**3GPP TSG-CT WG3 Meeting #134 *C3-242277***

**Changsha, China, 15 - 19 April, 2024 *(Revision of C3-242xxx)***

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.591** | **CR** | **0180** | **rev** | **-** | **Current version:** | **18.5.0** |  |
|  |
| *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:***  | Removal of the Editor’s note and enhacement about ECSAddress API |
|  |  |
| ***Source to WG:*** | Huawei, Nokia |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | EDGE\_Ph2 |  | ***Date:*** | 2024-03-30 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Following EN exists in clause 5.4.6.2.2:Editor's note: Whether the "dnns", "snssais" and "internalGroupId" attributes are single or plural and if they need to be included in the notification is FFS.In TS 23.502, the SA2 indicates that the following attributes can be provided as input, and it is also implemented in the procedures in TS 23.548.:***Inputs, Optional:*** *list of (DNN, S-NSSAI), Internal Group Identifier.*Hence, in the Nnef\_ECSAddress API, the "dnns" and "snssais" should support plural and the "internalGroupId" should be single. Hence, the current definition in Stage 3 is fully address the Stage 2 requirement and can simply remove the EN.In addition, for the ECS Address Configuration Information subscription, the attributes may be partially modified in the updating procedure, it is proposed to add a PATCH request to support partially modifying an existing subscription for subsequent expansion. |
|  |  |
| ***Summary of change:*** | Remove the EN in clause 5.4.6.2.2 and address the above mentioned issues. |
|  |  |
| ***Consequences if not approved:*** | Editor’s Notes remain in the specification. |
|  |  |
| ***Clauses affected:*** | 4.5.2.2.2, 4.5.2.2.3, 4.5.2.3.2, 5.4.3.1, 5.4.3.3.3.4(new), 5.4.6.1, 5.4.6.2.2, 5.4.6.2.4(new), A.5 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR introduces backward compatible corrections to the Nnef\_ECSAddress API. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

##### 4.5.2.2.2 Creating a new subscription

Figure 4.5.2.2.2-1 illustrates the creation of a Individual ECS Address Configuration Information Subscription.



Figure 4.5.2.2.2-1: Creation of a subscription

In order to subscribe to ECS Address Configuration Information, the SMF shall send an Nnef\_ECSAddress\_Subscribe request using the HTTP POST method to the NEF with "{apiRoot}/nnef-ecs-addr-cfg-info/<apiVersion>/subscriptions" as request URI as shown in step 1 of figure 4.5.2.2.2-1. The HTTP POST message shall include EcsAddrCfgInfoSub data structure as request body. The EcsAddrCfgInfoSub data structure shall include:

- the notification URI in the "notifUri" attribute;

- the notification correlation identifier in the "notifCorrId" attribute;

and may include:

- the identifications of DNN in "dnns" attribute;

- the identifications of network slice in "snssais" attribute;

- the internal Group Identifier in "internalGroupId" attribute;

- an indicator to immediately report the currently available ECS Address Configuration Information in "immRepInd" attribute;

Upon receipt of the HTTP request from the SMF, the NEF shall interact with the UDR by invoking the Nudr\_DataRepository service as described in 3GPP TS 29.504 [20] to fetch the ECS Address Configuration Information in the application data in the UDR.

After receiving a successful response from the UDR, the NEF shall create a new subscription and assign a subscription identifier for the "Individual ECS Address Configuration Information Subscription" resource. Then the NEF shall send an HTTP "201 Created" response with EcsAddrCfgInfoSub data structure as response body and a Location header field containing the URI of the created individual subscription resource to the NF service consumer.

If the immediate report indication is included in the subscription request, the NEF shall include the currently available ECS Address Configuration Information in "immReports" attribute in the response body.

If errors occur when processing the HTTP POST request or receiving an error code from the UDR, the NEF shall send an HTTP error response as specified in clause 5.4.7.

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

##### 4.5.2.2.3 Modifying an existing subscription

Figure 4.5.2.2.3-1 illustrates the modification of an existing subscription.



Figure 4.5.2.2.3-1: Modification of an existing subscription

To modify an existing subscription to event notifications, the NF service consumer shall send an HTTP PUT/PATCH request with: "{apiRoot}/nnef-ecs-addr-cfg-info/<apiVersion>/subscriptions/{subscriptionId}" as request URI, as shown in step 1 of figure 4.5.2.2.3-1, where "{subscriptionId}" is the subscription ID of the existing subscription. The EcsAddrCfgInfoSub data structure is included as PUT request body as described in clause 4.5.2.2.2 or the EcsAddrCfgInfoSubPatch data structure is included as PATCH request body as defined in clause 5.4.6.2.4.

Upon successful reception of an HTTP PUT/PATCH request with: "{apiRoot}/nnef-ecs-addr-cfg-info/<apiVersion>/subscriptions/{subscriptionId}" as request URI and EcsAddrCfgInfoSub/EcsAddrCfgInfoSubPatch data structure as request body, the NEF shall interact with the UDR by invoking the Nudr\_DataRepository service as described in 3GPP TS 29.504 [20] to fetch the ECS Address Configuration Information in the application data in the UDR.

After receiving a successful response from the UDR, the NEF shall:

- send HTTP "200 OK" response (as shown in figure 4.5.2.2.3-1, step 2a) with a response body containing a representation of the updated subscription in the EcsAddrCfgInfoSub data type; or

- send HTTP "204 No Content" response (as shown in figure 4.5.2.2.3-1, step 2b).

If the immediate report indication is included in the subscription request, the NEF shall include the current available ECS Address Configuration Information in the response body.

If the received HTTP PUT/PATCH request needs to be redirected, the NEF shall send an HTTP redirect response as specified in clause 6.10.9 of 3GPP TS 29.500 [4].

If errors occur when processing the HTTP PUT/PATCH request or receiving an error code from the UDR, the NEF shall send an HTTP error response as specified in clause 5.4.7.

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

##### 4.5.2.3.2 Unsubscription of notification of ECS Address Configuration Information

Figure 4.5.2.3.2-1 illustrates the unsubscription of event notifications from NEF.



Figure 4.5.2.3.2-1: NF service consumer unsubscribes from notifications

In order to delete an existing subscription to ECS Address Configuration Information, the NF service consumer shall send an HTTP DELETE request message with "{apiRoot}/nnef-ecs-addr-cfg-info/<apiVersion>/subscriptions/{subscriptionId}" as request URI, as shown in step 1 of figure 4.5.2.3.2-1, where "{subscriptionId}" is the subscription identifier of the existing subscription resource that is to be deleted.

Upon successful reception of an HTTP DELETE, the NEF shall delete the individual resource and shall respond to the NF service consumer with an HTTP "204 No Content" response message, as shown in step 2 of figure 4.5.2.3.2-1.

If the received HTTP DELETE request needs to be redirected, the NEF shall send an HTTP redirect response as specified in clause 6.10.9 of 3GPP TS 29.500 [4].

If errors occur when processing the HTTP DELETE request, the NEF shall send an HTTP error response as specified in clause 5.4.7.

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

#### 5.4.3.1 Overview

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

Figure 5.4.3.1-1 depicts the resource URIs structure for the Nnef\_ECSAddress API.



Figure 5.4.3.1-1: Resource URI structure of the Nnef\_ECSAddress API

Table 5.4.3.1-1 provides an overview of the resources and applicable HTTP methods.

Table 5.4.3.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method or custom operation | Description |
| ECS Address Configuration Information Subscriptions | /subscriptions | POST | Creates a subscription to notifications of ECS Address Configuration Information, i.e. creation of an Individual ECS Address Configuration Information Subscription resource. |
| Individual ECS Address Configuration Information Subscription | /subscriptions/{subscriptionId} | PUT | Modify all of the properties of an existing subscription to ECS Address Configuration Information. |
| PATCH | Partially modify the properties of an existing subscription to ECS Address Configuration Information. |
| GET | Reads a subscription to Individual ECS Address Configuration Information. |
| DELETE | Cancels an individual subscription to notifications of ECS Address Configuration Information. |

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

###### 5.4.3.3.3.4 PATCH

This method shall support the URI query parameters specified in table 5.4.3.3.3.4-1.

Table 5.4.3.3.3.4-1: URI query parameters supported by the PATCH method on this resource

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

This method shall support the request data structures specified in table 5.4.3.3.3.4-2 and the response data structures and response codes specified in table 5.4.3.3.3.4-3.

Table 5.4.3.3.3.4-2: Data structures supported by the PATCH Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| EcsAddrCfgInfoSubPatch | M | 1 | Partially modify an existing subscription to ECS Address Configuration Information. |

Table 5.4.3.3.3.4-3: Data structures supported by the PATCH Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Responsecodes | Description |
| EcsAddrCfgInfoSub | M | 1 | 200 OK | The subscription was updated successfully. |
| n/a |  |  | 204 No Content | The subscription has been successfully updated and no content is returned in the response body. |
| RedirectResponse | O | 0..1 | 307 Temporary Redirect | Temporary redirection, during subscription retrieval.(NOTE 2) |
| RedirectResponse | O | 0..1 | 308 Permanent Redirect | Permanent redirection, during subscription retrieval.(NOTE 2) |
| NOTE 1: The mandatory HTTP error status codes for the PATCH method listed in table 5.2.7.1-1 of 3GPP TS 29.500 [4] also apply.NOTE 2: The RedirectResponse data structure may be provided by an SCP (cf. clause 6.10.9.1 of 3GPP TS 29.500 [4]). |

Table 5.4.3.3.3.4-4: Headers supported by the 307 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative NEF (service) instance towards which the request is redirected. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NEF (service) instance towards which the request is redirected.For the case where the request is redirected to the same target via a different SCP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |

Table 5.4.3.3.3.4-5: Headers supported by the 308 Response Code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | string | M | 1 | Contains an alternative URI of the resource located in an alternative NEF (service) instance towards which the request is redirected.For the case where the request is redirected to the same target via a different SCP, refer to clause 6.10.9.1 of 3GPP TS 29.500 [4]. |
| 3gpp-Sbi-Target-Nf-Id | string | O | 0..1 | Identifier of the target NEF (service) instance towards which the request is redirected. |

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

#### 5.4.6.1 General

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

Table 5.4.6.1-1 specifies the data types defined for the Nnef\_ECSAddress service based interface protocol.

Table 5.4.6.1-1: Nnef\_ECSAddress specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Section defined | Description | Applicability |
| EcsAddrCfgInfoNotification | 5.4.6.2.3 | Contains ECS Address Configuration Information for notification. |  |
| EcsAddrCfgInfoSub | 5.4.6.2.2 | Contains ECS Address Configuration Information subscription data. |  |
| EcsAddrCfgInfoSubPatch | 5.4.6.2.4 | Contains the updated ECS Address Configuration Information subscription data. |  |

Table 5.4.6.1-2 specifies data types re-used by the Nnef\_ECSAddress service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nnef\_ECSAddress service based interface.

Table 5.4.6.1-2: Nnef\_ECSAddress re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| Dnn | 3GPP TS 29.571 [16] | Identifies the DNN. |  |
| GroupId | 3GPP TS 29.571 [16] | Identifies a group of UEs. |  |
| RedirectResponse | 3GPP TS 29.571 [16] | Contains redirection related information. |  |
| Snssai | 3GPP TS 29.571 [16] | Identifies a Single Network Slice Selection Assistance Information. |  |
| SupportedFeatures | 3GPP TS 29.571 [16] | Indicates the features supported. |  |
| Uri | 3GPP TS 29.571 [16] | Contains a URI. |  |

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

##### 5.4.6.2.2 Type: EcsAddrCfgInfoSub

Table 5.4.6.2.2-1: Definition of type EcsAddrCfgInfoSub

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| notifUri | Uri | M | 1 | URI provided by the NF service consumer indicating where to receive the subscribed notifications from the NEF. |  |
| notifCorrId | string | M | 1 | Notification correlation identifier. |  |
| dnns | array(Dnn) | O | 1..N | Each element identifies a DNN. |  |
| snssais | array(Snssai) | O | 1..N | Each element identifies an internal slice. |  |
| internalGroupId | GroupId | O | 0..1 | Identifies a group of users. |  |
| immRepInd | boolean | O | 0..1 | Indication of immediate reporting. If included, when it is set to true it indicates immediate reporting of the subscribed events, if available. Otherwise, reporting will occur when the event is met. |  |
| immReports | array(EcsAddrCfgInfoNotification) | O | 1..N | Contains the ECS Address Configuration Information that match this subscription.It may be included only in the POST (or PUT/PATCH) response body of a subscription creation (or modification), and only if the "immRepInd" attribute is set to "true" in the corresponding HTTP request. |  |
| supportedFeatures | SupportedFeatures | C | 0..1 | Used to negotiate the applicability of the optional features. This attribute shall be provided in the POST request and in the response of successful resource creation. |  |

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

##### 5.4.6.2.4 Type: EcsAddrCfgInfoSubPatch

Table 5.4.6.2.4-1: Definition of type EcsAddrCfgInfoSubPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| notifUri | Uri | O | 0..1 | URI provided by the NF service consumer indicating where to receive the subscribed notifications from the NEF. |  |
| notifCorrId | string | O | 0..1 | Notification correlation identifier. |  |
| dnns | array(Dnn) | O | 1..N | Each updated element identifies a DNN. |  |
| snssais | array(Snssai) | O | 1..N | Each updated element identifies an internal slice. |  |
| internalGroupId | GroupId | O | 0..1 | Identifies a updated group of users. |  |
| immRepInd | boolean | O | 0..1 | Indication of immediate reporting. If included, when it is set to true it indicates immediate reporting of the subscribed events, if available. Otherwise, reporting will occur when the event is met. |  |

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

# A.5 Nnef\_ECSAddress API

openapi: 3.0.0

info:

 title: Nnef\_ECSAddressConfigurationInformation

 version: 1.0.0-alpha.2

 description: |

 NEF ECS Address Service.

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externalDocs:

 description: >

 3GPP TS 29.591 V18.3.0; 5G System; Network Exposure Function Southbound Services; Stage 3.

 url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.591/

servers:

 - url: '{apiRoot}/nnef-ecs-addr-cfg-info/v1'

 variables:

 apiRoot:

 default: https://example.com

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

security:

 - {}

 - oAuth2ClientCredentials:

 - nnef-ecs-addr-cfg-info

paths:

 /subscriptions:

 post:

 summary: subscribe to notifications

 operationId: CreateIndividualSubcription

 tags:

 - Subscriptions (Collection)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Success

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the newly created resource, according to the structure

 {apiRoot}/nnef-ecs-addr-cfg-info/<apiVersion>/subscriptions/{subscriptionId}

 required: true

 schema:

 type: string

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 callbacks:

 myNotification:

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

 post:

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: No Content, Notification was succesfull

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 /subscriptions/{subscriptionId}:

 get:

 summary: retrieve subscription

 operationId: GetIndividualSubcription

 tags:

 - IndividualSubscription (Document)

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription ID

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource representation is returned

 content:

 application/json:

 schema:

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

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '406':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 put:

 summary: fully update subscription

 operationId: ReplaceIndividualSubcription

 tags:

 - IndividualSubscription (Document)

 requestBody:

 required: true

 content:

 application/json:

 schema:

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

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription ID

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource was succesfully modified and representation is returned

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. Resource was succesfully modified

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 patch:

 summary: Partially update subscription

 operationId: ModifyIndividualSubcription

 tags:

 - IndividualSubscription (Document)

 requestBody:

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription ID

 required: true

 schema:

 type: string

 responses:

 '200':

 description: OK. Resource was succesfully modified and representation is returned

 content:

 application/json:

 schema:

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

 '204':

 description: No Content. Resource was succesfully modified

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

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 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

 delete:

 summary: unsubscribe from notifications

 operationId: DeleteIndividualSubcription

 tags:

 - IndividualSubscription (Document)

 parameters:

 - name: subscriptionId

 in: path

 description: Subscription ID

 required: true

 schema:

 type: string

 responses:

 '204':

 description: No Content. Resource was succesfully deleted

 '307':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/307'

 '308':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/308'

 '400':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/400'

 '401':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/401'

 '403':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/403'

 '404':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/404'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/503'

 default:

 $ref: 'TS29571\_CommonData.yaml#/components/responses/default'

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{nrfApiRoot}/oauth2/token'

 scopes:

 nnef-ecs-addr-cfg-info: Access to the Nnef\_ECSAddress API

 schemas:

 EcsAddrCfgInfoSub:

 description: Represents an Individual ECS Address Configuration Information subscription data.

 type: object

 properties:

 notifUri:

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

 notifCorrId:

 type: string

 description: Notification correlation identifier.

 dnns:

 type: array

 items:

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

 minItems: 1

 description: Each element identifies a DNN.

 snssais:

 type: array

 items:

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

 minItems: 1

 description: Each element identifies a slice.

 internalGroupId:

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

 immRepInd:

 type: boolean

 description: >

 Indication of immediate reporting. If included, when it is set to true it indicates

 immediate reporting of the subscribed events, if available. Otherwise, reporting will

 occur when the event is met.

 immReports:

 type: array

 items:

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

 minItems: 1

 description: >

 Immediate report with ECS Address Configuration Information that match this

 subscription.

 supportedFeatures:

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

 required:

 - notifUri

 - notifCorrId

 EcsAddrCfgInfoNotification:

 description: Represents notifications for ECS Address Configuration Information data.

 type: object

 properties:

 notifCorrId:

 type: string

 description: Notification correlation identifier.

 ecsAddrCfgInfo:

 type: array

 items:

 type: string

 minItems: 1

 description: Contains the ECS Address Configuration Information.

 required:

 - notifCorrId

 - ecsAddrCfgInfo

 EcsAddrCfgInfoSubPatch:

 description: Represents an updated ECS Address Configuration Information subscription data.

 type: object

 properties:

 notifUri:

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

 notifCorrId:

 type: string

 description: Notification correlation identifier.

 dnns:

 type: array

 items:

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

 minItems: 1

 description: Each updated element identifies a DNN.

 snssais:

 type: array

 items:

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

 minItems: 1

 description: Each updated element identifies a slice.

 internalGroupId:

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

 immRepInd:

 type: boolean

 description: >

 Indication of immediate reporting. If included, when it is set to true it indicates

 immediate reporting of the subscribed events, if available. Otherwise, reporting will

 occur when the event is met.

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