**3GPP TSG- Meeting #e *130***

**e-meeting, –**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **65** | **CR** | **0061** | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *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** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2023-04-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | 29.501 clause 5.3.14 requires modelling attribute presence conditions in the OpenAPI, including mutual exclusivity of attributes, for example:  - JSON object defining attributes "a" and "b", of type integer, where "a" and "b" can be both absent but, if one of them is present, the other shall be absent:  components:  schemas:  ExampleType4:  type: object  not:  required: [ a, b ]  properties:  a:  type: integer  b:  type: integer   1. 6.2.6.2.2 Type TscAppSessionContextData, 6.2.6.2.4 Type TscAppSessionContextUpdateData: either the "ethFlowInfo" or the "enEthFlowInfo" shall be provided, but not both simultaneously. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Modelled the mutual exclusivity of attributes listed above in the OpenAPI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incomplete OpenAPI file. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | A.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 correction in the Open API –   1. Ntsctsf\_QoSandTSCAssitance API 2. Ntsctsf\_ASTI API | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

# A.3 Ntsctsf\_QoSandTSCAssistance API

openapi: 3.0.0

info:

title: Ntsctsf\_QoSandTSCAssistance Service API

version: 1.1.0-alpha.2

description: |

TSCTSF QoS and TSC Assistance Service.

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externalDocs:

description: >

3GPP TS 29.565 V18.1.0; 5G System; Time Sensitive Communication and Time Synchronization function

Services; Stage 3.

url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.565/'

servers:

- url: '{apiRoot}/ntsctsf-qos-tscai/v1'

variables:

apiRoot:

default: https://example.com

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

security:

- {}

- oAuth2ClientCredentials:

- ntsctsf-qos-tscai

paths:

/tsc-app-sessions:

post:

summary: Creates a new Individual TSC Application Session Context resource

operationId: PostTSCAppSessions

tags:

- TSC Application Sessions (Collection)

requestBody:

description: Contains the information for the creation the resource.

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Successful creation of the resource.

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the created individual TSC application session context resource,

according to the structure

{apiRoot}/ntsctsf-qos-tscai/v1/tsc-app-sessions/{appSessionId} or the URI of the

created events subscription sub-resource, according to the structure

{apiRoot}/ntsctsf-qos-tscai/v1/tsc-app-sessions/{appSessionId}/events-subscription}

required: true

schema:

type: string

'400':

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

'401':

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

'403':

description: Forbidden

content:

application/problem+json:

schema:

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

headers:

Retry-After:

description: >

Indicates the time the AF has to wait before making a new request. It can be a

non-negative integer (decimal number) indicating the number of seconds the AF

has to wait before making a new request or an HTTP-date after which the AF can

retry a new request.

schema:

type: string

'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:

terminationRequest:

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

post:

requestBody:

description: >

Request of the termination of the Individual TSC Application Session Context

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'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'

eventNotification:

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

post:

requestBody:

description: Notification of an event occurrence in the TSCTSF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'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'

/tsc-app-sessions/{appSessionId}:

get:

summary: Reads an existing Individual TSC Application Session Context

operationId: GetTSCAppSession

tags:

- Individual TSC Application Session Context (Document)

parameters:

- name: appSessionId

description: String identifying the resource.

in: path

required: true

schema:

type: string

responses:

'200':

description: A representation of the resource is returned.

content:

application/json:

schema:

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

'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'

patch:

summary: Modifies an existing Individual TSC Application Session Context

operationId: ModAppSession

tags:

- Individual TSC Application Session Context (Document)

parameters:

- name: appSessionId

description: String identifying the resource.

in: path

required: true

schema:

type: string

requestBody:

description: Modification of the resource.

required: true

content:

application/merge-patch+json:

schema:

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

responses:

'200':

description: >

successful modification of the resource and a representation of that resource is

returned.

content:

application/json:

schema:

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

'204':

description: The successful modification.

'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':

description: Forbidden

content:

application/problem+json:

schema:

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

headers:

Retry-After:

description: >

Indicates the time the AF has to wait before making a new request. It can be a

non-negative integer (decimal number) indicating the number of seconds the AF

has to wait before making a new request or an HTTP-date after which the AF can

retry a new request.

schema:

type: string

'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:

eventNotification:

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

post:

requestBody:

description: Notification of an event occurrence in the TSCTSF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'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'

/tsc-app-sessions/{appSessionId}/delete:

post:

summary: Deletes an existing Individual TSC Application Session Context

operationId: DeleteTSCAppSession

tags:

- Individual TSC Application Session Context (Document)

parameters:

- name: appSessionId

description: String identifying the Individual TSC Application Session Context resource.

in: path

required: true

schema:

type: string

requestBody:

description: >

Deletion of the Individual TSC Application Session Context resource, request notification.

required: false

content:

application/json:

schema:

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

responses:

'200':

description: The deletion of the resource is confirmed and a resource is returned

content:

application/json:

schema:

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

'204':

description: The deletion is confirmed without returning additional data.

'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'

/tsc-app-sessions/{appSessionId}/events-subscription:

put:

summary: Creates or modifies an Events Subscription subresource

operationId: putEventsSubsc

tags:

- Events Subscription (Document)

parameters:

- name: appSessionId

description: String identifying the Events Subscription resource

in: path

required: true

schema:

type: string

requestBody:

description: Creation or modification of an Events Subscription resource.

required: true

content:

application/json:

schema:

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

responses:

'201':

description: >

The creation of the Events Subscription resource is confirmed and its representation is

returned.

content:

application/json:

schema:

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

headers:

Location:

description: >

Contains the URI of the created Events Subscription resource,

according to the structure

{apiRoot}/ntsctsf-qos-tscai/v1/tsc-app-sessions/{appSessionId}/events-subscription}

required: true

schema:

type: string

'200':

description: >

The modification of the Events Subscription resource is confirmed and its representation

is returned.

content:

application/json:

schema:

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

'204':

description: >

The modification of the Events Subscription subresource is confirmed without returning

additional data.

'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'

callbacks:

eventNotification:

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

post:

requestBody:

description: >

Contains the information for the notification of an event occurrence in the TSCTSF.

required: true

content:

application/json:

schema:

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

responses:

'204':

description: The receipt of the notification is acknowledged.

'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'

delete:

summary: Deletes the Events Subscription subresource.

operationId: DeleteEventsSubsc

tags:

- Events Subscription (Document)

parameters:

- name: appSessionId

description: String identifying the Individual TSC Application Session Context resource

in: path

required: true

schema:

type: string

responses:

'204':

description: >

The deletion of the of the Events Subscription sub-resource is confirmed without returning

additional data.

'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:

ntsctsf-qos-tscai: Access to the Ntsctsf\_QoSandTSCAssistance API

schemas:

TscAppSessionContextData:

description: Represents an Individual TSC Application Session Context resource.

type: object

required:

- notifUri

- afId

- qosReference

oneOf:

- required: [ueIpAddr]

- required: [ueMac]

not:

required: [ethFlowInfo, enEthFlowInfo]

properties:

ueIpAddr:

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

ipDomain:

type: string

description: The IPv4 address domain identifier.

ueMac:

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

dnn:

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

snssai:

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

notifUri:

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

appId:

type: string

description: Identifies the Application Identifier.

ethFlowInfo:

type: array

items:

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

minItems: 1

enEthFlowInfo:

type: array

items:

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

minItems: 1

description: >

Identifies the Ethernet flows which require QoS. Each Ethernet flow consists of a flow

identifer and the corresponding UL and/or DL flows.

flowInfo:

type: array

items:

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

minItems: 1

afId:

type: string

description: Identifies the AF identifier.

tscQosReq:

$ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/TscQosRequirement'

qosReference:

type: string

description: Identifies a pre-defined QoS information.

altQosReferences:

type: array

items:

type: string

minItems: 1

description: Identifies an ordered list of pre-defined QoS information.

altQosReqs:

type: array

items:

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

minItems: 1

description: >

Identifies an ordered list of alternative service requirements that include individual

QoS parameter sets. The lower the index of the array for a given entry, the higher the

priority.

aspId:

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

sponId:

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

sponStatus:

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

evSubsc:

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

suppFeat:

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

TscAppSessionContextUpdateData:

description: >

Describes the authorization data of an Individual TSC Application Session Context created by

the PCF.

type: object

properties:

notifUri:

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

appId:

type: string

description: Identifies the Application Identifier.

ethFlowInfo:

type: array

items:

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

minItems: 1

enEthFlowInfo:

type: array

items:

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

minItems: 1

description: >

Identifies the Ethernet flows which require QoS. Each Ethernet flow consists of a flow

identifer and the corresponding UL and/or DL flows.

flowInfo:

type: array

items:

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

minItems: 1

tscQosReq:

$ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/TscQosRequirementRm'

qosReference:

type: string

description: Identifies a pre-defined QoS information.

altQosReferences:

type: array

items:

type: string

minItems: 1

description: Identifies an ordered list of pre-defined QoS information.

altQosReqs:

type: array

items:

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

minItems: 1

description: >

Identifies an ordered list of alternative service requirements that include individual

QoS parameter sets. The lower the index of the array for a given entry, the higher the

priority.

aspId:

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

sponId:

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

sponStatus:

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

evSubsc:

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

not:

required: [ethFlowInfo, enEthFlowInfo]

EventsSubscReqData:

description: Identifies the events the application subscribes to.

type: object

required:

- events

- notifUri

- notifCorreId

properties:

events:

type: array

items:

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

minItems: 1

notifUri:

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

qosMon:

$ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/QosMonitoringInformation'

usgThres:

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

notifCorreId:

type: string

EventsSubscReqDataRm:

description: >

This data type is defined in the same way as the EventsSubscReqData data type, but with the

OpenAPI nullable property set to true.

type: object

required:

- events

properties:

events:

type: array

items:

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

minItems: 1

notifUri:

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

qosMon:

$ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/QosMonitoringInformationRm'

usgThres:

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

notifCorreId:

type: string

nullable: true

EventsNotification:

description: Describes the notification of matched events.

type: object

required:

- notifCorreId

- events

properties:

notifCorreId:

type: string

events:

type: array

items:

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

minItems: 1

EventNotification:

description: Describes a notification of an matched event.

type: object

required:

- event

properties:

event:

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

flowIds:

type: array

items:

type: integer

minItems: 1

description: Identifies the IP flows that were sent during event subscription.

qosMonReports:

type: array

items:

$ref: 'TS29122\_AsSessionWithQoS.yaml#/components/schemas/QosMonitoringReport'

minItems: 1

usgRep:

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

appliedQosRef:

type: string

description: >

The currently applied alternative QoS requirement referring to an alternative QoS

reference or a requested alternative QoS parameter set. Applicable for

event QOS\_NOT\_GUARANTEED or SUCCESSFUL\_RESOURCES\_ALLOCATION.

altQosNotSuppInd:

type: boolean

description: >

When present and set to true it indicates that the Alternative QoS profiles are not

supported by NG-RAN. Applicable for

event QOS\_NOT\_GUARANTEED or SUCCESSFUL\_RESOURCES\_ALLOCATION.

AdditionInfoTsctsfQosTscac:

description: Describes additional error information specific for this API.

type: object

properties:

acceptableServInfo:

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

#

# ENUMERATIONS DATA TYPES

#

TscEvent:

description: Represents an event to notify to the AF.

anyOf:

- type: string

enum:

- FAILED\_RESOURCES\_ALLOCATION

- QOS\_MONITORING

- QOS\_GUARANTEED

- QOS\_NOT\_GUARANTEED

- SUCCESSFUL\_RESOURCES\_ALLOCATION

- USAGE\_REPORT

- 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.

#

# ALTERNATIVE DATA TYPES OR COMBINATIONS OF DATA TYPES

#

ProblemDetailsTsctsfQosTscac:

description: Extends ProblemDetails to also include the acceptable service info.

allOf:

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

- $ref: '#/components/schemas/AdditionInfoTsctsfQosTscac'

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