**3GPP TSG-CT3 Meeting #134 *C3-242132***

**Changsha, Hunan Province, China, 15th Apr 2024 - 19th Apr 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.522** | **CR** | **1227** | **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:*** | 5GC capabilities reporting in Traffic Influence notifications | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | EDGE\_Ph2 | | | | |  | ***Date:*** | | | 2024-04-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | 23.502 clause 4.3.6.3 requires the SMF to be able to report the EAS IP Replacement capability in the Event Notifications that it sends to an AF, either directly or via the NEF. Similar is true for the rest of the features/capabiilties that are currently negotiated during the SMF notifications for implicitly subscribed events, namely the support of HR-SBO and Uplink Buffering. The support of these capabilities in the 5GC is reported by the SMF via a SupportedFeatures attribute which contains features of the SMF Event Exposure API.  The issue with the current solution is that the Untrusted AF, which is required to be informed about these capabilities, does not receive this SupportedFeatures attribute and it is also not a consumer (or event receiver) of the SMF Event Exposure API, i.e. it is agnostic to the features of this API, which are defined in 29.508.  The NEF needs to have a way to report these capabilities to the Untrusted AF. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Added the SMF-reported 5GC capabilties (as features) to the EventNotification data structure that is sent to the Untrusted AF. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Not fulfilled stage 2 requirements, the AF is not informed about 5GC capabilities. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.4.3.3.4, A.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 a backwards compatible feature to OpenAPI file of the TrafficInfluence API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change \* \* \* \*

5.4.3.3.4 Type: EventNotification

**Table 5.4.3.3.4-1: Definition of type EventNotification**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability**  **(NOTE 1)** |
| afTransId | string | O | 0..1 | Identifies an NEF Northbound interface transaction, generated by the AF. |  |
| dnaiChgType | DnaiChangeType | M | 1 | Identifies the type of notification regarding UP path management event. |  |
| sourceTrafficRoute | RouteToLocation | O | 0..1 | Identifies the N6 traffic routing information associated to the source DNAI.  May be present if the "subscribedEvent" sets to "UP\_PATH\_CHANGE". (NOTE 3) |  |
| subscribedEvent | SubscribedEvent | M | 1 | Identifies a UP path management event the AF requested to be notified of. |  |
| targetTrafficRoute | RouteToLocation | O | 0..1 | Identifies the N6 traffic routing information associated to the target DNAI.  May be present if the "subscribedEvent" sets to "UP\_PATH\_CHANGE". (NOTE 3) |  |
| sourceDnai | Dnai | O | 0..1 | Source DN Access Identifier. Shall be included for event "UP\_PATH\_CHANGE" if the DNAI changed (NOTE 2, NOTE 3). |  |
| targetDnai | Dnai | O | 0..1 | Target DN Access Identifier. Shall be included for event "UP\_PATH\_CHANGE" if the DNAI changed (NOTE 2, NOTE 3). |  |
| candidateDnais | array(Dnai) | O | 1..N | The candidate DNAI(s) for the PDU Session. May be included for event "UP\_PATH\_CHANGE". | CommonEASDNAI |
| candDnaisPrioInd | boolean | O | 0..1 | If provided and set to "true", it indicates that the candidate DNAIs provided in the "candidateDnais" attribute are in descending priority order, i.e. the lower the array index the higher the priority of the respective DNAI. If omitted, the default value is "false". It may only be provided if the "candidateDnais" attribute is provided and the "dnaiChgType" attribute is set to the value "EARLY". | CommonEASDNAI |
| easRediscoverInd | boolean | O | 0..1 | Indication of EAS re-discovery. If present and set to "true", it indicates the EAS re-discovery is performed, e.g. due to change of common EAS. Default value is "false" if omitted.  May be included for event "UP\_PATH\_CHANGE". | CommonEASDNAI |
| gpsi | Gpsi | O | 0..1 | Identifies a user. |  |
| srcUeIpv4Addr | Ipv4Addr | O | 0..1 | The IPv4 Address of the served UE for the source DNAI. |  |
| srcUeIpv6Prefix | Ipv6Prefix | O | 0..1 | The Ipv6 Address Prefix of the served UE for the source DNAI. |  |
| tgtUeIpv4Addr | Ipv4Addr | O | 0..1 | The IPv4 Address of the served UE for the target DNAI. |  |
| tgtUeIpv6Prefix | Ipv6Prefix | O | 0..1 | The Ipv6 Address Prefix of the served UE for the target DNAI. |  |
| ueMac | MacAddr48 | O | 0..1 | UE MAC address of the served UE. |  |
| afAckUri | Link | O | 0..1 | The URI provided by the NEF for the AF acknowledgement.  May only be included for event "UP\_PATH\_CHANGE". | URLLC |
| suppFeatures | SupportedFeatures | C | 0..1 | List of Traffic Influence negotiated features as described in clause 5.4.4.  This parameter shall be supplied by the NEF when it determines that it needs to update the supported features that were negotiated during the resource creation due to a notification received by the SMF which contained updated supported features on the SMF side. | HR-SBO |
| NOTE 1: Properties marked with a feature as defined in clause 5.4.4 are applicable as described in clause 5.2.7 of 3GPP TS 29.122 [4]. If no feature is indicated, the related property applies for all the features.  NOTE 2: If the DNAI is not changed while the N6 traffic routing information is changed, the "sourceDnai" attribute and "targetDnai" attribute shall not be provided.  NOTE 3: The change from the UP path status where no DNAI applies to a status where a DNAI applies indicates the activation of the related AF request and therefore only the target DNAI and N6 traffic routing information is provided in the event notification; the change from the UP path status where a DNAI applies to a status where no DNAI applies indicates the de-activation of the related AF request and therefore only the source DNAI and N6 traffic routing information is provided in the event notification. | | | | | |

\* \* \* \* Next change \* \* \* \*

A.2 TrafficInfluence API

openapi: 3.0.0

info:

title: 3gpp-traffic-influence

version: 1.3.0-alpha.4

description: |

API for AF traffic influence

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externalDocs:

description: >

3GPP TS 29.522 V18.4.0; 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 clause 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

operationId: ReadAllSubscriptions

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

operationId: CreateNewSubscription

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

operationId: ReadAnSubscription

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: Fully updates/replaces an existing subscription resource

operationId: FullyUpdateAnSubscription

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: Partially updates/replaces an existing subscription resource

operationId: PartialUpdateAnSubscription

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'

'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

operationId: DeleteAnSubscription

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'

'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:

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'

externalGroupIds:

type: array

items:

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

minItems: 1

description: Each element identifies a group of users.

extSubscCats:

type: array

items:

type: string

minItems: 1

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 clause 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.

sfcIdDl:

type: string

description: >

Reference to a pre-configured steering of user traffic to service function chain in

downlink.

sfcIdUl:

type: string

description: >

Reference to a pre-configured steering of user traffic to service function chain in

uplink.

metadata:

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

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.

deprecated: true

geoAreas:

type: array

items:

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

minItems: 1

description: Identifies geographical areas within which the AF request applies.

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.

easRedisInd:

type: boolean

description: >

Indicates the EAS rediscovery is required for the application if it is included

and set to "true".

eventReq:

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

eventReports:

type: array

items:

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

minItems: 1

candDnaiInd:

type: boolean

description: >

Indication of reporting candidate DNAI(s). If it is included and set to "true", the

candidate DNAI(s) for the PDU session need to be reported. Otherwise set to "false" or

omitted.

tfcCorreInfo:

$ref: 'TS29519\_Application\_Data.yaml#/components/schemas/TrafficCorrelationInfo'

plmnId:

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

portNumber:

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

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.

sfcIdDl:

type: string

description: >

Reference to a pre-configured steering of user traffic to service function chain in

downlink.

nullable: true

sfcIdUl:

type: string

description: >

Reference to a pre-configured steering of user traffic to service function chain in

uplink.

nullable: true

metadata:

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

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

deprecated: true

geoAreas:

type: array

items:

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

minItems: 1

description: Identifies geographical areas within which the AF request applies.

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

easRedisInd:

type: boolean

description: >

Indicates the EAS rediscovery is required for the application if it is included

and set to "true".

notificationDestination:

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

eventReq:

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

tfcCorreInfo:

$ref: 'TS29519\_Application\_Data.yaml#/components/schemas/TrafficCorrelationInfo'

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'

candidateDnais:

type: array

items:

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

minItems: 1

description: The candidate DNAI(s) for the PDU Session.

candDnaisPrioInd:

type: boolean

description: >

If provided and set to true, it indicates that the candidate DNAIs provided

in the candidateDnais attribute are in descending priority order, i.e.,

the lower the array index the higher the priority of the respective DNAI.

If omitted, the default value is false.

easRediscoverInd:

type: boolean

description: >

Indication of EAS re-discovery. If present and set to "true", it indicates the EAS

re-discovery is performed, e.g. due to change of common EAS. Default value is "false" if

omitted. May be included for event "UP\_PATH\_CHANGE".

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'

afAckUri:

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

suppFeatures:

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

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: >

This string provides forward-compatibility with future extensions to the enumeration but

is not used to encode content defined in the present version of this API.

description: |

Represents the type of UP path management events for which the AF requests to be notified.

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: >

This string provides forward-compatibility with future extensions to the enumeration but

is not used to encode content defined in the present version of this API.

description: |

Represents the status of application handling result.

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.

\* \* \* \* End of changes \* \* \* \*