events subscribed by the EAS.

 sponsorInformation:

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

 qosMonInfo:

 $ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/QosMonitoringInformationRm'

 notificationDestination:

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

 maxbrUl:

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

 maxbrDl:

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

 disUeNotif:

 type: boolean

 UserPlaneEventNotification:

 type: object

 description: Represents the user plane event notification.

 properties:

 sessionId:

 type: string

 description: >

 String identifying the individual data session information for which

 the QoS event notification is delivered.

 eventReports:

 type: array

 items:

 $ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/UserPlaneEventReport'

 minItems: 1

 description: >

 Contains the flow description for the Uplink and/or Downlink IP flows.

 required:

 - sessionId

 - eventReports

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

# A.7 Eees\_ACRManagementEvent API

openapi: 3.0.0

info:

 title: EES ACR Management Event\_API

 description: |

 API for EES ACR Management Event.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.1

externalDocs:

 description: >

 3GPP TS 29.558 V17.1.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-acrmgntevent/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /subscriptions:

 post:

 summary: Creates a new Individual ACR Management Events Subscription

 operationId: CreateACRMngEventSubscr

 tags:

 - ACR Management Events Subscriptions (Collection)

 description: Create an Individual ACR Management Event Subscription resource.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 ACRManagementEventsNotification:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful notification)

 '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'

 UPPathChangeAvailabilityNotif:

 '{request.body#/notificationDestination}/report-availability':

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content. The notification is successful received.

 '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'

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource'

 required: true

 schema:

 type: string

 '204':

 description: >

 Successful case. The resource has been successfully created and no

 additional content is to be sent in the response message.

 '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'

 get:

 summary: Read all ACR Management Events Subscriptions

 operationId: GetACRMngEventSubscrs

 tags:

 - ACR Management Events Subscriptions (Collection)

 description: Retrieve all the ACR Management Events Subscriptions information.

 parameters:

 - name: supp-feat

 in: query

 description: Features supported by the EAS.

 required: false

 schema:

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

 responses:

 '200':

 description: OK (Successful get all of the active subscriptions)

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 description: All the active ACR management events subscriptions

 '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'

 /subscriptions/{subscriptionId}:

 get:

 summary: Read an Individual ACR Management Events Subscription

 operationId: GetIndACRMngEventSubscr

 tags:

 - Individual ACR Management Events Subscription (Document)

 description: Retrieve an Individual ACR Management Events Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 - name: supp-feat

 in: query

 description: Features supported by the EAS.

 required: false

 schema:

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

 responses:

 '200':

 description: OK (Successful get the active subscription).

 content:

 application/json:

 schema:

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

 '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: Update an Individual ACR Management Events Subscription

 operationId: UpdateIndACRMngEventSubscr

 tags:

 - Individual ACR Management Events Subscription (Document)

 description: Fully replace an existing Individual ACR Management Events Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful get the active subscription).

 content:

 application/json:

 schema:

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

 '204':

 description: No Content

 '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'

 patch:

 summary: Modify an Individual ACR Management Events Subscription

 operationId: ModifyIndACRMngEventSubscr

 tags:

 - Individual ACR Management Events Subscription (Document)

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update an existing Individual ACR Management Events Subscription.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The Individual ACR Management Events Subscription is successfully modified

 and the updated subscription information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content.

 '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'

 delete:

 summary: Delete an Individual ACR Management Events Subscription

 operationId: DeleteIndACRMngEventSubscr

 tags:

 - Individual ACR Management Events Subscription (Document)

 description: Delete an existing Individual ACR Management Events Subscription.

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual subscription is 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'

 '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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 AcrMgntEventsSubscription:

 type: object

 description: Represents an Individual ACR Management Events Subscription.

 properties:

 self:

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

 easId:

 type: string

 description: Identifier of an EAS.

 eventSubscs:

 type: array

 items:

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

 minItems: 1

 description: The subscribed ACR management events.

 evtReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 notificationDestination:

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

 eventReports:

 type: array

 items:

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

 minItems: 1

 description: The ACR management event report(s).

 availabilityInfo:

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

 failEventReports:

 type: array

 items:

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

 minItems: 1

 description: Failure event reports.

 requestTestNotification:

 type: boolean

 description: >

 Set to true by the EAS to request the EES to send a test notification.

 Set to false or omitted otherwise.

 websockNotifConfig:

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

 suppFeat:

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

 required:

 - easId

 - eventSubscs

 - notificationDestination

 AcrMgntEventSubsc:

 type: object

 description: Represents an ACR Management Event Subscription.

 properties:

 event:

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

 eventFilter:

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

 evtReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 tgtUeId:

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

 dnaiChgType:

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

 easAckInd:

 type: boolean

 easChars:

 type: array

 items:

 $ref: 'TS24558\_Eees\_EASDiscovery.yaml#/components/schemas/EasCharacteristics'

 minItems: 1

 description: A list of EAS characteristics.

 required:

 - event

 AcrMgntEventsSubscriptionPatch:

 type: object

 description: >

 Represents a modification request of Individual ACR Management Events Subscription.

 properties:

 eventSubscs:

 type: array

 items:

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

 minItems: 1

 description: The subscribed ACR management events.

 evtReq:

 $ref: 'TS29523\_Npcf\_EventExposure.yaml#/components/schemas/ReportingInformation'

 notificationDestination:

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

 AcrMgntEventsNotification:

 type: object

 description: Represents the ACR management events notification.

 properties:

 subpId:

 type: string

 description: >

 String identifying the Individual ACR Management Events Subscription

 for which the notification is delivered.

 eventReports:

 type: array

 items:

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

 minItems: 1

 description: A list of ACR management event reports.

 required:

 - subpId

 - eventReports

 AcrMgntEventReport:

 type: object

 description: Represents an ACR management event report.

 properties:

 event:

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

 timeStamp:

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

 upPathChgInfo:

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

 easEndPoint:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 actStatus:

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

 required:

 - event

 FailureAcrMgntEventInfo:

 type: object

 description: Represents a failure ACR management event.

 properties:

 event:

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

 failureCode:

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

 required:

 - event

 - failureCode

 TargetUeIdentification:

 description: Identifies the target UE information.

 type: object

 properties:

 gpsi:

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

 intGrpId:

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

 extGrpId:

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

 ueIpAddr:

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

 oneOf:

 - required: [gpsi]

 - required: [intGrpId]

 - required: [extGrpId]

 - required: [ueIpAddr]

 AvailabilityNotif:

 type: object

 description: >

 Represents the availability information of user plane path management events monitoring

 via the 3GPP 5GC network.

 properties:

 availabilityStatus:

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

 required:

 - availabilityStatus

 UpPathChangeInfo:

 description: Represents user plane path change information.

 type: object

 properties:

 ueId:

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

 dnaiChgType:

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

 sourceTrafficRoute:

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

 targetTrafficRoute:

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

 sourceDnai:

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

 targetDnai:

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

 srcUeIpv4Addr:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

 srcUeIpv6Prefix:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

 tgtUeIpv4Addr:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/Ipv4Addr'

 tgtUeIpv6Prefix:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

 required:

 - ueId

 - dnaiChgType

 IndUeIdentification:

 description: Represents identification information of a UE.

 type: object

 properties:

 gpsi:

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

 externalId:

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

 ueIpAddr:

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

 oneOf:

 - required: [gpsi]

 - required: [externalId]

 - required: [ueIpAddr]

 AcrMgntEvent:

 anyOf:

 - type: string

 enum:

 - UP\_PATH\_CHG

 - ACR\_MONITORING

 - ACR\_FACILITATION

 - ACT\_START\_STOP

 - type: string

 description: >

 This string represents the ACR management.

 description: |

 Possible values are:

 - UP\_PATH\_CHG: User plane path change event.

 - ACR\_MONITORING: ACR monitoring event.

 - ACR\_FACILITATION: ACR facilitation event.

 - ACT\_START\_STOP: ACT start/stop event.

 AcrMgntEventFilter:

 anyOf:

 - type: string

 enum:

 - INTRA\_EDN\_MOBILITY

 - INTER\_EDN\_MOBILITY

 - type: string

 description: >

 This string represents the ACR Management Event filter.

 description: |

 Possible values are:

 - INTRA\_EDN\_MOBILITY: Indicates that the ACR Management Event filter is intra-EDN mobility.

 - INTER\_EDN\_MOBILITY: Indicates that the ACR Management Event filter is inter-EDN mobility.

 ActStatus:

 anyOf:

 - type: string

 enum:

 - ACT\_START

 - ACT\_STOP

 - type: string

 description: >

 This string represents the ACT status, i.e. ACT start or stop.

 description: |

 Possible values are:

 - ACT\_START: Indicates ACT start.

 - ACT\_STOP: Indicates ACT stop.

 AcrMgntEventFailureCode:

 anyOf:

 - type: string

 enum:

 - 3GPP\_UP\_PATH\_CHANGE\_MON\_NOT\_AVAILABLE

 - OTHER\_REASONS

 - type: string

 description: >

 This string represents the reason for ACR Management subscription failure for an event.

 description: |

 Possible values are:

 - 3GPP\_UP\_PATH\_CHANGE\_MON\_NOT\_AVAILABLE: Indicates that the ACR Management Event Subscription failed because user plane path management event notifications from the 3GPP network is NOT available. This value is only applicable for the "UP\_PATH\_CHG", "ACR\_MONITORING" and "ACR\_FACILITATION" events.

 - OTHER\_REASONS: Indicates that the ACR Management Event Subscription failed for other reasons. This value is applicable for all events.

 AvailabilityStatus:

 anyOf:

 - type: string

 enum:

 - AVAILABLE

 - NOT\_AVAILABLE

 - type: string

 description: >

 This string represents the availability status.

 description: |

 Possible values are:

 - AVAILABLE: Indicates availability.

 - NOT\_AVAILABLE: Indicates unavailability.

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

# A.8 Eees\_EECContextRelocation API

openapi: 3.0.0

info:

 title: EES EEC Context Relocation API

 description: |

 API for EEC Context Relocation.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.1

externalDocs:

 description: >

 3GPP TS 29.558 V17.1.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/eees-eeccontextreloc/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /eec-contexts:

 post:

 summary: Push EEC Context information

 operationId: PushEecContexts

 tags:

 - Collection of EEC contexts (Collection)

 description: S-EES transfers the EEC context information to T-EES.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. The EEC context has been successfully transferred to the T-EES and

 the EEC is implicitly registered.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The EEC context has been successfully transferred to the T-EES.

 '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'

 get:

 summary: Pull EEC Context information

 operationId: PullEecContexts

 tags:

 - Collection of EEC contexts (Collection)

 description: T-EES pulls an EEC context information from S-EES.

 parameters:

 - name: ees-id

 in: query

 description: Unique identifier of the requesting EES.

 required: true

 schema:

 type: string

 - name: eec-cntx-id

 in: query

 description: Unique identifier of the EEC context.

 required: true

 schema:

 type: string

 - name: sess-cntxs

 in: query

 description: List of service session context information being requested.

 required: false

 schema:

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

 responses:

 '200':

 description: >

 OK (The EEC context information matching the input parameters in the request

 is returned by the S-EES).

 content:

 application/json:

 schema:

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

 '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:

 SessionContexts:

 type: object

 description: Represents the list of service session contexts information.

 properties:

 sessCntxs:

 type: array

 items:

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

 minItems: 1

 description: List of service session contexts information.

 required:

 - sessCntxs

 IndividualSessionContext:

 type: object

 description: Represents a single service session context information.

 properties:

 easId:

 type: string

 description: Identifier of the EAS providing the application services.

 endPt:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 acId:

 type: string

 description: Identifier of the AC for which the service session information is provided.

 required:

 - easId

 - endPt

 EECContextPush:

 type: object

 description: Represents the EEC context push request data.

 properties:

 eesId:

 type: string

 description: Identifier of the S-EES pushing the EEC context information.

 eecCntx:

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

 required:

 - eesId

 - eecCntx

 EECContextPushRes:

 type: object

 description: Represents the EEC context push response data.

 properties:

 implReg:

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

 ImplicitRegDetails:

 type: object

 description: Represents the EEC implicit registration details.

 properties:

 regId:

 type: string

 description: Identifier of the EEC registration.

 expTime:

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

 required:

 - regId

 EECContext:

 type: object

 description: Represents the EEC context information.

 properties:

 eecId:

 type: string

 description: Unique idenitfier of the EEC.

 cntxId:

 type: string

 description: Unique idenitfier assigned to the EEC context.

 ueId:

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

 e1Subs:

 type: array

 items:

 type: string

 minItems: 1

 description: List of subscription IDs for the capability expsoure for the EEC ID.

 ueLoc:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 acProfs:

 type: array

 items:

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

 minItems: 1

 description: List AC profiles.

 sessCntxs:

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

 required:

 - eecId

 - cntxId

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

# A.11 Eecs\_EESRegistration API

openapi: 3.0.0

info:

 title: ECS EES Registration\_API

 description: |

 API for EES Registration.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.1

externalDocs:

 description: >

 3GPP TS 29.558 V17.1.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

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

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /registrations:

 post:

 summary: Create a new EES Registration

 operationId: CreateEESRegistration

 tags:

 - EES Registrations (Collection)

 description: Registers a new EES at the Edge Configuration Server.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: EES information is registered successfully at ECS.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created 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'

 /registrations/{registrationId}:

 get:

 summary: Get an Individual EES Registration

 operationId: GetIndEESReg

 tags:

 - Individual EES Registration (Document)

 description: Retrieve an Individual EES registration resource.

 parameters:

 - name: registrationId

 in: path

 description: Registration Id.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (The EES registration information at the Edge Configuration Server).

 content:

 application/json:

 schema:

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

 '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: Update an Individual EES Registration

 operationId: UpdateIndEESReg

 tags:

 - Individual EES Registration (Document)

 description: Fully replace an existing EES Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: EES Registration Id.

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (The EES registration information is updated successfully).

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The individual EES registration information is updated successfully.

 '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'

 patch:

 summary: Modify an Individual EES Registration

 operationId: ModifyIndEESReg

 tags:

 - Individual EES Registration (Document)

 description: Partially update an existing EES Registration resource.

 parameters:

 - name: registrationId

 in: path

 description: EES registration Id.

 required: true

 schema:

 type: string

 requestBody:

 description: Partial update an existing EES registration resource.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The Individual EES registration is successfully modified and

 the updated registration information is returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. The individual EES registration information is updated successfully.

 '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'

 delete:

 summary: Delete an Individual EES Registration

 operationId: DeleteIndEESReg

 tags:

 - Individual EES Registration (Document)

 description: Delete an existing EES registration at ECS.

 parameters:

 - name: registrationId

 in: path

 description: Registration Id.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The individual EES registration is 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'

 '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:

 EESRegistration:

 type: object

 description: Represents an EES registration information.

 properties:

 eesProf:

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

 expTime:

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

 suppFeat:

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

 required:

 - eesProf

 EESProfile:

 type: object

 description: Represents the EES profile information.

 properties:

 eesId:

 type: string

 description: Identifier of the EES.

 endPt:

 $ref: 'TS29558\_Eees\_EASRegistration.yaml#/components/schemas/EndPoint'

 easIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Application identifiers of EASs that are registered with EES.

 provId:

 type: string

 description: Identifier of the ECSP that provides the EES provider.

 svcArea:

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

 appLocs:

 type: array

 items:

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

 minItems: 1

 description: List of DNAI(s) associated with the EES.

 svcContSupp:

 type: array

 items:

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

 minItems: 1

 description: The ACR scenarios supported by the EES for service continuity.

 eecRegConf:

 type: boolean

 description: >

 Set to true if the EEC is required to register to the EES to use edge service.

 Set to false if the EEC is not required to register to use edge services.

 required:

 - eesId

 - endPt

 - eecRegConf

 EESRegistrationPatch:

 type: object

 description: Represents partial update request of individual EES registration information.

 properties:

 eesProf:

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

 expTime:

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

 ServiceArea:

 type: object

 description: Represents a service area information of the EdgeApp entity.

 properties:

 topServAr:

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

 geoServAr:

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

 TopologicalServiceArea:

 type: object

 description: Represents topological service area information.

 properties:

 ecgis:

 type: array

 items:

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

 minItems: 1

 description: A list of E-UTRA cell identities.

 ncgis:

 type: array

 items:

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

 minItems: 1

 description: A list of NR cell identities.

 tais:

 type: array

 items:

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

 minItems: 1

 description: A list of tracking area identities.

 plmnIds:

 type: array

 items:

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

 minItems: 1

 description: A list of PLMN identities.

 GeographicalServiceArea:

 type: object

 description: Represents geographical service area information.

 properties:

 geoArs:

 type: array

 items:

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

 minItems: 1

 description: A list of geographic area information.

 civicAddrs:

 type: array

 items:

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

 minItems: 1

 description: A list of civic address information.

 ACRScenario:

 anyOf:

 - type: string

 enum:

 - EEC\_INITIATED

 - EEC\_EXECUTED\_VIA\_SOURCE\_EES

 - EEC\_EXECUTED\_VIA\_TARGET\_EES

 - SOURCE\_EAS\_DECIDED

 - SOURCE\_EES\_EXECUTED

 - EEL\_MANAGED\_ACR

 - type: string

 description: >

 This string provides forward-compatibility with future

 extensions to the enumeration but is not used to encode

 content defined in the present version of this API.

 description: |

 Possible values are:

 - EEC\_INITIATED: Represents the EEC initiated ACR scenario.

 - EEC\_EXECUTED\_VIA\_SOURCE\_EES: Represents the EEC ACR scenario executed via the S-EES.

 - EEC\_EXECUTED\_VIA\_TARGET\_EES: Represents the EEC ACR scenario executed via the T-EES.

 - SOURCE\_EAS\_DECIDED: Represents the EEC ACR scenario where the S-EAS decides to perform ACR.

 - SOURCE\_EES\_EXECUTED: Represents the EEC ACR scenario where S-EES executes the ACR.

 - EEL\_MANAGED\_ACR: Represents the EEC ACR scenario where the ACR is managed by the Edge Enabler Layer.

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

# A.12 Eecs\_TargetEESDiscovery API

openapi: 3.0.0

info:

 title: ECS Target EES Discovery API

 description: |

 API for Target EES Discovery.

 © 2022, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

 All rights reserved.

 version: 1.0.0

externalDocs:

 description: >

 3GPP TS 29.558 V17.0.0 Enabling Edge Applications;

 Application Programming Interface (API) specification; Stage 3

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

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

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

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 7.5 of 3GPP TS 29.558.

paths:

 /ees-profiles:

 get:

 summary: Read all EES Profiles

 operationId: GetEESProfiles

 tags:

 - EES Profiles (Collection)

 description: Retrieve the T-EES information.

 parameters:

 - name: ees-id

 in: query

 description: Unique identifier of the S-EES.

 required: true

 schema:

 type: string

 - name: eas-id

 in: query

 description: Unique identifier of the S-EAS.

 required: true

 schema:

 type: string

 - name: target-dnai

 in: query

 description: The DNAI information associated with the potential T-EES(s) and/or T-EAS(s).

 required: false

 schema:

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

 - name: ue-id

 in: query

 description: Identifier of the UE.

 required: false

 schema:

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

 - name: ue-location

 in: query

 description: The location information of the UE.

 required: false

 schema:

 $ref: 'TS29122\_CommonData.yaml#/components/schemas/LocationArea5G'

 responses:

 '200':

 description: The EDN configuration and the T-EES information determined by ECS.

 content:

 application/json:

 schema:

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

 '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: {}

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