**TSG-CT WG3 Meeting #108-e *C3-201337***

**E-Meeting, 19th – 28th February 2020 (Revision of C3-201132)**

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **29.522** | **CR** | **0126** | **rev** | **1** | **Current version:** | **16.2.0** |  |
|  |
| *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:***  | Indication of traffic correlation |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | Vertical\_LAN |  | ***Date:*** | 2020-02-17 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | For AF traffic influence procedure, indication of traffic correlation may be included as part of traffic routing requirement, it is used to indicate for a group of UEs, their targeted PDU sessions should be correlated by a common DNAI (selected from the list of DNAIs provided by the AF) in the user plane. |
|  |  |
| ***Summary of change:*** | Define an indication of traffic correlation. |
|  |  |
| ***Consequences if not approved:*** | Missed requirement. |
|  |  |
| ***Clauses affected:*** | 5.4.3.3.2; 5.4.3.3.3; 5.4.4; 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 backward compatible feature into OpenAPI file for TrafficInfluence API. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**…**

**Proposed changes:**

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

##### 5.4.3.3.2 Type: TrafficInfluSub

This type represents a traffic influence subscription. The same structure is used in the subscription request and subscription response.

Table 5.4.3.3.2-1: Definition of type TrafficInfluSub

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability(NOTE 1) |
| afServiceId | string | O | 0..1 | Identifies a service on behalf of which the AF is issuing the request. |  |
| afAppId | string | O | 0..1 | Identifies an application.(NOTE 3) |  |
| afTransId | string | O | 0..1 | Identifies an NEF Northbound interface transaction, generated by the AF. |  |
| appReloInd | boolean | O | 0..1 | Identifies whether an application can be relocated once a location of the application has been selected. Set to "true" if it can be relocated; otherwise set to "false". Default value is "false" if omitted. |  |
| dnn | Dnn | O | 0..1 | Identifies a DNN. |  |
| snssai | Snssai | O | 0..1 | Identifies an S-NSSAI. |  |
| externalGroupId | ExternalGroupId | O | 0..1 | Identifies a group of users. (NOTE 2) |  |
| anyUeInd | boolean | O | 0..1 | Identifies whether the AF request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".(NOTE 2) |  |
| subscribedEvents | array(SubscribedEvent) | O | 1..N | Identifies the requirement to be notified of the event(s). |  |
| gpsi | Gpsi | O | 0..1 | Identifies a user. (NOTE 2) |  |
| ipv4Addr | Ipv4Addr | O | 0..1 | Identifies the IPv4 address. (NOTE 2) |  |
| ipv6Addr | Ipv6Addr | O | 0..1 | Identifies the IPv6 address. (NOTE 2) |  |
| macAddr | MacAddr48 | O | 0..1 | Identifies the MAC address. |  |
| dnaiChgType | DnaiChangeType | O | 0..1 | Identifies a type of notification regarding UP path management event. |  |
| notificationDestination | Link | C | 0..1 | Contains the Callback URL to receive the notification from the NEF.It shall be present if the "subscribedEvents" is present. |  |
| requestTestNotification | boolean | O | 0..1 | 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 [4]. Set to false or omitted otherwise. | Notification\_test\_event |
| websockNotifConfig | WebsockNotifConfig | O | 0..1 | Configuration parameters to set up notification delivery over Websocket protocol. | Notification\_websocket |
| self | Link | C | 0..1 | Link to the created resource. This parameter shall be supplied by the NEF in HTTP responses that include an object of TrafficInfluSub type |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters.(NOTE 3) |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters.(NOTE 3) |  |
| trafficRoutes | array(RouteToLocation) | O | 1..N | Identifies the N6 traffic routing requirement. |  |
| tfcCorrInd | boolean | O | 0..1 | Indication of traffic correlation.May only be included when "externalGroupId" attribute was included within the TrafficInfluSub data type previously.It is used to indicate that for the group of UEs, the targeted PDU sessions should be correlated by a common DNAI.Set to "true" if it should be correlated; otherwise set to "false". Default value is "false" if omitted. |  |
| tempValidities | array(TemporalValidity) | O | 0..N | Indicates the time interval(s) during which the AF request is to be applied. |  |
| validGeoZoneIds | array(string) | O | 1..N | Identifies a geographic zone that the AF request applies only to the traffic of UE(s) located in this specific zone. |  |
| afAckInd | boolean | O | 0..1 | Identifies whether the AF acknowledgement of UP path event notification is expected.Set to "true" if the AF acknowledge is expected; otherwise set to "false". Default value is "false" if omitted. | URLLC |
| addrPreserInd | boolean | O | 0..1 | Indicates whether UE IP address should be preserved.This attribute shall set to "true" if preserved, otherwise, set to "false".Defalult value is "false" if omitted. | URLLC |
| suppFeat | SupportedFeatures | C | 0..1 | Indicates the list of Supported features used as described in subclause 5.4.4.This attribute shall be provided in the POST request and in the response of successful resource creation. |  |
| NOTE 1: Properties marked with a feature as defined in subclause 5.4.4 are applicable as described in subclause 5.2.7 of 3GPP TS 29.122 [4]. If no feature is indicated, the related property applies for all the features.NOTE 2: One of individual UE identifier (i.e. "gpsi", "ipv4Addr" or "ipv6Addr"), External Group Identifier (i.e. "externalGroupId") or any UE indication "anyUeInd" shall be included.NOTE 3: One of "afAppId", "trafficFilters" or "ethTrafficFilters" shall be included. |

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

##### 5.4.3.3.3 Type: TrafficInfluSubPatch

This type represents a subscription of traffic influence parameters provided by the AF to the NEF. The structure is used for HTTP PATCH request.

Table 5.4.3.3.3-1: Definition of type TrafficInfluSubPatch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| appReloInd | boolean | O | 0..1 | Identifies whether an application can be relocated once a location of the application has been selected.(NOTE) |  |
| trafficFilters | array(FlowInfo) | O | 1..N | Identifies IP packet filters. |  |
| ethTrafficFilters | array(EthFlowDescription) | O | 1..N | Identifies Ethernet packet filters. |  |
| trafficRoutes | array(RouteToLocation) | O | 1..N | Identifies the N6 traffic routing requirement.(NOTE) |  |
| tfcCorrInd | boolean | O | 0..1 | Indication of traffic correlation.May only be included when "externalGroupId" attribute was included within the TrafficInfluSub data type previously.It is used to indicate that for the group of UEs, the targeted PDU sessions should be correlated by a common DNAI. |  |
| tempValidities | array(TemporalValidity) | O | 1..N | Indicates the time interval(s) during which the AF request is to be applied.(NOTE) |  |
| validGeoZoneIds | array(string) | O | 1..N | Identifies a geographic zone that the AF request applies only to the traffic of UE(s) located in this specific zone.(NOTE) |  |
| afAckInd | boolean | O | 0..1 | Identifies whether the AF acknowledgement of UP path event notification is expected. | URLLC |
| addrPreserInd | boolean | O | 0..1 | Indicates whether UE IP address should be preserved.(NOTE) | URLLC |
| NOTE: The value of the property shall be set to NULL for removal. |

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

# A.2 TrafficInfluence API

openapi: 3.0.0

info:

 title: 3gpp-traffic-influence

 version: 1.1.0.alpha-3

 description: |

 API for AF traffic influence

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externalDocs:

 description: 3GPP TS 29.522 V16.2.0; 5G System; Network Exposure Function Northbound APIs.

 url: 'http://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:

 - TrafficInfluence API SCS/AS level GET Operation

 responses:

 '200':

 description: OK.

 content:

 application/json:

 schema:

 type: array

 items:

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

 '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:

 - TrafficInfluence API Subscription level POST Operation

 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)

 '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)

 '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:

 - TrafficInfluence API Subscription level GET Operation

 responses:

 '200':

 description: OK (Successful get the active subscription)

 content:

 application/json:

 schema:

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

 '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:

 - TrafficInfluence API subscription level PUT Operation

 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'

 '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:

 - TrafficInfluence API subscription level PATCH Operation

 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'

 '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:

 - TrafficInfluence API Subscription level DELETE Operation

 responses:

 '204':

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

 '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:

 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'

 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

 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:

 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

 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

 EventNotification:

 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'

 afAckUri:

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

 required:

 - dnaiChgType

 - subscribedEvent

 AfResultInfo:

 type: object

 properties:

 afStatus:

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

 trafficRoute:

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

 required:

 - afStatus

 AfAckInfo:

 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.

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