**3GPP TSG-CT WG3 Meeting #120eC3-221672**

**E-Meeting, 17th – 25th February 2022**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **29.522** | **CR** | **0548** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  |
| *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:***  | Update of OpenAPI version and TS version in externalDocs field |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | TEI17 |  | ***Date:*** | 2022-02-24 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | During this plenary cycle (2022-Q1), there have been some backwards compatible changes / corrections / addition of new features to the following NEF Northbound APIs defined in TS 29.522.The following agreed CRs update the OpenAPI file of the **TrafficInfluence API** for the present release:* TS 29.522 CR#0483 introduces a backwards compatible correction
* TS 29.522 CR#0491 introduces a backwards compatible feature

The API version need to be updated from 1.2.0-alpha.**4** to 1.2.0-alpha.**5**The following agreed CRs update the OpenAPI file of the **AnalyticsExposure API** for the present release:* TS 29.522 CR#0470 introduces a backwards compatible feature
* TS 29.522 CR#0531 introduces a backwards compatible feature
* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**1** to 1.1.0-alpha.**2**The following agreed CRs update the OpenAPI file of the **5GLANParameterProvision API** for the present release:* TS 29.522 CR#0504 introduces a backwards compatible correction
* TS 29.522 CR#0505 introduces a backwards compatible correction
* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**2** to 1.1.0-alpha.**3**The following agreed CRs update the OpenAPI file of the **ApplyingBdtPolicy API** for the present release:* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**1** to 1.1.0-alpha.**2**The following agreed CRs update the OpenAPI file of the **IPTVConfiguration API** for the present release:* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**2** to 1.1.0-alpha.**3**The following agreed CRs update the OpenAPI file of the **LpiParameterProvision API** for the present release:* TS 29.522 CR#0532 introduces a backwards compatible feature
* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**1** to 1.1.0-alpha.**2**The following agreed CRs update the OpenAPI file of the **ServiceParameter API** for the present release:* TS 29.522 CR#0482 introduces a backwards compatible correction
* TS 29.522 CR#0492 introduces a backwards compatible feature
* TS 29.522 CR#0500 introduces a backwards compatible correction
* TS 29.522 CR#0517 introduces a backwards compatible correction
* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**2** to 1.1.0-alpha.**3**The following agreed CRs update the OpenAPI file of the **ACSParameterProvision API** for the present release:* TS 29.522 CR#0530 introduces a backwards compatible feature
* TS 29.522 CR#0547 introduces a backwards compatible correction

The API version need to be updated from 1.1.0-alpha.**1** to 1.1.0-alpha.**2**The following agreed CRs update the OpenAPI file of the **AKMA API** for the present release:* TS 29.522 CR#0541 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**4** to 1.0.0-alpha.**5**The following agreed CRs update theOpenAPI file of the **TimeSyncExposure API** for the present release:* TS 29.522 CR#0484 introduces a backwards compatible feature
* TS 29.522 CR#0487 introduces a backwards compatible feature
* TS 29.522 CR#0488 introduces a backwards compatible feature
* TS 29.522 CR#0489 introduces a backwards compatible feature
* TS 29.522 CR#0490 introduces a backwards compatible feature
* TS 29.522 CR#0540 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**3** to 1.0.0-alpha.**4**The following agreed CRs update theOpenAPI file of the **EcsAddressProvision API** for the present release:* TS 29.522 CR#0542 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**3** to 1.0.0-alpha.**4**The following agreed CRs update theOpenAPI file of the **AmPolicyAuthorization API** for the present release:* TS 29.522 CR#0496 introduces a backwards compatible correction
* TS 29.522 CR#0544 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**3** to 1.0.0-alpha.**4**The following agreed CRs update theOpenAPI file of the **AMInfluence API** for the present release:* TS 29.522 CR#0497 introduces a backwards compatible correction
* TS 29.522 CR#0543 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**1** to 1.0.0-alpha.**2**The following agreed CRs update theOpenAPI file of the **MBSTMGI API** for the present release:* TS 29.522 CR#0469 introduces a backwards compatible correction
* TS 29.522 CR#0545 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**1** to 1.0.0-alpha.**2**The following agreed CRs update theOpenAPI file of the **MBSSession API** for the present release:* TS 29.522 CR#0474 introduces a backwards compatible correction
* TS 29.522 CR#0475 introduces a backwards compatible correction
* TS 29.522 CR#0508 introduces a backwards compatible correction
* TS 29.522 CR#0509 introduces a backwards compatible correction
* TS 29.522 CR#0537 introduces a backwards compatible correction
* TS 29.522 CR#0546 introduces a backwards compatible correction
* TS 29.571 CR#0334 introduces a backwards compatible correction
* TS 29.571 CR#0335 introduces a backwards compatible correction
* TS 29.571 CR#0336 introduces a backwards compatible feature
* TS 29.571 CR#0337 introduces a backwards compatible correction

The API version need to be updated from 1.0.0-alpha.**1** to 1.0.0-alpha.**2**As these APIs are under pre-release development, the pre-release version number (“alpha.n”) of the APIs need to be incremented as per the provisions of clause 4.3.1.2 of TS 29.501. The "externalDocs" object description field should also be updated to "v17.**5**.0" for these APIs. |
|  |  |
| ***Summary of change:*** | The CR proposes the following changes:* Increment the pre-release version number from "…-alpha.**n**" to "…-alpha.**n+1**" for the above listed APIs.
* Update the TS version number in "externalDocs" object description field to “v17.**5**.0”
 |
|  |  |
| ***Consequences if not approved:*** | OpenAPI version and the "externalDocs" object description field are not updated in the OpenAPI files impacted by the agreed CRs during Q1-2022 plenary cycle in CT3. |
|  |  |
| ***Clauses affected:*** | A.2, A.4, A.5, A.6, A.7, A.8, A.9, A.10, A.12, A.13, A.14, A.15, A.16, A.17, A.18 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

# A.2 TrafficInfluence API

openapi: 3.0.0

info:

 title: 3gpp-traffic-influence

 version: 1.2.0-alpha.5

 description: |

 API for AF traffic influence

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-traffic-influence/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - Traffic Influence Subscription

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 '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'

 post:

 summary: Creates a new subscription resource

 tags:

 - Traffic Influence Subscription

 requestBody:

 description: Request to create a new subscription resource

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 notificationDestination:

 '{request.body#/notificationDestination}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 afAcknowledgement:

 '{request.body#/afAckUri}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content (successful acknowledgement)

 '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:

 '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'

 responses:

 '201':

 description: Created (Successful creation of subscription)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/subscriptions/{subscriptionId}:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 get:

 summary: read an active subscriptions for the SCS/AS and the subscription Id

 tags:

 - Individual Traffic Influence Subscription

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual Traffic Influence Subscription

 requestBody:

 description: Parameters to update/replace the existing subscription

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual Traffic Influence Subscription

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The subscription was modified successfully.

 content:

 application/json:

 schema:

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

 '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'

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

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

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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'

 delete:

 summary: Deletes an already existing subscription

 tags:

 - Individual Traffic Influence Subscription

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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'

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 '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:

 TrafficInfluSub:

 description: Represents a traffic influence subscription.

 type: object

 properties:

 afServiceId:

 type: string

 description: Identifies a service on behalf of which the AF is issuing the request.

 afAppId:

 type: string

 description: Identifies an application.

 afTransId:

 type: string

 description: Identifies an NEF Northbound interface transaction, generated by the AF.

 appReloInd:

 type: boolean

 description: Identifies whether an application can be relocated once a location of the application has been selected.

 dnn:

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

 snssai:

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

 externalGroupId:

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

 anyUeInd:

 type: boolean

 description: Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

 subscribedEvents:

 type: array

 items:

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

 minItems: 1

 description: Identifies the requirement to be notified of the event(s).

 gpsi:

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

 ipv4Addr:

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

 ipDomain:

 type: string

 ipv6Addr:

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

 macAddr:

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

 dnaiChgType:

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

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the SCS/AS to request the NEF to send a test notification as defined in subclause 5.2.5.3. Set to false or omitted otherwise.

 websockNotifConfig:

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

 self:

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

 trafficFilters:

 type: array

 items:

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

 minItems: 1

 description: Identifies IP packet filters.

 ethTrafficFilters:

 type: array

 items:

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

 minItems: 1

 description: Identifies Ethernet packet filters.

 trafficRoutes:

 type: array

 items:

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

 minItems: 1

 description: Identifies the N6 traffic routing requirement.

 tfcCorrInd:

 type: boolean

 tempValidities:

 type: array

 items:

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

 validGeoZoneIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Identifies a geographic zone that the AF request applies only to the traffic of UE(s) located in this specific zone.

 afAckInd:

 type: boolean

 addrPreserInd:

 type: boolean

 simConnInd:

 type: boolean

 description: Indicates whether simultaneous connectivity should be temporarily maintained for the source and target PSA.

 simConnTerm:

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

 maxAllowedUpLat:

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

 easIpReplaceInfos:

 type: array

 items:

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

 minItems: 1

 description: Contains EAS IP replacement information.

 suppFeat:

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

 allOf:

 - oneOf:

 - required: [afAppId]

 - required: [trafficFilters]

 - required: [ethTrafficFilters]

 - oneOf:

 - required: [ipv4Addr]

 - required: [ipv6Addr]

 - required: [macAddr]

 - required: [gpsi]

 - required: [externalGroupId]

 - required: [anyUeInd]

 anyOf:

 - not:

 required: [subscribedEvents]

 - required: [notificationDestination]

 TrafficInfluSubPatch:

 description: Represents parameters to request the modification of a traffic influence subscription resource.

 type: object

 properties:

 appReloInd:

 type: boolean

 description: Identifies whether an application can be relocated once a location of the application has been selected.

 nullable: true

 trafficFilters:

 type: array

 items:

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

 minItems: 1

 description: Identifies IP packet filters.

 ethTrafficFilters:

 type: array

 items:

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

 minItems: 1

 description: Identifies Ethernet packet filters.

 trafficRoutes:

 type: array

 items:

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

 minItems: 1

 description: Identifies the N6 traffic routing requirement.

 tfcCorrInd:

 type: boolean

 nullable: true

 tempValidities:

 type: array

 items:

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

 minItems: 1

 nullable: true

 validGeoZoneIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Identifies a geographic zone that the AF request applies only to the traffic of UE(s) located in this specific zone.

 nullable: true

 afAckInd:

 type: boolean

 nullable: true

 addrPreserInd:

 type: boolean

 nullable: true

 simConnInd:

 type: boolean

 description: Indicates whether simultaneous connectivity should be temporarily maintained for the source and target PSA.

 simConnTerm:

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

 maxAllowedUpLat:

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

 easIpReplaceInfos:

 type: array

 items:

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

 minItems: 1

 description: Contains EAS IP replacement information.

 nullable: true

 notificationDestination:

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

 EventNotification:

 description: Represents a traffic influence event notification.

 type: object

 properties:

 afTransId:

 type: string

 description: Identifies an NEF Northbound interface transaction, generated by the AF.

 dnaiChgType:

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

 sourceTrafficRoute:

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

 subscribedEvent:

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

 targetTrafficRoute:

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

 sourceDnai:

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

 targetDnai:

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

 gpsi:

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

 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'

 ueMac:

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

 easIpReplSupport:

 type: boolean

 description: Indicates the capability of supporting EAS IP replacement in 5GC.

 afAckUri:

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

 required:

 - dnaiChgType

 - subscribedEvent

 AfResultInfo:

 description: Identifies the result of application layer handling.

 type: object

 properties:

 afStatus:

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

 trafficRoute:

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

 upBuffInd:

 type: boolean

 description: If present and set to "true" it indicates that buffering of uplink traffic to the target DNAI is needed.

 easIpReplaceInfos:

 type: array

 items:

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

 minItems: 1

 description: Contains EAS IP replacement information.

 required:

 - afStatus

 AfAckInfo:

 description: Represents acknowledgement information of a traffic influence event notification.

 type: object

 properties:

 afTransId:

 type: string

 ackResult:

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

 gpsi:

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

 required:

 - ackResult

 SubscribedEvent:

 anyOf:

 - type: string

 enum:

 - UP\_PATH\_CHANGE

 - type: string

 description: >

 Possible values are

 - UP\_PATH\_CHANGE: The AF requests to be notified when the UP path changes for the PDU session.

 AfResultStatus:

 anyOf:

 - type: string

 enum:

 - SUCCESS

 - TEMPORARY\_CONGESTION

 - RELOC\_NO\_ALLOWED

 - OTHER

 - type: string

 description: >

 Possible values are

 - SUCCESS: The application layer is ready or the relocation is completed.

 - TEMPORARY\_CONGESTION: The application relocation fails due to temporary congestion.

 - RELOC\_NO\_ALLOWED: The application relocation fails because application relocation is not allowed.

 - OTHER: The application relocation fails due to other reason.

\* \* \* Next changes \* \* \* \*

# A.4 AnalyticsExposure API

openapi: 3.0.0

info:

 title: 3gpp-analyticsexposure

 version: 1.1.0-alpha.2

 description: |

 API for Analytics Exposure.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-analyticsexposure/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - Analytics Exposure Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: supp-feat

 in: query

 description: Features supported by the NF service consumer

 required: false

 schema:

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

 responses:

 '200':

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

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - Analytics Exposure Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new subscription creation

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 notification:

 '{request.body#/notifUri}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 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'

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/subscriptions/{subscriptionId}:

 get:

 summary: read an active subscription for the AF and the subscription Id

 tags:

 - Individual Analytics Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 - name: supp-feat

 in: query

 description: Features supported by the NF service consumer

 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/AnalyticsExposureSubsc'

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual Analytics Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing subscription

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful deletion of the existing subscription)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Deletes an already existing subscription

 tags:

 - Individual Analytics Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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'

 /{afId}/fetch:

 post:

 summary: Fetch analytics information

 tags:

 - AnalyticsExposure API Fetch analytics information

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: The requested information was returned successfully.

 content:

 application/json:

 schema:

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

 '204':

 description: No Content (The requested Analytics data does not exist)

 '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'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 AnalyticsExposureSubsc:

 description: Represents an analytics exposure subscription.

 type: object

 properties:

 analyEventsSubs:

 type: array

 items:

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

 minItems: 1

 analyRepInfo:

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

 notifUri:

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

 notifId:

 type: string

 eventNotifis:

 type: array

 items:

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

 minItems: 1

 failEventReports:

 type: array

 items:

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

 minItems: 1

 suppFeat:

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

 self:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the AF to request the NEF to send a test notification as defined in subclause 5.2.5.3 of 3GPP TS 29.122. Set to false or omitted otherwise.

 websockNotifConfig:

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

 required:

 - analyEventsSubs

 - notifUri

 - notifId

 AnalyticsEventNotification:

 description: Represents an analytics event(s) notification.

 type: object

 properties:

 notifId:

 type: string

 analyEventNotifs:

 type: array

 items:

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

 minItems: 1

 required:

 - notifId

 - analyEventNotifs

 AnalyticsEventNotif:

 description: Represents an analytics event to be reported.

 type: object

 properties:

 analyEvent:

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

 expiry:

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

 timeStamp:

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

 ueMobilityInfos:

 type: array

 items:

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

 minItems: 1

 ueCommInfos:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/UeCommunication'

 minItems: 1

 abnormalInfos:

 type: array

 items:

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

 minItems: 1

 congestInfos:

 type: array

 items:

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

 minItems: 1

 nwPerfInfos:

 type: array

 items:

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

 minItems: 1

 qosSustainInfos:

 type: array

 items:

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

 minItems: 1

 required:

 - analyEvent

 - timeStamp

 AnalyticsEventSubsc:

 description: Represents a subscribed analytics event.

 type: object

 properties:

 analyEvent:

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

 analyEventFilter:

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

 tgtUe:

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

 required:

 - analyEvent

 AnalyticsEventFilterSubsc:

 description: Represents an analytics event filter.

 type: object

 properties:

 nwPerfReqs:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/NetworkPerfRequirement'

 minItems: 1

 locArea:

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

 appIds:

 type: array

 items:

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

 minItems: 1

 dnn:

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

 excepRequs:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/Exception'

 minItems: 1

 exptAnaType:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ExpectedAnalyticsType'

 exptUeBehav:

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

 reptThlds:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ThresholdLevel'

 minItems: 1

 snssai:

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

 qosReq:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/QosRequirement'

 qosFlowRetThds:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/RetainabilityThreshold'

 minItems: 1

 ranUeThrouThds:

 type: array

 items:

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

 minItems: 1

 extraReportReq:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/EventReportingRequirement'

 TargetUeId:

 description: Represents the target UE(s) information.

 type: object

 properties:

 anyUeInd:

 type: boolean

 gpsi:

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

 exterGroupId:

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

 UeMobilityExposure:

 description: Represents a UE mobility information.

 type: object

 properties:

 ts:

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

 recurringTime:

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

 duration:

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

 durationVariance:

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

 locInfo:

 type: array

 items:

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

 minItems: 1

 required:

 - duration

 - locInfo

 UeLocationInfo:

 description: Represents a UE location information.

 type: object

 properties:

 loc:

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

 ratio:

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

 confidence:

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

 required:

 - loc

 AnalyticsRequest:

 description: Represents the parameters to request to retrieve analytics information.

 type: object

 properties:

 analyEvent:

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

 analyEventFilter:

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

 analyRep:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/EventReportingRequirement'

 tgtUe:

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

 suppFeat:

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

 required:

 - analyEvent

 - suppFeat

 AnalyticsEventFilter:

 description: Represents analytics event filter information.

 type: object

 properties:

 locArea:

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

 dnn:

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

 nwPerfTypes:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/NetworkPerfType'

 minItems: 1

 appIds:

 type: array

 items:

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

 minItems: 1

 excepIds:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ExceptionId'

 minItems: 1

 exptAnaType:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ExpectedAnalyticsType'

 exptUeBehav:

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

 snssai:

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

 qosReq:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/QosRequirement'

 AnalyticsData:

 description: Represents analytics data.

 type: object

 properties:

 expiry:

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

 ueMobilityInfos:

 type: array

 items:

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

 minItems: 1

 ueCommInfos:

 type: array

 items:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/UeCommunication'

 minItems: 1

 nwPerfInfos:

 type: array

 items:

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

 minItems: 1

 abnormalInfos:

 type: array

 items:

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

 minItems: 1

 congestInfos:

 type: array

 items:

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

 minItems: 1

 qosSustainInfos:

 type: array

 items:

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

 minItems: 1

 suppFeat:

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

 required:

 - suppFeat

 NetworkPerfExposure:

 description: Represents network performance information.

 type: object

 properties:

 locArea:

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

 nwPerfType:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/NetworkPerfType'

 relativeRatio:

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

 absoluteNum:

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

 confidence:

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

 required:

 - locArea

 - nwPerfType

 AbnormalExposure:

 description: Represents a user’s abnormal behavior information.

 type: object

 properties:

 gpsis:

 type: array

 items:

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

 minItems: 1

 appId:

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

 excep:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/Exception'

 ratio:

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

 confidence:

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

 addtMeasInfo:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/AdditionalMeasurement'

 required:

 - excep

 CongestInfo:

 description: Represents a UE’s user data congestion information.

 type: object

 properties:

 locArea:

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

 cngAnas:

 type: array

 items:

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

 minItems: 1

 required:

 - locArea

 - cngAnas

 CongestionAnalytics:

 description: Represents data congestion analytics for transfer over the user plane, control plane or both.

 type: object

 properties:

 cngType:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/CongestionType'

 tmWdw:

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

 nsi:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ThresholdLevel'

 confidence:

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

 required:

 - cngType

 - tmWdw

 - nsi

 QosSustainabilityExposure:

 description: Represents a QoS sustainability information.

 type: object

 properties:

 locArea:

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

 startTs:

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

 endTs:

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

 qosFlowRetThd:

 $ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/RetainabilityThreshold'

 ranUeThrouThd:

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

 confidence:

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

 required:

 - locArea

 - startTs

 - endTs

 AnalyticsFailureEventInfo:

 description: Represents an event for which the subscription request was not successful and including the associated failure reason.

 type: object

 properties:

 event:

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

 failureCode:

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

 required:

 - event

 - failureCode

 AnalyticsEvent:

 anyOf:

 - type: string

 enum:

 - UE\_MOBILITY

 - UE\_COMM

 - ABNORMAL\_BEHAVIOR

 - CONGESTION

 - NETWORK\_PERFORMANCE

 - QOS\_SUSTAINABILITY

 - 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

 - UE\_MOBILITY: The AF requests to be notified about analytics information of UE mobility.

 - UE\_COMM: The AF requests to be notified about analytics information of UE communication.

 - ABNORMAL\_BEHAVIOR: The AF requests to be notified about analytics information of UE’s abnormal behavior.

 - CONGESTION: The AF requests to be notified about analytics information of user data congestion information.

 - NETWORK\_PERFORMANCE: The AF requests to be notified about analytics information of network performance.

 - QOS\_SUSTAINABILITY: The AF requests to be notified about analytics information of QoS sustainability.

 AnalyticsFailureCode:

 anyOf:

 - type: string

 enum:

 - UNAVAILABLE\_DATA

 - BOTH\_STAT\_PRED\_NOT\_ALLOWED

 - 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

 - UNAVAILABLE\_DATA: The event is rejected since necessary data to perform the service is unavailable.

 - BOTH\_STAT\_PRED\_NOT\_ALLOWED: The event is rejected since the start time is in the past and the end time is in the future, which means the NF service consumer requested both statistics and prediction for the analytics.

 - OTHER: The event is rejected due to other reasons.

\* \* \* Next changes \* \* \* \*

# A.5 5GLANParameterProvision API

openapi: 3.0.0

info:

 title: 3gpp-5glan-pp

 version: 1.1.0-alpha.3

 description: |

 API for 5G LAN Parameter Provision.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-5glan-pp/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - 5GLAN Parameters Provision Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

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

 content:

 application/json:

 schema:

 type: array

 items:

 $ref: '#/components/schemas/5GLanParametersProvision'

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - 5GLAN Parameters Provision Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new subscription creation

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 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'

 /{afId}/subscriptions/{subscriptionId}:

 get:

 summary: read an active subscription for the AF and the subscription Id

 tags:

 - Individual 5GLAN Parameters Provision Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual 5GLAN Parameters Provision Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing subscription

 required: true

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 responses:

 '200':

 description: OK (Successful deletion of the existing subscription)

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Partial updates an existing subscription resource

 tags:

 - Individual 5GLAN Parameters Provision Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvisionPatch'

 responses:

 '200':

 description: OK. The subscription was modified successfully.

 content:

 application/json:

 schema:

 $ref: '#/components/schemas/5GLanParametersProvision'

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Deletes an already existing subscription

 tags:

 - Individual 5GLAN Parameters Provision Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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:

 5GLanParametersProvision:

 description: Represents an individual 5G LAN parameters provision subscription resource.

 type: object

 properties:

 self:

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

 5gLanParams:

 $ref: '#/components/schemas/5GLanParameters'

 suppFeat:

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

 required:

 - 5gLanParams

 - suppFeat

 5GLanParametersProvisionPatch:

 description: Represents the 5G LAN parameters to request the modification of a subscription to provision parameters.

 type: object

 properties:

 5gLanParamsPatch:

 $ref: '#/components/schemas/5GLanParametersPatch'

 5GLanParameters:

 description: Represents 5G LAN service related parameters that need to be provisioned.

 type: object

 properties:

 exterGroupId:

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

 gpsis:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Contains the list of 5G VN Group members, each member is identified by GPSI. Any string value can be used as a key of the map.

 dnn:

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

 aaaIpv4Addr:

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

 aaaIpv6Addr:

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

 aaaUsgs:

 type: array

 items:

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

 minItems: 1

 mtcProviderId:

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

 snssai:

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

 sessionType:

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

 appDesps:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Describes the operation systems and the corresponding applications for each operation systems. The key of map is osId.

 required:

 - exterGroupId

 - gpsis

 - dnn

 - snssai

 - sessionType

 - appDesps

 5GLanParametersPatch:

 description: Represents 5G LAN service related parameters that need to be modified.

 type: object

 properties:

 gpsis:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Contains the list of 5G VN Group members, each member is identified by GPSI. Any string value can be used as a key of the map.

 appDesps:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Describes the operation systems and the corresponding applications for each operation systems. The key of map is osId.

 AppDescriptor:

 description: Represents an operation system and the corresponding applications.

 type: object

 properties:

 osId:

 $ref: 'TS29519\_Policy\_Data.yaml#/components/schemas/OsId'

 appIds:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Identifies applications that are running on the UE’s operating system. Any string value can be used as a key of the map.

 required:

 - osId

 - appIds

 AppDescriptorRm:

 description: Represents the same as the AppDescriptor data type but with the nullable:true property.

 type: object

 properties:

 appIds:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Identifies applications that are running on the UE’s operating system. Any string value can be used as a key of the map.

 AaaUsage:

 anyOf:

 - type: string

 enum:

 - AUTH

 - IP\_ALLOC

 - type: string

 description: >

 This string identifies the usage of secondary authentication/authorization, and/or UE IP address allocation from the DN-AAA server.

 description: >

 Possible values are

 - AUTH: secondary authentication/authorization needed from DN-AAA server

 - IP\_ALLOC: UE IP address allocation needed from DN-AAA server

\* \* \* Next changes \* \* \* \*

# A.6 ApplyingBdtPolicy API

openapi: 3.0.0

info:

 title: 3gpp-applying-bdt-policy

 version: 1.1.0-alpha.2

 description: |

 API for applying BDT policy

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-applying-bdt-policy/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - Applied BDT Policy Subscription

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - Applied BDT Policy Subscription

 requestBody:

 description: Request to create a new subscription resource

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation of subscription)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/subscriptions/{subscriptionId}:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 get:

 summary: read an active subscriptions for the SCS/AS and the subscription Id

 tags:

 - Individual Applied BDT Policy Subscription

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 patch:

 summary: Updates/replaces an existing subscription resource

 tags:

 - Individual Applied BDT Policy Subscription

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The subscription was modified successfully.

 content:

 application/json:

 schema:

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

 '204':

 description: No content. The 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: Deletes an already existing subscription

 tags:

 - Individual Applied BDT Policy Subscription

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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:

 AppliedBdtPolicy:

 description: Represents an applied BDT policy.

 type: object

 properties:

 externalGroupId:

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

 gpsi:

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

 bdtRefId:

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

 suppFeat:

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

 self:

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

 required:

 - bdtRefId

 - suppFeat

 oneOf:

 - required: [gpsi]

 - required: [externalGroupId]

 AppliedBdtPolicyPatch:

 description: Represents the parameters to request the modification of a subscription to applied BDT policy.

 type: object

 properties:

 bdtRefId:

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

 required:

 - bdtRefId

\* \* \* Next changes \* \* \* \*

# A.7 IPTVConfiguration API

openapi: 3.0.0

info:

 title: 3gpp-iptvconfiguration

 version: 1.1.0-alpha.3

 description: |

 API for IPTV configuration.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-iptvconfiguration/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/configurations:

 get:

 summary: read all of the active configurations for the AF

 tags:

 - IPTV Configurations

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get all of the active configurations for the AF)

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new configuration resource

 tags:

 - IPTV Configurations

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new configuration creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation of configuration)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/configurations/{configurationId}:

 get:

 summary: read an active configuration for the AF and the configuration Id

 tags:

 - Individual IPTV Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active configuration)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing configuration resource

 tags:

 - Individual IPTV Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing configuration

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful deletion of the existing configuration)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Partial updates an existing configuration resource

 tags:

 - Individual IPTV Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The configuration was modified successfully.

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Deletes an already existing configuration

 tags:

 - Individual IPTV Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing configuration)

 '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:

 IptvConfigData:

 description: Represents an individual IPTV Configuration resource.

 type: object

 properties:

 self:

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

 gpsi:

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

 exterGroupId:

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

 afAppId:

 type: string

 dnn:

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

 snssai:

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

 multiAccCtrls:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Identifies a list of multicast address access control information. Any string value can be used as a key of the map.

 mtcProviderId:

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

 suppFeat:

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

 required:

 - afAppId

 - multiAccCtrls

 - suppFeat

 IptvConfigDataPatch:

 description: Represents the parameters to request the modification of an IPTV Configuration resource.

 type: object

 properties:

 multiAccCtrls:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Identifies a list of multicast address access control information. Any string value can be used as a key of the map.

 MulticastAccessControl:

 description: Represents multicast address access control information.

 type: object

 properties:

 srcIpv4Addr:

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

 srcIpv6Addr:

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

 multicastV4Addr:

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

 multicastV6Addr:

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

 accStatus:

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

 required:

 - accStatus

 AccessRightStatus:

 anyOf:

 - type: string

 enum:

 - FULLY\_ALLOWED

 - PREVIEW\_ALLOWED

 - NO\_ALLOWED

 - type: string

 description: >

 Possible values are

 - FULLY\_ALLOWED: The User is fully allowed to access to the channel.

 - PREVIEW\_ALLOWED: The User is preview allowed to access to the channel.

 - NO\_ALLOWED: The User is not allowed to access to the channel.

\* \* \* Next changes \* \* \* \*

# A.8 LpiParameterProvision API

openapi: 3.0.0

info:

 title: 3gpp-lpi-pp

 version: 1.1.0-alpha.2

 description: |

 API for Location Privacy Indication Parameters Provisioning.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-lpi-pp/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/provisionedLpis:

 get:

 summary: read all of the active LPI Parameters Provisioning resources for the AF

 tags:

 - LPI Parameters Provisionings

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get all of the active resources for the AF)

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new LPI Parameters Provisioning resource

 tags:

 - LPI Parameters Provisionings

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new resource creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/provisionedLpis/{provisionedLpiId}:

 get:

 summary: read an active LPI Parameters Provisioning resource for the AF and the provisioned LPI Id

 tags:

 - Individual LPI Parameters Provisioning

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: provisionedLpiId

 in: path

 description: Identifier of the provisioned LPI parameter resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active resource)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing LPI Parameters Provisioning resource

 tags:

 - Individual LPI Parameters Provisioning

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: provisionedLpiId

 in: path

 description: Identifier of the provisioned LPI parameter resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing resource

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the existing resource)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is sent in the response message.

 '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: Deletes an already existing LPI Parameters Provisioning resource

 tags:

 - Individual LPI Parameters Provisioning

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: provisionedLpiId

 in: path

 description: Identifier of the provisioned LPI parameter resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing resource)

 '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:

 LpiParametersProvision:

 description: Represents an individual LPI Parameters Provisionings resource.

 type: object

 properties:

 self:

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

 exterGroupId:

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

 gpsi:

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

 lpi:

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

 mtcProviderId:

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

 suppFeat:

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

 required:

 - lpi

 - suppFeat

\* \* \* Next changes \* \* \* \*

# A.9 ServiceParameter API

openapi: 3.0.0

info:

 title: 3gpp-service-parameter

 version: 1.1.0-alpha.3

 description: |

 API for AF service paramter

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-service-parameter/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - Service Parameter Subscriptions

 parameters:

 - name: gpsi

 in: query

 description: The GPSI of the requested UE(s).

 required: false

 schema:

 type: array

 items:

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

 minItems: 1

 - name: ip-addrs

 in: query

 description: The IP address(es) of the requested UE(s).

 required: false

 schema:

 type: array

 items:

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

 minItems: 1

 - name: ip-domain

 in: query

 description: The IPv4 address domain identifier. The attribute may only be provided if IPv4 address is included in the ip-addrs query parameter.

 required: false

 schema:

 type: string

 - name: mac-addrs

 in: query

 description: The MAC address(es) of the requested UE(s).

 required: false

 schema:

 type: array

 items:

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

 minItems: 1

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - Service Parameter Subscriptions

 requestBody:

 description: Request to create a new subscription resource

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation of subscription)

 content:

 application/json:

 schema:

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

 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:

 description: Notifications upon AF Service Parameter Authorization Update, and/or AF subscribed event notification of the outcome related to the invocation of service parameters provisioning.

 required: true

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 responses:

 '204':

 description: Expected response to a successful callback processing without a 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'

 /{afId}/subscriptions/{subscriptionId}:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 get:

 summary: read an active subscriptions for the SCS/AS and the subscription Id

 tags:

 - Individual Service Parameter Subscription

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual Service Parameter Subscription

 requestBody:

 description: Parameters to update/replace the existing subscription

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual Service Parameter Subscription

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The subscription was modified successfully.

 content:

 application/json:

 schema:

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

 '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: Deletes an already existing subscription

 tags:

 - Individual Service Parameter Subscription

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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:

 ServiceParameterData:

 description: Represents an individual Service Parameter subscription resource.

 type: object

 properties:

 afServiceId:

 type: string

 description: Identifies a service on behalf of which the AF is issuing the request.

 appId:

 type: string

 description: Identifies an application.

 dnn:

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

 snssai:

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

 afTransId:

 type: string

 description: AF Transaction Reference Id assigned by the NEF for the AF invoked ServiceParameter\_Create request. Shall be present by the NEF in HTTP responses and by the AF in HTTP update request.

 externalGroupId:

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

 anyUeInd:

 type: boolean

 description: Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

 gpsi:

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

 ueIpv4:

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

 ueIpv6:

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

 ueMac:

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

 self:

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

 subNotifEvents:

 type: array

 items:

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

 minItems: 1

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the AF to request the NEF to send a test notification as defined in subclause 5.2.5.3 of 3GPP TS 29.122. Set to false or omitted otherwise.

 websockNotifConfig:

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

 paramOverPc5:

 $ref: '#/components/schemas/ParameterOverPc5'

 paramOverUu:

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

 paramForProSeDd:

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

 paramForProSeDc:

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

 paramForProSeU2NRelUe:

 $ref: '#/components/schemas/ParamForProSeU2NRelUe'

 paramForProSeRemUe:

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

 urspInfluence:

 type: array

 items:

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

 minItems: 1

 description: Contains the service parameter used to influence the URSP.

 mtcProviderId:

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

 suppFeat:

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

 ServiceParameterDataPatch:

 description: Represents the parameters to request the modification of a service parameter subscription resource.

 type: object

 properties:

 paramOverPc5:

 $ref: '#/components/schemas/ParameterOverPc5Rm'

 paramOverUu:

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

 paramForProSeDd:

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

 paramForProSeDc:

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

 paramForProSeU2NRelUe:

 $ref: '#/components/schemas/ParamForProSeU2NRelUeRm'

 paramForProSeRemUe:

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

 urspInfluence:

 type: array

 items:

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

 minItems: 1

 description: Contains the service parameter used to influence the URSP.

 notificationDestination:

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

 ParameterOverPc5:

 description: Represents configuration parameters for V2X communications over PC5 reference point.

 type: string

 ParameterOverPc5Rm:

 description: Represents the same as the ParameterOverPc5 data type but with the nullable:true property.

 type: string

 nullable: true

 ParameterOverUu:

 description: Represents configuration parameters for V2X communications over Uu reference point.

 type: string

 ParameterOverUuRm:

 description: Represents the same as the ParameterOverUu data type but with the nullable:true property.

 type: string

 nullable: true

 ParamForProSeDd:

 description: Represents the service parameters for 5G ProSe direct discovery.

 type: string

 ParamForProSeDdRm:

 description: This data type is defined in the same way as the ParamForProSeDd data type, but with the OpenAPI nullable property set to true.

 type: string

 nullable: true

 ParamForProSeDc:

 description: Represents the service parameters for 5G ProSe direct communications.

 type: string

 ParamForProSeDcRm:

 description: This data type is defined in the same way as the ParamForProSeDc data type, but with the OpenAPI nullable property set to true.

 type: string

 nullable: true

 ParamForProSeU2NRelUe:

 description: Represents the service parameters for 5G ProSe UE-to-network relay UE.

 type: string

 ParamForProSeU2NRelUeRm:

 description: This data type is defined in the same way as the ParamForProSeU2NRelay data type, but with the OpenAPI nullable property set to true.

 type: string

 nullable: true

 ParamForProSeRemUe:

 description: Represents the service parameters for 5G ProSe Remate UE.

 type: string

 ParamForProSeRemUeRm:

 description: This data type is defined in the same way as the ParamForProSeRemUe data type, but with the OpenAPI nullable property set to true.

 type: string

 nullable: true

 UrspRuleRequest:

 description: Contains parameters that can be used to influence the URSP.

 type: object

 properties:

 trafficDesc:

 $ref: 'TS29122\_ResourceManagementOfBdt.yaml#/components/schemas/TrafficDescriptor'

 routeSelParamSets:

 type: array

 items:

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

 minItems: 1

 description: Sets of parameters that may be used to influence the Route Selection Descriptors of the URSP.

 RouteSelectionParameterSet:

 description: Contains parameters that can be used to influence the Route Selection Descriptors of the URSP.

 type: object

 properties:

 dnn:

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

 snssai:

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

 precedence:

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

 spatialValidity:

 type: array

 items:

 type: string

 minItems: 1

 description: Indicates where the route selection parameters apply. It may correspond to a geographical area, for example using a geographic zone identifier that is known to the AF and is configured by the operator to correspond to a list of Cell Ids or TAIs.

 Event:

 anyOf:

 - type: string

 enum:

 - SUCCESS\_UE\_POL\_DEL\_SP

 - UNSUCCESS\_UE\_POL\_DEL\_SP

 - type: string

 description: >

 This string identifies AF subscribe to event(s) notifications related to AF provisioned service parameters.

 description: >

 Possible values are

 - SUCCESS\_UE\_POL\_DEL\_SP: Successful UE Policy Delivery related to the invocation of AF provisioned Service Parameters.

 - UNSUCCESS\_UE\_POL\_DEL\_SP: Unsuccessful UE Policy Delivery related to the invocation of AF provisioned Service Parameters.

 AfNotification:

 description: Notifications upon AF Service Parameter Authorization Update e.g. to revoke the authorization, and/or AF subscribed event notification of the outcome related to the invocation of service parameter provisioning.

 type: object

 properties:

 reportEvent:

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

 afTransId:

 type: string

 description: AF transaction identifier.

 authResult:

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

 gpsi:

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

 externalGroupId:

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

 anyUeInd:

 type: boolean

 description: Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

 dnn:

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

 snssai:

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

 eventInfo:

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

 required:

 - afTransId

 oneOf:

 - required: [gpsi]

 - required: [externalGroupId]

 - required: [anyUeInd]

 anyOf:

 - required: [reportEvent]

 - required: [authResult]

 AuthorizationResult:

 anyOf:

 - type: string

 enum:

 - AUTH\_REVOKED

 - type: string

 description: >

 This string indicates NEF notify the AF about the service parameters authorization updates result.

 description: >

 Possible values are

 - AUTH\_REVOKED: Indicated the service parameters authorization is revoked.

 EventInfo:

 description: Indicates the event information.

 type: object

 properties:

 failureCause:

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

 Failure:

 oneOf:

 - type: string

 enum:

 - UNSPECIFIED

 - UE\_NOT\_REACHABLE

 - UNKNOWN

 - type: string

 description: >

 This string represents the failure reason for the unsuccessful result. May present if the reported afSubEvent attribute is "UNSUCCESS\_UE\_POL\_DEL\_SP".

 description: >

 Possible values are

 - UNSPECIFIED: Indicates the PCF received the UE sent UE policy delivery service cause #111 (Protocol error, unspecified).

 - UE\_NOT\_REACHABLE: Indicates the PCF received the notification from the AMF that the UE is not reachable.

 - UNKNOWN: Indicates unknown reasons upon no response from the UE, e.g. UPDS message type is not defined or not implemented by the UE, or not compatible with the UPDS state, in which the UE shall ignore the UPDS message.

\* \* \* Next changes \* \* \* \*

# A.10 ACSParameterProvision API

openapi: 3.0.0

info:

 title: 3gpp-acs-pp

 version: 1.1.0-alpha.2

 description: |

 API for 5G ACS Parameter Provision.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-acs-pp/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - ACS Configuration Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

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

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - ACS Configuration Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new subscription creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/subscriptions/{subscriptionId}:

 get:

 summary: read an active subscription for the AF and the subscription Id

 tags:

 - Individual ACS Configuration Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing subscription resource

 tags:

 - Individual ACS Configuration Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing subscription

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the existing subscription)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Deletes an already existing subscription

 tags:

 - Individual ACS Configuration Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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:

 AcsConfigurationData:

 description: Represents an individual ACS Configuration subscription resource.

 type: object

 properties:

 self:

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

 exterGroupId:

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

 gpsi:

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

 acsInfo:

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

 mtcProviderId:

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

 suppFeat:

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

 required:

 - acsInfo

 - suppFeat

\* \* \* Next changes \* \* \* \*

# A.12 AKMA API

openapi: 3.0.0

info:

 title: 3gpp-akma

 version: 1.0.0-alpha.5

 description: |

 API for AKMA.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-akma/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /retrieve:

 post:

 summary: Retrieve AKMA Application Key Information.

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: The requested information was returned successfully.

 content:

 application/json:

 schema:

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

 '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'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 AkmaAfKeyRequest:

 description: Represents the parameters to request the retrieval of AKMA Application Key information.

 type: object

 properties:

 suppFeat:

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

 afId:

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

 aKId:

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

 required:

 - afId

 - aKId

 AkmaAfKeyData:

 description: Represents AKMA Application Key information data.

 type: object

 properties:

 suppFeat:

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

 gpsi:

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

 expiry:

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

 kaf:

 type: string

 supi:

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

 required:

 - kaf

 - expiry

 AfId:

 description: Represents an AF identifier.

 type: string

 AKId:

 description: Represents an AKMA Key Identifier.

 type: string

\* \* \* Next changes \* \* \* \*

# A.13 TimeSyncExposure API

openapi: 3.0.0

info:

 title: 3gpp-time-sync-exposure

 version: 1.0.0-alpha.4

 description: |

 API for time synchronization exposure.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-time-sync/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/subscriptions:

 get:

 summary: read all of the active subscriptions for the AF

 tags:

 - Time Synchronization Exposure Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

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

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new subscription resource

 tags:

 - Time Synchronization Exposure Subscriptions

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new subscription creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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:

 timeSyncSubsNotification:

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

 post:

 requestBody:

 description: Notification for Time Synchronization Capability for a list of UEs.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: Expected response to a successful callback processing without a 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'

 /{afId}/subscriptions/{subscriptionId}:

 get:

 summary: read an active subscription for the AF and the subscription Id

 tags:

 - Individual Time Synchronization Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Deletes an already existing subscription

 tags:

 - Individual Time Synchronization Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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'

 /{afId}/subscriptions/{subscriptionId}/configurations:

 get:

 summary: read all of the active configurations for the AF

 tags:

 - Time Synchronization Exposure Configurations

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 description: String identifying the individual synchronization Exposure Subscription resource in the NEF

 in: path

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get all of the active configurations for the AF)

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new configuration resource

 tags:

 - Time Synchronization Exposure Configurations

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 description: String identifying the individual synchronization Exposure Subscription resource in the NEF

 in: path

 required: true

 schema:

 type: string

 requestBody:

 description: new configuration creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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:

 timeSyncConfigNotification:

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

 post:

 requestBody:

 description: Notification for Time Synchronization Service status.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: Expected response to a successful callback processing without a 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'

 /{afId}/subscriptions/{subscriptionId}/configurations/{instanceReference}:

 get:

 summary: read an active subscription for the AF and the subscription Id

 tags:

 - Individual Time Synchronization Exposure Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 - name: instanceReference

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing configuration resource

 tags:

 - Individual Time Synchronization Exposure Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 - name: instanceReference

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing configuration

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful deletion of the existing configuration)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is to be sent in the response message.

 '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: Deletes an already existing configuration

 tags:

 - Individual Time Synchronization Exposure Configuration

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource

 required: true

 schema:

 type: string

 - name: instanceReference

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing configuration)

 '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:

 TimeSyncExposureSubsc:

 description: Contains requested parameters for the subscription to the notification of time synchronization capability.

 type: object

 properties:

 exterGroupId:

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

 gpsis:

 type: array

 items:

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

 minItems: 1

 description: Contains a list of UE for which the time synchronization capabilities is requested.

 anyUeInd:

 type: boolean

 description: Any UE indication. This IE shall be present if the event subscription is applicable to any UE. Default value "false" is used, if not present.

 afServiceId:

 type: string

 description: Identifies a service on behalf of which the AF is issuing the request.

 dnn:

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

 snssai:

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

 subsNotifId:

 type: string

 description: Notification Correlation ID assigned by the NF service consumer.

 subsNotifUri:

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

 subscribedEvents:

 type: array

 items:

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

 minItems: 1

 description: Subscribed events

 eventFilters:

 type: array

 items:

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

 minItems: 1

 description: Contains the filter conditions to match for notifying the event(s) of time synchronization capabilities for a list of UE(s).

 notifMethod:

 $ref: 'TS29508\_Nsmf\_EventExposure.yaml#/components/schemas/NotificationMethod'

 maxReportNbr:

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

 expiry:

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

 repPeriod:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the SCS/AS to request the SCEF to send a test notification as defined in subclause 5.2.5.3 of 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:

 - subsNotifUri

 - subsNotifId

 TimeSyncCapability:

 description: Contains time synchronization capability.

 type: object

 properties:

 gpsis:

 type: array

 items:

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

 minItems: 1

 description: Contains a list of UEs associated with the user plane node.

 upNodeId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

 gmCapables:

 type: array

 items:

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

 ptpCapForUes:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: Contains the PTP capabilities supported by each of the UE(s). The key of the map is the gpsi.

 required:

 - upNodeId

 - ptpCapForUes

 TimeSyncExposureConfig:

 description: Contains the Time Synchronization Configuration parameters.

 type: object

 properties:

 upNodeId:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

 reqPtpIns:

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

 gmEnable:

 type: boolean

 description: Indicates that the AF requests 5GS to act as a grandmaster for PTP or gPTP if it is included and set to true.

 gmPrio:

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

 timeDom:

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

 configNotifId:

 type: string

 description: Notification Correlation ID assigned by the NF service consumer.

 configNotifUri:

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

 tempValidity:

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

 required:

 - upNodeId

 - reqPtpIns

 - timeDom

 - configNotifId

 - configNotifUri

 TimeSyncExposureSubsNotif:

 description: Contains the notification of time synchronization capability.

 type: object

 properties:

 subsNotifId:

 type: string

 description: Notification Correlation ID assigned by the NF service consumer.

 eventNotifs:

 type: array

 items:

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

 minItems: 1

 required:

 - subsNotifId

 - eventNotifs

 SubsEventNotification:

 description: Notifications about subscribed Individual Events.

 type: object

 properties:

 event:

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

 timeSyncCapas:

 type: array

 items:

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

 minItems: 1

 required:

 - event

 TimeSyncExposureConfigNotif:

 description: Contains the notification of time synchronization service state.

 type: object

 properties:

 configNotifId:

 type: string

 description: Notification Correlation ID assigned by the NF service consumer.

 stateOfConfig:

 type: string

 required:

 - configNotifId

 - stateOfConfig

 PtpCapabilitiesPerUe:

 description: Contains the supported PTP capabilities per UE.

 type: object

 properties:

 gpsi:

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

 ptpCaps:

 type: array

 items:

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

 minItems: 1

 required:

 - gpsi

 - ptpCaps

 EventFilter:

 description: Contains the filter conditions to match for notifying the event(s) of time synchronization capabilities.

 type: object

 properties:

 instanceTypes:

 type: array

 items:

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

 minItems: 1

 transProtocols:

 type: array

 items:

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

 minItems: 1

 ptpProfiles:

 type: array

 items:

 type: string

 minItems: 1

 PtpInstance:

 description: Contains PTP instance configuration and activation requested by the AF.

 type: object

 properties:

 instanceType:

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

 protocol:

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

 ptpProfile:

 type: string

 required:

 - instanceType

 - protocol

 - ptpProfile

 Protocol:

 anyOf:

 - type: string

 enum:

 - ETH

 - IPV4

 - IPV6

 - type: string

 description: >

 This string identifies supported protocol.

 description: >

 Possible values are

 - ETH: Indicates Ethernet as defined in IEEE Std 1588 [45] Annex E is supported.

 - IPV4: Indicates IPv4 as defined in IEEE Std 1588 [45] Annex C is supported.

 - IPV6: Indicates IPv6 as defined in IEEE Std 1588 [45] Annex D is supported.

 GmCapable:

 anyOf:

 - type: string

 enum:

 - GPTP

 - PTP

 - type: string

 description: >

 This string identifies supported grandmaster.

 description: >

 Possible values are

 - GPTP: gPTP grandmaster is supported.

 - PTP: PTP grandmaste is supported.

 InstanceType:

 anyOf:

 - type: string

 enum:

 - BOUNDARY\_CLOCK

 - E2E\_TRANS\_CLOCK

 - P2P\_TRANS\_CLOCK

 - P2P\_RELAY\_INSTANCE

 - type: string

 description: >

 This string identifies supported PTP instance type.

 description: >

 Possible values are

 - BOUNDARY\_CLOCK: Indicates Boundary Clock as defined in IEEE Std 1588.

 - E2E\_TRANS\_CLOCK: Indicates End-to-End Transparent Clock as defined in IEEE Std 1588.

 - P2P\_TRANS\_CLOCK: Indicates Peer-to-Peer Transparent Clock as defined in IEEE Std 1588.

 - P2P\_RELAY\_INSTANCE: Indicates PTP Relay instance as defined in IEEE Std 802.1AS.

 SubscribedEvent:

 anyOf:

 - type: string

 enum:

 - AVAILABILITY\_FOR\_TIME\_SYNC\_SERVICE

 - type: string

 description: >

 This string identifies supported event.

 description: >

 Possible values are

 - AVAILABILITY\_FOR\_TIME\_SYNC\_SERVICE: The UE is availability for time synchronization service.

\* \* \* Next changes \* \* \* \*

# A.14 EcsAddressProvision API

openapi: 3.0.0

info:

 title: 3gpp-ecs-address-provision

 version: 1.0.0-alpha.4

 description: |

 API for ECS Address Provisioning.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-ecs-address-provision/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/configurations:

 get:

 summary: read all active configurations for a given AF

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get all of the active resources for the AF)

 content:

 application/json:

 schema:

 type: array

 items:

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

 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'

 post:

 summary: Creates a new configuration resource

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new resource creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 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'

 /{afId}/configurations/{configurationId}:

 get:

 summary: read an active resource for the AF and the configuration Id

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (Successful get the active resource)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing resource

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 requestBody:

 description: Parameters to update/replace the existing resource

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the existing resource)

 content:

 application/json:

 schema:

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

 '204':

 description: Successful case. The resource has been successfully updated and no additional content is sent in the response message.

 '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: Deletes an already existing configuration resource

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: configurationId

 in: path

 description: Identifier of the configuration resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content (Successful deletion of the existing resource)

 '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:

 EcsAddressProvision:

 description: Represents ECS address provision configuration.

 type: object

 properties:

 self:

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

 ecsServerAddr:

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

 spatialValidityCond:

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

 tgtUe:

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

 suppFeat:

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

 required:

 - ecsServerAddr

 - suppFeat

\* \* \* Next changes \* \* \* \*

# A.15 AmPolicyAuthorization API

openapi: 3.0.0

info:

 title: 3gpp-am-policyauthorization

 version: 1.0.0-alpha.4

 description: |

 API for AM policy authorization.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-am-policyauthorization/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /{afId}/app-am-contexts:

 post:

 summary: Creates a new Individual application AM Context resource

 operationId: PostAppAmContexts

 tags:

 - Application AM Contexts

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 requestBody:

 description: new resource creation

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Created (Successful creation)

 content:

 application/json:

 schema:

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

 headers:

 Location:

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

 required: true

 schema:

 type: string

 '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'

 callbacks:

 amEventNotification:

 '{$request.body#/evSubsc/eventNotifUri}':

 post:

 requestBody:

 description: Notification of an event occurrence.

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsNotification'

 responses:

 '204':

 description: The receipt of the notification is acknowledged

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 /{afId}/app-am-contexts/{appAmContextId}:

 get:

 summary: read an existing Individual application AM context

 operationId: GetAppAmContext

 tags:

 - Individual Application AM Context

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: appAmContextId

 in: path

 description: Identifier of the Individual application AM context

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK (A representation of the resource is successfully returned)

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 patch:

 summary: partial modifies an existing Individual application AM context

 operationId: ModAppAmContext

 tags:

 - Individual Application AM Context

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: appAmContextId

 in: path

 description: Identifier of the application AM context resource

 required: true

 schema:

 type: string

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: successful modification of the resource and a representation of that resource is returned. If a subscribed event is matched, the event notification is also included in the response.

 content:

 application/json:

 schema:

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

 '204':

 description: The successful modification

 '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'

 callbacks:

 amEventNotification:

 '{$request.body#/evSubsc/eventNotifUri}':

 post:

 requestBody:

 description: Notification of an event occurrence.

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsNotification'

 responses:

 '204':

 description: The receipt of the notification is acknowledged

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: Deletes an existing Individual Application AM Context

 operationId: DeleteAppAmContext

 tags:

 - Individual Application AM Context

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: appAmContextId

 in: path

 description: string identifying the Individual aaplication AM context resource

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The deletion is confirmed without returning additional data.

 '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'

 /{afId}/app-am-contexts/{appAmContextId}/events-subscription:

 put:

 summary: creates or modifies an AM Policy Events Subscription sub-resource.

 operationId: UpdateAmEventsSubsc

 tags:

 - AM Policy Events Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: appAmContextId

 in: path

 description: string identifying the AM Policy Events Subscription subresource

 required: true

 schema:

 type: string

 requestBody:

 description: Creation or modification of an application AM Policy Events Subscription sub-resource.

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsSubscData'

 responses:

 '201':

 description: The creation of the application AM Policy Events Subscription sub-resource is confirmed and its representation is returned. If an AM Event is matched, the response also includes the notification.

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsSubscRespData'

 headers:

 Location:

 description: 'Contains the URI of the created AM Policy Events Subscription subresource, according to the structure: {apiRoot}/3gpp-am-policyauthorization/v1/{afId}/app-am-contexts/{appAmContextId}/events-subscription}'

 required: true

 schema:

 type: string

 '200':

 description: The modification of the AM Policy Events Subscription subresource is confirmed and its representation is returned. If an AM Event is matched, the response also includes the notification.

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsSubscRespData'

 '204':

 description: The modification of the AM Policy Events Subscription subresource is confirmed without returning additional data.

 '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'

 callbacks:

 amEventNotification:

 '{$request.body#/evSubsc/eventNotifUri}':

 post:

 requestBody:

 description: Contains the information for the notification of an event occurrence.

 required: true

 content:

 application/json:

 schema:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsNotification'

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

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

 '413':

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

 '415':

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

 '429':

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

 '500':

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

 '503':

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

 default:

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

 delete:

 summary: deletes the AM Policy Events Subscription sub-resource

 operationId: DeleteAmEventsSubsc

 tags:

 - AM Policy Events Subscription

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 - name: appAmContextId

 in: path

 description: string identifying the Individual Application AM Context resource.

 required: true

 schema:

 type: string

 responses:

 '204':

 description: The deletion of the of the AM Policy Events Subscription subresource is confirmed without returning additional data.

 '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:

 AppAmContextExpData:

 description: Represents an Individual application AM context exposure resource.

 type: object

 properties:

 self:

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

 evSubscs:

 type: array

 items:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsSubscData'

 minItems: 1

 gpsi:

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

 afAppIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Identifies an application.

 highThruInd:

 type: boolean

 covReqs:

 type: array

 items:

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

 minItems: 1

 policyDuration:

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

 trafficFilters:

 type: array

 items:

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

 minItems: 1

 ethTrafficFilters:

 type: array

 items:

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

 minItems: 1

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the AF to request the NEF to send a test notification as defined in subclause 5.2.5.3 of 3GPP TS 29.122. Set to false or omitted otherwise.

 websockNotifConfig:

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

 required:

 - gpsi

 anyOf:

 - required: [highThruInd]

 - required: [covReqs]

 oneOf:

 - required: [afAppIds]

 - required: [trafficFilters]

 - required: [ethTrafficFilters]

 AppAmContextExpUpdateData:

 description: Contains the modification(s) to be applied to the Individual application AM context exposure resource.

 type: object

 properties:

 evSubscs:

 type: array

 items:

 $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsSubscDataRm'

 minItems: 1

 afAppIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Identifies an application.

 highThruInd:

 type: boolean

 covReqs:

 type: array

 items:

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

 minItems: 1

 policyDuration:

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

 trafficFilters:

 type: array

 items:

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

 minItems: 1

 ethTrafficFilters:

 type: array

 items:

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

 minItems: 1

 notificationDestination:

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

 GeographicalArea:

 description: Contains geographical area information (e.g.a civic address or shapes).

 type: object

 properties:

 civicAddress:

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

 shapes:

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

 AppAmContextExpRespData:

 description: It represents a response to a modification or creation request of an Individual Application AM resource. It may contain the notification of the already met events

 anyOf:

 - $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AppAmContextData'

 - $ref: 'TS29534\_Npcf\_AMPolicyAuthorization.yaml#/components/schemas/AmEventsNotification'

\* \* \* Next changes \* \* \* \*

# A.16 AMInfluence API

openapi: 3.0.0

info:

 title: AMInfluence

 version: 1.0.0-alpha.2

 description: |

 AMInfluence API Service.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/

servers:

 - url: '{apiRoot}/3gpp-am-influence/v1'

 variables:

 apiRoot:

 default: https://example.com

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

security:

 - {}

 - oAuth2ClientCredentials: []

paths:

 /{afId}/subscriptions:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF

 required: true

 schema:

 type: string

 get:

 summary: Read all of the active subscriptions for the AF.

 tags:

 - AM Influence Subscription

 responses:

 '200':

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

 content:

 application/json:

 schema:

 type: array

 items:

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

 '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'

 post:

 summary: Create a new subscription to AM influence.

 operationId: CreateAMInfluenceSubcription

 tags:

 - AM Influence Subscription

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Create a new Individual AM Influence Subscription resource.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/3gpp-am-influence/v1/{afId}/subscriptions/{subscriptionId}.'

 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:

 required: true

 content:

 application/json:

 schema:

 type: array

 items:

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

 minItems: 1

 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'

 /{afId}/subscriptions/{subscriptionId}:

 parameters:

 - name: afId

 in: path

 description: Identifier of the AF.

 required: true

 schema:

 type: string

 - name: subscriptionId

 in: path

 description: Identifier of the subscription resource.

 required: true

 schema:

 type: string

 get:

 summary: Read an active subscription identified by the subscriptionId.

 tags:

 - Individual AM Influence Subscription

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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/Replace an existing subscription resource.

 tags:

 - Individual AM Influence Subscription

 requestBody:

 description: Parameters to update/replace the existing subscription.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the subscription)

 content:

 application/json:

 schema:

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

 '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: Update/Replace an existing subscription resource.

 tags:

 - Individual AM Influence Subscription

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The subscription was modified successfully.

 content:

 application/json:

 schema:

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

 '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 existing subscription.

 tags:

 - Individual AM Influence Subscription

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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: '{nrfApiRoot}/oauth2/token'

 scopes: {}

 schemas:

 AmInfluSub:

 description: Represents an AM influence subscription.

 type: object

 properties:

 afTransId:

 type: string

 supi:

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

 gpsi:

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

 externalGroupId:

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

 anyUeInd:

 type: boolean

 description: Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

 dnnSnssaiInfos:

 type: array

 items:

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

 minItems: 1

 description: Each of the element identifies a (DNN, S-NSSAI) combination.

 afAppIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Each of the element identifies an application.

 highThruInd:

 type: boolean

 geoAreas:

 type: array

 items:

 $ref: 'TS29522\_AmPolicyAuthorization.yaml#/components/schemas/GeographicalArea'

 minItems: 1

 description: Identifies geographic areas of the user where the request is applicable.

 policyDuration:

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

 self:

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

 subscribedEvents:

 type: array

 items:

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

 minItems: 1

 description: Indicates one or more AM influence related events.

 notificationDestination:

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

 requestTestNotification:

 type: boolean

 description: Set to true by the AF to request the NEF to send a test notification as defined in subclause 5.2.5.3 of 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:

 - afTransId

 anyOf:

 - required: [highThruInd]

 - required: [geoAreas]

 oneOf:

 - required: [gpsi]

 - required: [externalGroupId]

 - required: [anyUeInd]

 AmInfluSubPatch:

 description: Represents parameters to request the modification of an AM influence subscription resource.

 type: object

 properties:

 highThruInd:

 type: boolean

 geoAreas:

 type: array

 items:

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

 minItems: 1

 description: Identifies geographic areas of the user where the request is applicable.

 policyDuration:

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

 dnnSnssaiInfos:

 type: array

 items:

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

 minItems: 1

 description: Each of the element identifies a (DNN, S-NSSAI) combination.

 afAppIds:

 type: array

 items:

 type: string

 minItems: 1

 description: Each of the element identifies an application.

 subscribedEvents:

 type: array

 items:

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

 minItems: 1

 description: Indicates one or more AM influence related events.

 notificationDestination:

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

 afTransId:

 type: string

 description: Identifies an NEF Northbound interface transaction, generated by the AF.

 AmInfluEventNotif:

 description: Represents an AM influence event notification.

 type: object

 properties:

 afTransId:

 type: string

 event:

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

 geoAreas:

 type: array

 items:

 $ref: 'TS29522\_AmPolicyAuthorization.yaml#/components/schemas/GeographicalArea'

 minItems: 1

 description: Identifies geographic areas of the user where the request is applicable.

 required:

 - event

 - afTransId

 DnnSnssaiInformation:

 description: Represents a (DNN, SNSSAI) combination.

 type: object

 properties:

 dnn:

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

 snssai:

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

# ENUMERATIONS DATA TYPES

#

 AmInfluEvent:

 description: Represents the service area coverage outcome event.

 anyOf:

 - type: string

 enum:

 - SERVICE\_AREA\_COVRG\_OUTCOME

 - type: string

\* \* \* Next changes \* \* \* \*

# A.17 MBSTMGI API

openapi: 3.0.0

info:

 title: 3gpp-mbs-tmgi

 version: 1.0.0-alpha.2

 description: |

 API for the allocation, deallocation and management of TMGI(s) for 5MBS.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

security:

 - {}

 - oAuth2ClientCredentials: []

servers:

 - url: '{apiRoot}/3gpp-mbs-tmgi/v1'

 variables:

 apiRoot:

 default: https://example.com

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

paths:

 /allocate:

 post:

 summary: Request the allocation of TMGI(s) for new 5MBS session(s) or the refresh of the expiry time of already allocated TMGI(s).

 operationId: AllocateTmgi

 tags:

 - TMGI Allocation or Timer Expiry Refresh

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: Successful case. The allocated TMGI(s) or a refreshed expiry time for the concerned already allocated TMGI(s) is/are returned to the requesting AF.

 content:

 application/json:

 schema:

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

 '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'

 callbacks:

 TmgiTimerExpiryNotification:

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

 post:

 requestBody:

 description: Represents the TMGI(s) timer expiry notification information (e.g. list of TMGI(s) for which the timer has expired).

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: Expected response to a successful callback processing without a 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'

 /deallocate:

 post:

 summary: Request the deallocation of TMGI(s).

 operationId: DeallocateTmgi

 tags:

 - TMGI Deallocation

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content. Successful case, the TMGI(s) have been deallocated

 '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'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{tokenUrl}'

 scopes: {}

 schemas:

 TmgiAllocRequest:

 description: Represents the full set of parameters to initiate a TMGI(s) allocation request or the refresh of the expiry time of already allocated TMGI(s).

 type: object

 properties:

 afId:

 type: string

 tmgiParams:

 $ref: 'TS29532\_Nmbsmf\_TMGI.yaml#/components/schemas/TmgiAllocate'

 notificationUri:

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

 requestTestNotification:

 type: boolean

 websockNotifConfig:

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

 suppFeat:

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

 required:

 - afId

 - tmgiParams

 TmgiAllocResponse:

 description: Represents TMGI(s) allocation information or the refreshed expiry time for already allocated TMGI(s)

 type: object

 properties:

 tmgiInfo:

 $ref: 'TS29532\_Nmbsmf\_TMGI.yaml#/components/schemas/TmgiAllocated'

 suppFeat:

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

 required:

 - tmgiInfo

 TmgiDeallocRequest:

 description: Represents information to request the deallocation of TMGI(s).

 type: object

 properties:

 afId:

 type: string

 tmgis:

 type: array

 items:

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

 minItems: 1

 required:

 - afId

 - tmgis

 ExpiryNotif:

 description: Represents TMGI(s) timer expiry notification information.

 type: object

 properties:

 tmgis:

 type: array

 items:

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

 minItems: 1

 required:

 - tmgis

\* \* \* Next changes \* \* \* \*

# A.18 MBSSession API

openapi: 3.0.0

info:

 title: 3gpp-mbs-session

 version: 1.0.0-alpha.2

 description: |

 <API Name> Service.

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externalDocs:

 description: >

 3GPP TS 29.522 V17.5.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.522/'

servers:

 - url: '{apiRoot}/3gpp-mbs-session/v1'

 variables:

 apiRoot:

 default: https://example.com

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

security:

 - {}

 - oAuth2ClientCredentials:

 - 3gpp-mbs-session

paths:

 /mbs-sessions:

 post:

 summary: Create

 tags:

 - MBS sessions collection

 operationId: Create

 requestBody:

 description: representation of the MBS session to be created in the NEF

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: successful creation of an MBS session

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: 'Contains the URI of the newly created resource, according to the structure: {apiRoot}/3gpp-mbs-session/v1/mbssessions/{mbsSessionId}'

 required: true

 schema:

 type: string

 '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-sessions/{mbsSessionId}:

 parameters:

 - name: mbsSessionId

 in: path

 description: Identifier of the MBS Session

 required: true

 schema:

 type: string

 put:

 summary: Updates/replaces an existing MBS session resource

 tags:

 - Individual MBS Session

 requestBody:

 description: Parameters to update/replace the MBS Session

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '200':

 description: OK (Successful update of the MBS Session resource)

 content:

 application/json:

 schema:

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

 '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: Updates/replaces an existing MBS Session resource

 tags:

 - Individual MBS Session

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: OK. The MBS Session resource was modified successfully.

 content:

 application/json:

 schema:

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

 '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: Deletes an already existing MBS Session resource

 tags:

 - Individual MBS Session

 responses:

 '204':

 description: No Content (Successful deletion of the existing MBS Session resource)

 '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-sessions/subscriptions:

 get:

 summary: read all of the active MBS Sessions status subscriptions

 tags:

 - MBS Session Subscriptions

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 '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'

 post:

 summary: Creates a new MBS Session subscription resource

 tags:

 - MBS Session subscriptions

 requestBody:

 description: Request to create a new MBS Session subscription resource

 required: true

 content:

 application/json:

 schema:

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

 callbacks:

 notificationUri:

 '{request.body#/notificationUri}':

 post:

 requestBody: # contents of the callback message

 required: true

 content:

 application/json:

 schema:

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

 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'

 responses:

 '201':

 description: Created (Successful creation of subscription)

 content:

 application/json:

 schema:

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

 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'

 /mbs-sessions/subscriptions/{subscriptionId}:

 parameters:

 - name: subscriptionId

 in: path

 description: Identifier of the MBS Session subscription resource

 required: true

 schema:

 type: string

 get:

 summary: read an active MBS Session subscriptions for the SCS/AS and the subscription Id

 tags:

 - Individual MBS Session subscription

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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: Deletes an already existing subscription

 tags:

 - Individual MBS Session Subscription

 responses:

 '204':

 description: No Content (Successful deletion of the existing subscription)

 '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: '{nrfApiRoot}/oauth2/token'

 scopes:

 3gpp-mbs-session: Access to the Nnef-MBSSession API

 schemas:

#

# STRUCTURED DATA TYPES

#

 MbsSessionCreateReq:

 description: Data within Create Request

 type: object

 properties:

 afId:

 type: string

 mbsSession:

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

 required:

 - mbsSession

 MbsSessionCreateRsp:

 description: Data within Create Response

 type: object

 properties:

 mbsSession:

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

 tmgi:

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

 inTunAddr:

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

 required:

 - mbsSession

 MbsSessionPatch:

 description: Represents the requested modifications to an Individual MBS Session resource

 type: object

 properties:

 mbsSession:

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

 required:

 - mbsSession

 MbsSessionSubsc:

 description: Represents an MBS Session Subscription.

 type: object

 properties:

 notificationUri:

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

 mbsSessionId:

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

 mbsSessionStatus:

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

 required:

 - notificationUri

 - mbsSessionId

 - mbsSessionStatus

 MbsSessionStatusNotif:

 description: Represents an MBS Session Status notification.

 type: object

 properties:

 mbsSessionId:

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

 mbsSessionStatus:

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

 required:

 - mbsSessionId

 - mbsSessionStatus

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

 MbsSessionStatus:

 anyOf:

 - type: string

 enum:

 - MBS\_REL\_TMGI\_EXPIRY

 - BROADCAST\_STATUS

 - type: string

 description: >

 Possible values are

 - MBS\_REL\_TMGI\_EXPIRY: The AF requests to be notified about MBS Session release due to TMGI expiry.

 - BROADCAST\_STATUS: The AF requests to be notified about MBS Session broadcast status.

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