**3GPP TSG- WG3 Meeting #****125 C3-225247\_r1**

**Toulouse, France, - , November, 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.508** | **CR** | **0189** | **rev** | **-** | **Current version:** | **17.8.0** |  |
|  | | | | | | | | |
| *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:*** | Enumeration definitions in the OpenAPI file | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SBIProtoc18 | | | | |  | ***Date:*** | | | 2022-11-01 |
|  |  | | | |  | |  | | |  |
| ***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 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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | TS 29.501 specifies in clause 5.3.12 for the enumeration definition in the OpenAPI file that the schema:  - shall contain the "anyOf" keyword listing as alternatives:  1. the "type: string" keyword and the "enum" keyword with a list of all defined values for the enumeration; and  2. the "type: string" keyword and the "description" keyword with a description stating that the string is only provided for forward compatibility with future extensions and is not used to encode contents defined in the present version of the specification. Future extensions may need to be defined in conjunction with the supported feature mechanism as specified in clause 6.6.2 of 3GPP TS 29.500 [2], and  - may contain a description listing the defined values of the enumeration together with explanations of those values.  However, the OpenAPI file of the Nsmf\_EventExposure API is not aligned with the above requirement from TS 29.501 i.e. in definitions of TransactionMetric and PduSessionStatus enumerations, descriptions of the string data type provided for forward compatibility with future extensions are incorrect. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Definitions of TransactionMetric and PduSessionStatus enumerations:  descriptions of the string data type provided for forward compatibility with future extensions corrected and specified in accordance with TS 29.501. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The OpenAPI file of the Nsmf\_EventExposure API will remain not fully compliant with the OpenAPI requirements specified in TS 29.501. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 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 correction to the OpenAPI file of the Nsmf\_EventExposure API. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\* First Change \*\*\*

# A.2 Nsmf\_EventExposure API

openapi: 3.0.0

info:

version: 1.2.0

title: Nsmf\_EventExposure

description: |

Session Management Event Exposure Service.

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externalDocs:

description: 3GPP TS 29.508 V17.7.0; 5G System; Session Management Event Exposure Service.

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.508/

servers:

- url: '{apiRoot}/nsmf-event-exposure/v1'

variables:

apiRoot:

default: https://example.com

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

security:

- {}

- oAuth2ClientCredentials:

- nsmf-event-exposure

paths:

/subscriptions:

post:

operationId: CreateIndividualSubcription

summary: Create an individual subscription for event notifications from the SMF

tags:

- Subscriptions (Collection)

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Created.

headers:

Location:

description: >

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

{apiRoot}/nsmf-event-exposure/v1/subscriptions/{subId}

required: true

schema:

type: string

content:

application/json:

schema:

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

'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'

'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/NsmfEventExposureNotification'

responses:

'204':

description: No Content, Notification was successful.

'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'

'503':

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

default:

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

callbacks:

afAcknowledgement:

'{request.body#/ackUri}':

post:

requestBody: # contents of the callback message

required: true

content:

application/json:

schema:

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

responses:

'204':

description: No Content (successful acknowledgement)

'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'

'503':

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

default:

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

/subscriptions/{subId}:

get:

operationId: GetIndividualSubcription

summary: Read an individual subscription for event notifications from the SMF

tags:

- IndividualSubscription (Document)

parameters:

- name: subId

in: path

description: Event Subscription ID

required: true

schema:

type: string

responses:

'200':

description: OK. Resource representation is returned

content:

application/json:

schema:

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

'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'

'503':

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

default:

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

put:

operationId: ReplaceIndividualSubcription

summary: Replace an individual subscription for event notifications from the SMF

tags:

- IndividualSubscription (Document)

requestBody:

required: true

content:

application/json:

schema:

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

parameters:

- name: subId

in: path

description: Event Subscription ID

required: true

schema:

type: string

responses:

'200':

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

content:

application/json:

schema:

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

'204':

description: No Content. Resource was successfully 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'

'503':

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

default:

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

delete:

operationId: DeleteIndividualSubcription

summary: Delete an individual subscription for event notifications from the SMF

tags:

- IndividualSubscription (Document)

parameters:

- name: subId

in: path

description: Event Subscription ID

required: true

schema:

type: string

responses:

'204':

description: No Content. Resource was successfully 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'

'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:

nsmf-event-exposure: Access to the Nsmf\_EventExposure API

schemas:

NsmfEventExposure:

description: >

Represents an Individual SMF Notification Subscription resource. The serviveName property

corresponds to the serviceName in the main body of the specification.

type: object

properties:

supi:

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

gpsi:

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

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.

groupId:

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

pduSeId:

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

dnn:

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

snssai:

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

subId:

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

notifId:

type: string

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

notifUri:

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

altNotifIpv4Addrs:

type: array

items:

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

description: Alternate or backup IPv4 address(es) where to send Notifications.

minItems: 1

altNotifIpv6Addrs:

type: array

items:

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

description: Alternate or backup IPv6 address(es) where to send Notifications.

minItems: 1

altNotifFqdns:

type: array

items:

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

minItems: 1

description: Alternate or backup FQDN(s) where to send Notifications.

eventSubs:

type: array

items:

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

minItems: 1

description: Subscribed events

eventNotifs:

type: array

items:

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

minItems: 1

ImmeRep:

type: boolean

notifMethod:

$ref: '#/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'

guami:

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

serviveName:

$ref: 'TS29510\_Nnrf\_NFManagement.yaml#/components/schemas/ServiceName'

supportedFeatures:

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

sampRatio:

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

partitionCriteria:

type: array

items:

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

minItems: 1

description: Criteria for partitioning the UEs before applying the sampling ratio.

grpRepTime:

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

notifFlag:

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

required:

- notifId

- notifUri

- eventSubs

NsmfEventExposureNotification:

description: Represents notifications on events that occurred.

type: object

properties:

notifId:

type: string

description: Notification correlation ID

eventNotifs:

type: array

items:

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

minItems: 1

description: Notifications about Individual Events

ackUri:

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

required:

- notifId

- eventNotifs

EventSubscription:

description: Represents a subscription to a single event.

type: object

properties:

event:

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

dnaiChgType:

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

dddTraDescriptors:

type: array

items:

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

minItems: 1

dddStati:

type: array

items:

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

minItems: 1

appIds:

type: array

items:

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

minItems: 1

targetPeriod:

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

transacDispInd:

type: boolean

description: >

Indicates the subscription for UE transaction dispersion collectionon, if it is included

and set to "true". Default value is "false".

transacMetrics:

type: array

items:

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

description: Indicates Session Management Transaction metrics.

minItems: 1

ueIpAddr:

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

required:

- event

EventNotification:

description: Represents a notification related to a single event that occurred.

type: object

properties:

event:

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

timeStamp:

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

supi:

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

gpsi:

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

ueIpAddr:

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

transacInfos:

type: array

items:

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

description: Transaction Information.

minItems: 1

sourceDnai:

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

targetDnai:

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

dnaiChgType:

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

sourceUeIpv4Addr:

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

sourceUeIpv6Prefix:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

targetUeIpv4Addr:

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

targetUeIpv6Prefix:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

sourceTraRouting:

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

targetTraRouting:

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

ueMac:

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

adIpv4Addr:

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

adIpv6Prefix:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

reIpv4Addr:

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

reIpv6Prefix:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

plmnId:

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

accType:

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

pduSeId:

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

ratType:

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

dddStatus:

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

dddTraDescriptor:

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

maxWaitTime:

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

commFailure:

$ref: 'TS29518\_Namf\_EventExposure.yaml#/components/schemas/CommunicationFailure'

ipv4Addr:

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

ipv6Prefixes:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Prefix'

minItems: 1

ipv6Addrs:

type: array

items:

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

minItems: 1

pduSessType:

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

qfi:

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

appId:

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

ethFlowDescs:

type: array

items:

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

minItems: 1

description: >

Descriptor(s) for non-IP traffic. It allows the encoding of multiple UL and/or DL flows.

Each entry of the array describes a single Ethernet flow.

ethfDescs:

type: array

items:

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

minItems: 1

maxItems: 2

description: >

Contains the UL and/or DL Ethernet flows. Each entry of the array describes a single

Ethernet flow.

flowDescs:

type: array

items:

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

minItems: 1

description: >

Descriptor(s) for IP traffic. It allows the encoding of multiple UL and/or DL flows.

Each entry of the array describes a single IP flow.

fDescs:

type: array

items:

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

minItems: 1

maxItems: 2

description: >

Contains the UL and/or DL IP flows. Each entry of the array describes a single

IP flow.

dnn:

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

snssai:

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

ulDelays:

type: array

items:

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

minItems: 1

dlDelays:

type: array

items:

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

minItems: 1

rtDelays:

type: array

items:

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

minItems: 1

timeWindow:

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

smNasFromUe:

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

smNasFromSmf:

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

upRedTrans:

type: boolean

description: >

Indicates whether the redundant transmission is setup or terminated. Set to "true" if

the redundant transmission is setup, otherwise set to "false" if the redundant

transmission is terminated. Default value is set to "false".

ssId:

type: string

bssId:

type: string

startWlan:

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

endWlan:

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

pduSessInfos:

type: array

items:

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

minItems: 1

upfInfo:

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

required:

- event

- timeStamp

SubId:

type: string

format: SubId

description: >

Identifies an Individual SMF Notification Subscription. To enable that the value is used as

part of a URI, the string shall only contain characters allowed according to the

"lower-with-hyphen" naming convention defined in 3GPP TS 29.501. In an OpenAPI schema, the

format shall be designated as "SubId".

AckOfNotify:

description: Represents an acknowledgement information of an event notification.

type: object

properties:

notifId:

type: string

ackResult:

$ref: 'TS29522\_TrafficInfluence.yaml#/components/schemas/AfResultInfo'

supi:

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

gpsi:

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

required:

- notifId

- ackResult

SmNasFromUe:

description: >

Represents information on the SM NAS messages that SMF receives from UE for PDU Session.

type: object

properties:

smNasType:

type: string

timeStamp:

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

required:

- smNasType

- timeStamp

SmNasFromSmf:

description: >

Represents information on the SM congestion control applied SM NAS messages that SMF sends to

UE for PDU Session.

type: object

properties:

smNasType:

type: string

timeStamp:

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

backoffTimer:

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

appliedSmccType:

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

required:

- smNasType

- timeStamp

- backoffTimer

- appliedSmccType

TransactionInfo:

description: Represents SMF Transaction Information.

type: object

properties:

transaction:

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

snssai:

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

appIds:

type: array

items:

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

minItems: 1

transacMetrics:

type: array

items:

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

minItems: 1

required:

- transaction

PduSessionInformation:

description: Represents the PDU session related information.

type: object

properties:

pduSessId:

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

sessInfo:

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

PduSessionInfo:

description: Represents session information.

type: object

properties:

n4SessId:

type: string

sessInactiveTimer:

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

pduSessStatus:

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

UpfInformation:

description: Represents the ID/address/FQDN of the UPF.

type: object

properties:

upfId:

type: string

upfAddr:

$ref: 'TS29517\_Naf\_EventExposure.yaml#/components/schemas/AddrFqdn'

SmfEvent:

anyOf:

- type: string

enum:

- AC\_TY\_CH

- UP\_PATH\_CH

- PDU\_SES\_REL

- PLMN\_CH

- UE\_IP\_CH

- RAT\_TY\_CH

- DDDS

- COMM\_FAIL

- PDU\_SES\_EST

- QFI\_ALLOC

- QOS\_MON

- SMCC\_EXP

- DISPERSION

- RED\_TRANS\_EXP

- WLAN\_INFO

- UPF\_INFO

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration and is not used to encode

content defined in the present version of this API.

description: |

Possible values are:

- AC\_TY\_CH: Access Type Change

- UP\_PATH\_CH: UP Path Change

- PDU\_SES\_REL: PDU Session Release

- PLMN\_CH: PLMN Change

- UE\_IP\_CH: UE IP address change

- RAT\_TY\_CH: RAT Type Change

- DDDS: Downlink data delivery status

- COMM\_FAIL: Communication Failure

- PDU\_SES\_EST: PDU Session Establishment

- QFI\_ALLOC: QFI allocation

- QOS\_MON: QoS Monitoring

- SMCC\_EXP: SM congestion control experience for PDU Session

- DISPERSION: Session Management transaction dispersion

- RED\_TRANS\_EXP: Redundant transmission experience for PDU Session

- WLAN\_INFO: WLAN information on PDU session for which Access Type is NON\_3GPP\_ACCESS and

RAT Type is TRUSTED\_WLAN

- UPF\_INFO: The UPF information, including the UPF ID/address/FQDN information.

NotificationMethod:

anyOf:

- type: string

enum:

- PERIODIC

- ONE\_TIME

- ON\_EVENT\_DETECTION

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration and is not used to encode

content defined in the present version of this API.

description: |

Possible values are:

- PERIODIC

- ONE\_TIME

- ON\_EVENT\_DETECTION

AppliedSmccType:

anyOf:

- type: string

enum:

- DNN\_CC

- SNSSAI\_CC

description: >

This string indicates the type of applied SM congestion control.

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration and is not used to encode

content defined in the present version of this API.

description: |

Possible values are:

- DNN\_CC: Indicates the DNN based congestion control.

- SNSSAI\_CC: Indicates the S-NSSAI based congestion control.

TransactionMetric:

anyOf:

- type: string

enum:

- PDU\_SES\_EST

- PDU\_SES\_AUTH

- PDU\_SES\_MODIF

- PDU\_SES\_REL

- type: string

description: >

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

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

description: |

Possible values are:

- PDU\_SES\_EST: PDU Session Establishment

- PDU\_SES\_AUTH: PDU Session Authentication

- PDU\_SES\_MODIF: PDU Session Modification

- PDU\_SES\_REL: PDU Session Release

PduSessionStatus:

anyOf:

- type: string

enum:

- ACTIVATED

- DEACTIVATED

- type: string

description: >

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

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

description: |

Possible values are:

- ACTIVATED: PDU Session status is activated.

- DEACTIVATED: PDU Session status is deactivated.

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