**3GPP TSG CT WG3 Meeting #138 *C3-246358***

**Orlando, US, 18 - 22 November, 2024** (revision of C3-246122)

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **549** | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | SEAL – Correcting structured data types in query parameters |
|  |  |
| ***Source to WG:*** | Samsung, Ericsson |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | NBI19 |  | ***Date:*** | 2024-11-11 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | During CT3#137 meeting, it was discussed to clarify the formatting of the structured data types in query parameters. The NBI APIs should be consistent in formatting of the structured data types in query parameters, i.e, should be “content”” block with “application/JSON” media type. The formatting of the following query parameters in SEAL APIs need to be clarified:SS\_UserProfileRetrieval API: "val-tgt-ue"SS\_NetworkResourceAdaptation API: "stream-specs"SS\_KeyInfoRetrieval API: "val-tgt-ue"SS\_LocationAreaInfoRetrieval API: "location-info" |
|  |  |
| ***Summary of change:*** | Clarify the formatting of following structured data type query parameters:SS\_UserProfileRetrieval API: "val-tgt-ue"SS\_NetworkResourceAdaptation API: "stream-specs"SS\_KeyInfoRetrieval API: "val-tgt-ue"SS\_LocationAreaInfoRetrieval API: "location-info" |
|  |  |
| ***Consequences if not approved:*** | Inconsistent formatting of the query parameters. |
|  |  |
| ***Clauses affected:*** | A.4, A.5, A.7, A.8 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR proposes backward compatible correction to the following Open API specification files: SS\_UserProfileRetrieval, SS\_NetworkResourceAdaptation API, SS\_KeyInfoRetrieval API, SS\_LocationAreaInfoRetrieval API |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* \* Start of Changes \* \* \* \*

# A.4 SS\_UserProfileRetrieval API

openapi: 3.0.0

info:

 title: SS\_UserProfileRetrieval

 description: |

 API for SEAL User Profile Retrieval.

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 version: "1.2.0"

externalDocs:

 description: >

 3GPP TS 29.549 V18.6.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-upr/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

paths:

 /val-services:

 get:

 description: Retrieve VAL User or VAL UE profile information.

 operationId: RetrieveValUserProfile

 tags:

 - VAL Services

 parameters:

 - name: val-service-id

 in: query

 description: String identifying an individual VAL service

 required: false

 schema:

 type: string

 - name: val-tgt-ue

 in: query

 description: Identifying a VAL target UE.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: The Profile information of the VAL User or VAL UE.

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 0

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 ProfileDoc:

 description: Represents the profile information associated with a VAL user ID or a VAL UE ID.

 type: object

 properties:

 profileInformation:

 type: string

 description: Profile information associated with the valUserId or valUeId.

 valTgtUe:

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

 required:

 - profileInformation

 - valTgtUe

 ValTargetUe:

 description: Represents the information identifying a VAL user ID or a VAL UE ID.

 type: object

 properties:

 valUserId:

 type: string

 description: Unique identifier of a VAL user.

 valUeId:

 type: string

 description: Unique identifier of a VAL UE.

 oneOf:

 - required: [valUserId]

 - required: [valUeId]

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

# A.5 SS\_NetworkResourceAdaptation API

openapi: 3.0.0

info:

 version: 1.3.0-alpha.1

 title: SS\_NetworkResourceAdaptation

 description: |

 SS Network Resource Adaptation Service.

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externalDocs:

 description: >

 3GPP TS 29.549 V19.0.0; Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-nra/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 4.4 of 3GPP TS 29.501

paths:

 /multicast-subscriptions:

 post:

 summary: Creates a new Individual Multicast Subscription resource

 operationId: CreateMulticastSubscription

 tags:

 - Multicast Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created individual multicast subscription resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 callbacks:

 UserPlaneNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content, Notification was succesfull

 '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'

 /multicast-subscriptions/{multiSubId}:

 get:

 summary: "Reads an existing Individual Multicast Subscription"

 operationId: GetMulticastSubscription

 tags:

 - Individual Multicast Subscription (Document)

 parameters:

 - name: multiSubId

 in: path

 description: Multicast Subscription ID

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource representation is returned

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: "Delete an existing Individual Multicast Subscription"

 operationId: DeleteMulticastSubscription

 tags:

 - Individual Multicast Subscription (Document)

 parameters:

 - name: multiSubId

 in: path

 description: Multicast Subscription ID

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content. Resource was succesfully 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'

 /mbs-resources:

 post:

 summary: Request the creation of a new MBS Resource.

 operationId: CreateMBSResource

 tags:

 - MBS Resources (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: >

 Created. Successfull case. The requested MBS resource is successfully created and a

 representation of the created Individual MBS Resource resource is returned in the

 response body.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created Individual MBS Resource 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'

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

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 '413':

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

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 $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:

 UserPlaneNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content. The notification was succesfully 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'

 /mbs-resources/{mbsResId}:

 parameters:

 - name: mbsResId

 in: path

 description: Represents the identifier of the Individual MBS Resource resource.

 required: true

 schema:

 type: string

 get:

 summary: Request the retrieval of an existing Individual MBS Resource.

 operationId: GetIndivMBSResource

 tags:

 - Individual MBS Resource (Document)

 responses:

 '200':

 description: >

 OK. Successful case. A representation of the requested Individual MBS Resource resource

 is returned in the response body.

 content:

 application/json:

 schema:

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

 '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':

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 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 put:

 summary: Request the update of an existing Individual MBS Resource.

 operationId: UpdateIndivMBSResource

 tags:

 - Individual MBS Resource (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. Successful case. The targeted Individual MBS Resource resource is successfully

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

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. Successful case. The targeted Individual MBS Resource resource is

 successfully updated and no content is returned in the response body.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 patch:

 summary: Request the modification of an existing Individual MBS Resource.

 operationId: ModifyIndivMBSResource

 tags:

 - Individual MBS Resource (Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 OK. Successful case. The targeted Individual MBS Resource resource is successfully

 modified and a representation of the updated resource is returned in the response body.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. Successful case. The targeted Individual MBS Resource resource is

 successfully modified and no content is returned in the response body.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: Request the deletion of an existing Individual MBS Resource.

 operationId: DeleteIndivMBSResource

 tags:

 - Individual MBS Resource (Document)

 responses:

 '204':

 description: >

 No Content. Successful case. The targeted Individual MBS Resource resource is

 successfully deleted.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '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'

 /mbs-resources/{mbsResId}/activate:

 parameters:

 - name: mbsResId

 in: path

 description: Represents the identifier of the Individual MBS Resource resource.

 required: true

 schema:

 type: string

 post:

 summary: Request the activation of an existing MBS Resource.

 operationId: ActivateMBSResource

 tags:

 - Individual MBS Resource (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. The activation request is successfully received and processed.

 content:

 application/json:

 schema:

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

 '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'

 /mbs-resources/{mbsResId}/deactivate:

 parameters:

 - name: mbsResId

 in: path

 description: Represents the identifier of the Individual MBS Resource resource.

 required: true

 schema:

 type: string

 post:

 summary: Request the deactivation of an existing MBS Resource.

 operationId: DeactivateMBSResource

 tags:

 - Individual MBS Resource (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. The deactivation request is successfully received and processed.

 content:

 application/json:

 schema:

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

 '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'

 /unicast-subscriptions:

 post:

 summary: Creates a new Individual Unicast Subscription resource

 operationId: CreateUnicastSubscription

 tags:

 - Unicast Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created individual unicast subscription resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 callbacks:

 UserPlaneNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content, Notification was succesfull

 '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'

 /unicast-subscriptions/{uniSubId}:

 get:

 summary: "Reads an existing Individual Unicast Subscription"

 operationId: GetUnicastSubscription

 tags:

 - Individual Unicast Subscription (Document)

 parameters:

 - name: uniSubId

 in: path

 description: Unicast Subscription ID

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource representation is returned

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: "Delete an existing Individual Unicast Subscription"

 operationId: DeleteUnicastSubscription

 tags:

 - Individual Unicast Subscription (Document)

 parameters:

 - name: uniSubId

 in: path

 description: Unicast Subscription ID

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content. Resource was succesfully 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'

 /tsc-stream-availability:

 get:

 summary: Discover the TSC stream availability information.

 operationId: GetTscStreamAvailability

 tags:

 - TSC stream availability discovery

 parameters:

 - name: stream-specs

 in: query

 description: >

 The MAC address(es) of the source DS-TT port(s) and the destination DS-TT port(s).

 required: true

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 0

 '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'

 '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'

 /tsc-streams:

 get:

 summary: Retrieval of TSC stream data.

 operationId: GetTscStream

 tags:

 - TSC stream retrieval

 parameters:

 - name: val-stream-ids

 in: query

 description: Retrieval of TSC Stream data, identified by the VAL Stream ID(s).

 required: false

 schema:

 type: array

 items:

 type: string

 minItems: 1

 responses:

 '200':

 description: OK (successful query of TSC stream resource)

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 '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'

 /tsc-streams/{valStreamId}:

 get:

 summary: "Reads an existing Individual TSC stream data information"

 operationId: GetTscStreamData

 tags:

 - Individual TSC Stream Retrieval

 parameters:

 - name: valStreamId

 in: path

 description: The VAL Stream ID identifies the TSC stream.

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource representation is returned

 content:

 application/json:

 schema:

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

 '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: Create a TSC stream identified by a VAL stream identifier.

 operationId: PutTscStream

 tags:

 - TSC stream creation

 description: Create an individual TSC stream identified by VAL Stream ID.

 parameters:

 - name: valStreamId

 in: path

 description: VAL stream identifier

 required: true

 schema:

 type: string

 requestBody:

 description: TSC stream creation request data from the VAL server to the NRM server.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: Contains the URI of the created individual TSC stream 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'

 delete:

 summary: "Delete an existing Individual TSC stream"

 operationId: DeleteTscStream

 tags:

 - Individual TSC Stream Deletion

 parameters:

 - name: valStreamId

 in: path

 description: The VAL Stream ID identifies the TSC stream.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content. Resource was succesfully 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'

 /bdt-policy-configs:

 post:

 summary: Creates a new Individual BDT Policy Configuration

 operationId: CreateBDTPolicyConfig

 tags:

 - BDT Policy Configurations (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created individual BDT Policy configuration 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:

 BdtNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content, Notification was successful

 '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'

 /bdt-policy-configs/{bdtPolConfigId}:

 parameters:

 - name: bdtPolConfigId

 in: path

 description: Represents the identifier of the Individual BDT Policy Configuration.

 required: true

 schema:

 type: string

 get:

 summary: Reads an existing Individual BDT Policy Configuration

 operationId: GetBDTPolicyConfig

 tags:

 - Individual BDT Policy Configuration(Document)

 responses:

 '200':

 description: OK. Resource representation is returned

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 put:

 summary: Request the update of an existing Individual BDT Policy Configuration.

 operationId: UpdateBDTPolicyConfig

 tags:

 - Individual BDT Policy Configuration(Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 OK. Successful case. The targeted Individual BDT Policy Configuration resource

 is successfully updated and a representation of the updated resource is returned

 in the response body.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. Successful case. The targeted Individual BDT Policy Configuration

 resource is successfully updated and no content is returned in the response body.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '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: Request the modification of an existing Individual BDT Policy Configuration.

 operationId: ModifyBDTPolicyConfig

 tags:

 - Individual BDT Policy Configuration(Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 OK. Successful case. The targeted Individual BDT Policy Configuration resource

 is successfully modified and a representation of the updated resource is returned

 in the response body.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 No Content. Successful case. The targeted Individual BDT Policy Configuration

 resource is successfully modified and no content is returned in the response body.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '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 existing Individual BDT policy Configuration

 operationId: DeleteBDTPolicyConfig

 tags:

 - Individual BDT Policy Configuration (Document)

 responses:

 '204':

 description: No Content. Resource was 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'

 /request-rel-trans:

 post:

 summary: Enables a service consumer to request reliable transmission service.

 operationId: RelTransRequest

 tags:

 - Reliable Transmission Service Request

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: >

 No Content. The reliable transmission service request is successfully received and

 processed.

 '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'

 /unif-traff-subscriptions:

 post:

 summary: Creates a new Individual Unified Traffic Pattern Subscription.

 operationId: CreateUnifiedTrafficPatternSubsc

 tags:

 - Unified Traffic Pattern Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created individual unified traffic pattern subscription

 resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 callbacks:

 UnfTrafficUpdNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content, Notification was successful

 '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'

 /unif-traff-subscriptions/{unfTrffSubId}:

 parameters:

 - name: unfTrffSubId

 in: path

 description: >

 Represents the identifier of the Individual Unified Traffic Pattern Subscription resource.

 required: true

 schema:

 type: string

 get:

 summary: Reads an existing Individual Unified Traffic Pattern Subscription.

 operationId: GetUnfTrffSubc

 tags:

 - Individual Unified Traffic Pattern Subscription (Document)

 responses:

 '200':

 description: OK. Resource representation is returned.

 content:

 application/json:

 schema:

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

 '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 existing Individual Unified Traffic Pattern Subscription.

 operationId: UpdateUnfTrffSubc

 tags:

 - Individual Unified Traffic Pattern Subscription (Document)

 requestBody:

 description: Updated details of the Unified Traffic Pattern subscription.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: >

 The subscription is updated successfully, and the updated subscription

 information returned in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The subscription 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 existing Individual Unified Traffic Pattern Subscription.

 operationId: ModifyUnfTrffSubc

 tags:

 - Individual Unified Traffic Pattern Subscription (Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

 The individual Unified Traffic Pattern subscription is

 modified successfully, and the representation of the modified resource

 is returned.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. The subscription is 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 existing Individual Unified Traffic Pattern Subscription

 operationId: DeleteUnfTrffSubc

 tags:

 - Individual Unified Traffic Pattern Subscription (Document)

 responses:

 '204':

 description: No Content. Resource was 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'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 MulticastSubscription:

 description: Represents a multicast subscription.

 type: object

 properties:

 valGroupId:

 type: string

 anncMode:

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

 multiQosReq:

 type: string

 locArea:

 $ref: 'TS29122\_GMDviaMBMSbyMB2.yaml#/components/schemas/MbmsLocArea'

 duration:

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

 tmgi:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 localMbmsInfo:

 $ref: 'TS29486\_VAE\_FileDistribution.yaml#/components/schemas/LocalMbmsInfo'

 localMbmsActInd:

 type: boolean

 notifUri:

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

 reqTestNotif:

 type: boolean

 wsNotifCfg:

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

 suppFeat:

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

 upIpv4Addr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

 upIpv6Addr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

 upPortNum:

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

 radioFreqs:

 type: array

 items:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 minItems: 1

 required:

 - valGroupId

 - anncMode

 - multiQosReq

 - notifUri

 UnicastSubscription:

 description: Represents a unicast subscription.

 type: object

 properties:

 valTgtUe:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 uniQosReq:

 type: string

 duration:

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

 notifUri:

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

 reqTestNotif:

 type: boolean

 wsNotifCfg:

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

 suppFeat:

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

 required:

 - valTgtUe

 - notifUri

 UserPlaneNotification:

 description: Represents a notification on User Plane events.

 type: object

 properties:

 notifId:

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

 eventNotifs:

 type: array

 items:

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

 minItems: 1

 required:

 - notifId

 - eventNotifs

 NrmEventNotification:

 description: Represents a notification on an individual User Plane event.

 type: object

 properties:

 event:

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

 ts:

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

 deliveryMode:

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

 streamIds:

 type: array

 items:

 type: string

 minItems: 1

 required:

 - event

 - ts

 TscStreamAvailability:

 description: >

 TSC stream availability information includes the stream specification and list of traffic

 specifications. This response shall include stream specification matching one of the query

 parameters provided in the request.

 type: object

 properties:

 streamSpec:

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

 trafficSpecs:

 type: array

 items:

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

 minItems: 1

 required:

 - streamSpec

 - trafficSpecs

 StreamSpecification:

 description: >

 Stream specification includes MAC addresses of the source and destination DS-TT ports.

 type: object

 properties:

 srcMacAddr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

 dstMacAddr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/MacAddr48'

 required:

 - srcMacAddr

 - dstMacAddr

 TrafficSpecification:

 description: >

 The traffic classe supported by the DS-TTs and available end-to-end maximum latency value.

 type: object

 properties:

 trafficClass:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 e2eMaxLatency:

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

 required:

 - trafficClass

 - e2eMaxLatency

 TscStreamData:

 description: TSC stream data information.

 type: object

 properties:

 streamSpec:

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

 trafficSpecInfo:

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

 required:

 - streamSpec

 - trafficSpecInfo

 TrafficSpecInformation:

 description: >

 The traffic classe supported by the DS-TTs and available end-to-end latency

 value and Priority Code Point (PCP) value.

 type: object

 properties:

 pcpValue:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 maxFramInt:

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

 maxFramSize:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 maxIntFrames:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 maxLatency:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

 required:

 - pcpValue

 - maxFramInt

 - maxFramSize

 - maxIntFrames

 - maxLatency

 MBSResourceReq:

 description: Represents the parameters to request the creation of an MBS Resource.

 type: object

 properties:

 mbsResource:

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

 suppFeat:

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

 required:

 - mbsResource

 MBSResource:

 description: Represents an MBS Resource.

 type: object

 properties:

 valGroupId:

 type: string

 valUeIdsList:

 type: array

 items:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 minItems: 1

 servAnmtMode:

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

 mbsResServInfo:

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

 mbsResServiceArea:

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

 notifUri:

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

 netSysInd:

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

 localMbmsInfo:

 $ref: 'TS29486\_VAE\_FileDistribution.yaml#/components/schemas/LocalMbmsInfo'

 localMbmsActInd:

 type: boolean

 mbsResRespInfo:

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

 oneOf:

 - required: [valGroupId]

 - required: [valUeIdsList]

 not:

 required: [localMbmsInfo, localMbmsActInd]

 required:

 - servAnmtMode

 - mbsResServInfo

 - notifUri

 MBSResourceRespInfo:

 description: Represents NRM Server side information related to the MBS Resource.

 type: object

 properties:

 mbs5gSessionId:

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

 mbmsBearerId:

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

 upIpv4Addr:

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

 upIpv6Addr:

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

 upPortNum:

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

 mbs5GInfo:

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

 epsMbmsInfo:

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

 anyOf:

 - required: [upIpv4Addr]

 - required: [upIpv6Addr]

 MBSResourceResp:

 description: Represents a response to an MBS Resource creation/modification request.

 type: object

 properties:

 mbsResource:

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

 suppFeat:

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

 required:

 - mbsResource

 MBSResourcePatch:

 description: Represents the parameters to request the modification of an MBS Resource.

 type: object

 properties:

 mbsResServInfo:

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

 mbsResServiceArea:

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

 notifUri:

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

 localMbmsInfo:

 $ref: 'TS29486\_VAE\_FileDistribution.yaml#/components/schemas/LocalMbmsInfo'

 localMbmsActInd:

 type: boolean

 mbsResRespInfo:

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

 anyOf:

 - required: [mbsResServInfo]

 - required: [mbsResServiceArea]

 - required: [localMbmsInfo]

 not:

 required: [localMbmsInfo, localMbmsActInd]

 MbsResAct:

 description: Represents the parameters related to the activation of the MBS Resource.

 type: object

 properties:

 mbs5gSessionId:

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

 suppFeat:

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

 required:

 - mbs5gSessionId

 MbsResDeact:

 description: Represents the parameters related to the deactivation of the MBS Resource.

 type: object

 properties:

 mbs5gSessionId:

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

 suppFeat:

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

 required:

 - mbs5gSessionId

 BdtPolConfig:

 description: Represents the parameters related to the BDT Policy configuration.

 type: object

 properties:

 valServId:

 type: string

 valGroupId:

 type: string

 valUeIds:

 type: array

 items:

 type: string

 minItems: 1

 dataVolUe:

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

 desiredTimeWindow:

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

 grantTimeWindow:

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

 desiredGeoArea:

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

 expTime:

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

 policyGuidance:

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

 bdtPolRefId:

 type: string

 notifUri:

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

 suppFeat:

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

 oneOf:

 - required: [valGroupId]

 - required: [valUeIds]

 required:

 - valServId

 - notifUri

 - dataVolUe

 - desiredTimeWindow

 - desiredGeoArea

 BdtPolConfigPatch:

 description: >

 Represents the parameters to request modification of the BDT Policy configuration.

 type: object

 properties:

 dataVolUe:

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

 desiredTimeWindow:

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

 desiredGeoArea:

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

 expTime:

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

 PolicyGuidance:

 description: >

 Represents the list of Policy Guidance.

 type: object

 properties:

 policyType:

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

 cost:

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

 GeoArea:

 description: Represents a Geographical area.

 type: object

 properties:

 geographicAreas:

 type: array

 items:

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

 minItems: 1

 description: Represents a list of Geographical area.

 civicAddresses:

 type: array

 items:

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

 minItems: 1

 description: Represents a list of Civic address of an area.

 BdtNotification:

 description: Represents a notification on update related to BDT Policy configuration resource.

 type: object

 properties:

 notifId:

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

 bdtConfigId:

 type: string

 grantTimeWindow:

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

 bdtPolicyRemoveInd:

 type: boolean

 default: false

 required:

 - notifId

 - bdtConfigId

 UnfTrafficSubc:

 description: Represents the request parameters for Unified Traffic Pattern subscription.

 type: object

 properties:

 mgmtSubs:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains contains the unified traffic pattern subscription(s).

 The key of the map is any unique string encoded value.

 notifUri:

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

 suppFeat:

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

 required:

 - mgmtSubs

 - notifUri

 UnfTrafficSubcPatch:

 description: Represents the request parameters to update Unified Traffic Pattern subscription.

 type: object

 properties:

 mgmtSubs:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains contains the unified traffic pattern subscription(s).

 The key of the map is any unique string encoded value.

 notifUri:

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

 ManagementSubc:

 description: Represents the Unified Traffic Pattern subscription details.

 type: object

 properties:

 valServId:

 type: string

 valUeIds:

 type: array

 items:

 type: string

 minItems: 1

 traffPatInd:

 type: array

 items:

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

 minItems: 1

 traffPatConfig:

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

 required:

 - valServId

 - valUeIds

 - traffPatInd

 TrafficPatternConfig:

 description: Represents the traffic pattern configuration parameters.

 type: object

 properties:

 scheds:

 type: array

 items:

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

 minItems: 1

 expTime:

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

 stationInd:

 type: boolean

 default: false

 UnfTrafficUpdNotification:

 description: Represents a notification on update related to unified traffic pattern.

 type: object

 properties:

 valUeIds:

 type: array

 items:

 type: string

 minItems: 1

 sched:

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

 stationInd:

 type: boolean

 default: false

 cause:

 type: string

 required:

 - valUeIds

 RelTransReq:

 description: Represents the parameters to request reliable transmission service.

 type: object

 properties:

 requestorId:

 type: string

 appDescs:

 type: array

 items:

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

 minItems: 2

 valUeId:

 type: string

 valAddrInfo:

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

 suppFeat:

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

 required:

 - requestorId

 AppTraffDesc:

 description: Represents the application traffic descriptor.

 type: object

 properties:

 connInfo:

 $ref: 'TS29548\_SDD\_Transmission.yaml#/components/schemas/ConnInfo'

 transProtoc:

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

 required:

 - connInfo

 ValUeAddrInfo:

 description: Represents VAL UE address information.

 type: object

 properties:

 valUeIpv4Addr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

 valUeIpv6Addr:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

 port:

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

 oneOf:

 - required: [valUeIpv4Addr]

 - required: [valUeIpv6Addr]

# Simple data types and Enumerations

 EpsMbmsInfo:

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

 ServiceAnnoucementMode:

 anyOf:

 - type: string

 enum:

 - NRM

 - VAL

 - 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: |

 Indicates the service announcement mode.

 Possible values are:

 - NRM: NRM server performs the service announcement.

 - VAL: VAL server performs the service announcement.

 DeliveryMode:

 anyOf:

 - type: string

 enum:

 - UNICAST

 - MULTICAST

 - MBS\_MULTICAST

 - MBS\_BROADCAST

 - 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: |

 Indicates the user plane delivery mode.

 Possible values are:

 - UNICAST: Indicates Unicast delivery.

 - MULTICAST: Indicates EPS MBMS Multicast delivery.

 - MBS\_MULTICAST: Indicates 5GS MBS Multicast delivery.

 - MBS\_BROADCAST: Indicates 5GS MBS Broadcast delivery.

 NrmEvent:

 anyOf:

 - type: string

 enum:

 - UP\_DELIVERY\_MODE

 - 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: |

 Indicates the NRM event.

 Possible values are:

 - UP\_DELIVERY\_MODE: User Plane delivery mode.

 NetSysIndicator:

 anyOf:

 - type: string

 enum:

 - 5GS

 - EPS

 - 5GS\_AND\_EPS

 - 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: |

 Represents the network system indicator, i.e. 5GS, EPS or both.

 Possible values are:

 - 5GS: Indicates that the network system is 5GS.

 - EPS: Indicates that the network system is EPS.

 - 5GS\_AND\_EPS: Indicates that the network system is 5GS and EPS.

 PolicyType:

 anyOf:

 - type: string

 enum:

 - LOWEST\_COST

 - HIGH\_THROUGHPUT\_WITH\_COST

 - 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: |

 Indicates the Policy types.

 Possible values are:

 - LOWEST\_COST: Indicates that the policy guidance is to consider lowest cost.

 - HIGH\_THROUGHPUT\_WITH\_COST: Indicates that the policy guidance is to consider highest

 throughput.

 TrafficPatternIndication:

 anyOf:

 - type: string

 enum:

 - TRAFFIC\_PATTERN\_MANAGE

 - TRAFFIC\_PATTERN\_MONITOR

 - NETWORK\_PARAM\_COORDINATION

 - 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: |

 Represents the unified traffic pattern indication requests.

 Possible values are:

 - TRAFFIC\_PATTERN\_MANAGE: Indicates management of the UE unified traffic pattern request.

 - TRAFFIC\_PATTERN\_MONITOR: Indicates monitoring of the UE unified traffic pattern.

 - NETWORK\_PARAM\_COORDINATION: Indicates network parameter coordination by NRM with 5GC.

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

# A.7 SS\_KeyInfoRetrieval API

openapi: 3.0.0

info:

 title: SS\_KeyInfoRetrieval

 description: |

 API for SEAL Key Information Retrieval.

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 version: "1.1.1"

externalDocs:

 description: >

 3GPP TS 29.549 V17.6.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-kir/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

paths:

 /key-records:

 get:

 description: Retrieve key management information specific to VAL service.

 operationId: RetrieveKeyMgmtInfo

 tags:

 - Key Records (Collection)

 parameters:

 - name: val-service-id

 in: query

 description: String identifying an individual VAL service

 required: true

 schema:

 type: string

 - name: val-tgt-ue

 in: query

 description: Identifying a VAL target.

 required: false

 content:

 application/json:

 schema:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 responses:

 '200':

 description: The key management information of the VAL service, VAL User or VAL UE.

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 ValKeyInfo:

 description: >

 Represents key management information associated with VAL server, VAL user or VAL UE.

 type: object

 properties:

 userUri:

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

 skmsId:

 type: string

 description: String identifying the key management server.

 valService:

 type: string

 description: Unique identifier of a VAL Service.

 valTgtUe:

 $ref: 'TS29549\_SS\_UserProfileRetrieval.yaml#/components/schemas/ValTargetUe'

 keyInfo:

 type: string

 description: Key management information specific to VAL service, VAL User or VAL UE.

 required:

 - userUri

 - valService

 - keyInfo

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

# A.8 SS\_LocationAreaInfoRetrieval API

openapi: 3.0.0

info:

 title: SS\_LocationAreaInfoRetrieval

 description: |

 API for SEAL Location Area Info Retrieval.

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 version: "1.1.0"

externalDocs:

 description: >

 3GPP TS 29.549 V18.6.0 Service Enabler Architecture Layer for Verticals (SEAL);

 Application Programming Interface (API) specification; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.549/

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/ss-lair/v1'

 variables:

 apiRoot:

 default: https://example.com

 description: apiRoot as defined in clause 6.5 of 3GPP TS 29.549

paths:

 /location-retrievals:

 get:

 description: >

 Retrieve the UE(s) information in an application defined proximity range of a location.

 operationId: RetrieveUeLocInfo

 tags:

 - Location Information (Collection)

 parameters:

 - name: location-info

 in: query

 description: Location information around which the UE(s) information is requested.

 required: true

 content:

 application/json:

 schema:

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

 - name: val-svc-area-id

 in: query

 description: >

 The val service area identifier around which which the UE(s) information is requested.

 schema:

 $ref: 'TS29549\_SS\_VALServiceAreaConfiguration.yaml#/components/schemas/ValSvcAreaId'

 - name: range

 in: query

 description: >

 The range information over which the UE(s) information is required,

 expressed in meters.

 required: true

 schema:

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

 responses:

 '200':

 description: >

 The UE(s) information in an application defined proximity range of a location.

 content:

 application/json:

 schema:

 type: array

 items:

 $ref: 'TS29549\_SS\_Events.yaml#/components/schemas/LMInformation'

 minItems: 0

 description: >

 The UE(s) information in an application defined proximity range of a location.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

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