**TSG-CT WG3 Meeting #119bis-e *C3-220164r1***

**E-Meeting, 17th – 21th January 2022**

**Source: Huawei, Ericsson**

**Title: Capability of 5G Access Stratum Time resource**

**Spec: 3GPP TS 29.565 v1.0.0**

**Agenda item: 17.16**

**Document for: Decision**

**1. Introduction**

<Introduction part (optional)>

**2. Reason for Change**

As defined in Table 5.2.6.25.8-1 of 23.502, capability of 5G Access Stratum Time resource can be notified. As defined 5.27.1.8 of TS 23.501, the TSCTSF exposes the 5GS and/or UE availability and capabilities for synchronization service to the AF. The exposed information includes the list of UE identities and may include the supported time synchronization distribution methods or 5G access stratum time distribution, (g)PTP grandmaster capable, 5G Clock quality. It means the (g)PTP grandmaster capability is not mandatory if the 5G Clock quality is reported.

**3. Conclusions**

5G AS time resource is included in the Time Synchronization Capability reported by the TSCTSF.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.565.

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

##### 6.1.6.2.5 Type: TimeSyncCapability

Table 6.1.6.2.5-1: Definition of type TimeSyncCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| upNodeId | Uint64 | M | 1 | Identifies the applicable NW-TT. Contains a TSC user plane node Id. If integrated with TSN, the user plane node Id is a bridge Id defined in IEEE 802.1Q [18] clause 14.2.5. |  |
| gmCapables | array(GmCapable) | C | 1..N | Indicates whether user plane node supports acting as a gPTP and/or PTP grandmaster. (NOTE) |  |
| asTimeRes | AsTimeResource | C | 0..1 | Indicates the supported 5G clock quality (i.e. the source of time used by the 5GS). (NOTE) |  |
| ptpCapForUes | map(PtpCapabilitiesPerUe) | C | 1..N | Contains the PTP capabilities supported by the list of UE(s). The key of the map is the SUPI. Shall be present if the "gmCapables" attribute is included. |  |
| NOTE 1: At least one of the "gmCapables" attribute and "asTimeRes" attribute shall be included. | | | | | |

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

#### 6.1.6.1 General

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

Table 6.1.6.1-1 specifies the data types defined for the Ntsctsf\_TimeSynchronization service based interface protocol.

Table 6.1.6.1-1: Ntsctsf\_TimeSynchronization specific Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Clause defined | Description | Applicability |
| AccessTimeDistributionData | 6.1.6.1.7 | Contains the parameters for the creation of 5G access stratum time distribution configuration. |  |
| AsTimeDistributionParam | 6.1.6.1.8 | Contains the 5G access stratum time distribution parameters. |  |
| ActiveUe | 6.1.6.2.11 | Contains the UE identifier whose status of the access stratum time distribution is active and the optional requested time synchronization error budget. |  |
| PtpCapabilitiesPerUe | 6.1.6.2.6 | Contains the PTP capabilities supported by a UE. |  |
| TimeSyncExposureSubsc | 6.1.6.2.2 | Contains the parameters for the subscription to notification of capability of time synchronization service |  |
| TimeSyncCapability | 6.1.6.2.5 | Contains the capability of time synchronization service |  |
| TimeSyncExposureSubsNotif | 6.1.6.2.3 | Contains the notification of time synchronization service. |  |
| StatusRequestData | 6.1.6.2.9 | Contains the parameters for retrieval of the status of the access stratum time distribution for a list of UEs. |  |
| StatusResponseData | 6.1.6.2.10 | Contains the parameters for the status of the access stratum time distribution for a list of UEs. |  |
| SubsEventNotification | 6.1.6.2.4 | Contains the notification of capability of time synchronization for a list of UEs. |  |

Table 6.1.6.1-2 specifies data types re-used by the Ntsctsf\_TimeSynchronization service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Ntsctsf\_TimeSynchronization service based interface.

Table 6.1.6.1-2: Ntsctsf\_TimeSynchronization re-used Data Types

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | Reference | Comments | Applicability |
| AsTimeResource | 3GPP TS 29.522 [17] | Indicates the supported 5G clock quality. |  |
| DateTime | 3GPP TS 29.571 [15] | String with format "date-time" as defined in OpenAPI Specification [6]. |  |
| DistributionMethod | 3GPP TS 29.522 [17] | Identifies the time synchronization distribution methods supported by 5GS. |  |
| Dnn | 3GPP TS 29.571 [15] | The DNN the user is connected to. |  |
| DurationSec | 3GPP TS 29.571 [15] | Identifies a period of time in units of seconds. |  |
| EventFilter | 3GPP TS 29.522 [17] | Contains the conditions to match for notifying the event. |  |
| GmCapable | 3GPP TS 29.522 [17] | Indicates separately whether 5GS supports acting as a gPTP or PTP grandmaster. |  |
| GroupId | 3GPP TS 29.571 [15] | Identifies a group of internal globally unique ID. |  |
| Snssai | 3GPP TS 29.571 [15] | Identifies the S-NSSAI. |  |
| SubscribedEvent | 3GPP TS 29.522 [17] | Indicates the subscribed event. |  |
| Supi | 3GPP TS 29.571 [15] | The identification of the user (i.e. IMSI, NAI). |  |
| SupportedFeatures | 3GPP TS 29.571 [15] | Used to negotiate the applicability of the optional features defined in table 5.8-1. |  |
| TimeSyncExposureConfig | 3GPP TS 29.522 [17] | Contains the parameters of time synchronization configuration. |  |
| Uinteger | 3GPP TS 29.571 [15] | Unsigned integer. |  |
| Uint64 | 3GPP TS 29.571 [15] |  |  |
| Uri | 3GPP TS 29.571 [15] | Identifies a referenced resource. |  |

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

## A.2 Ntsctsf\_TimeSynchronization API

openapi: 3.0.0

info:

title: Ntsctsf\_TimeSynchronization Service API

version: 1.0.0-alpha.1

description: |

TSCTSF Time Synchronization Service.

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externalDocs:

description: 3GPP TS 29.565 V1.0.0; 5G System; Time Sensitive Communication and Time Synchronization Function Services; Stage 3.

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

#

servers:

- url: '{apiRoot}/ntsctsf-time-sync/v1'

variables:

apiRoot:

default: https://example.com

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

security:

- {}

- oAuth2ClientCredentials:

- ntsctsf-timesynchronization

paths:

/subscriptions:

post:

summary: Creates a new subscription to notification of capability of time synchronization service resource

operationId: TimeSynchronizationExposureSubscriptions

tags:

- Time Synchronization Exposure Subscriptions (Collection)

requestBody:

description: Contains the information for the creation the resource

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Successful creation of the resource

content:

application/json:

schema:

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

headers:

Location:

description: 'Contains the URI of the created individual time synchronization exposure subscription resource, according to the structure: {apiRoot}/ntsctsf-time-sync/{apiVersion}/subscriptions/{subscriptionId}'

required: true

schema:

type: string

'400':

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

'401':

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

'403':

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

'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:

subsEventNotification:

'{$request.body#/subsNotifUri':

post:

requestBody:

description: Notification of an event occurrence in the TSCTSF.

required: true

content:

application/json:

schema:

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

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'

'503':

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

default:

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

/subscriptions/{subscriptionId}:

get:

summary: "Reads an existing Individual Time Synchronization Exposure Subscription"

operationId: GetIndividualTimeSynchronizationExposureSubscription

tags:

- Individual Time Synchronization Exposure Subscription (Document)

parameters:

- name: subscriptionId

description: string identifying an Individual Time Synchronization Exposure Subscription

in: path

required: true

schema:

type: string

responses:

'200':

description: A representation of the resource is returned.

content:

application/json:

schema:

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

'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'

delete:

operationId: DeleteIndividualTimeSynchronizationExposureSubscription

summary: Delete an Individual TimeSynchronization Exposure Subscription

tags:

- Individual Time Synchronization Exposure Subscription (Document)

parameters:

- name: subscriptionId

in: path

description: string identifying an Individual Time Synchronization Exposure Subscription

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'

/subscriptions/{subscriptionId}/configurations:

post:

summary: "Craete a new Individual Time Synchronization Exposure Configuration"

operationId: CreateIndividualTimeSynchronizationExposureConfiguration

tags:

- Individual Time Synchronization Exposure Configuration (Document)

parameters:

- name: subscriptionId

description: string identifying an Individual Time Synchronization Exposure Subscription

in: path

required: true

schema:

type: string

requestBody:

description: Contains the information for the creation the resource

required: true

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfig'

responses:

'201':

description: Successful creation of the resource

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfig'

headers:

Location:

description: 'Contains the URI of the created individual time synchronization exposure configuration resource, according to the structure: {apiRoot}/ntsctsf-time-sync/{apiVersion}/subscriptions/{subscriptionId}/configurations/{configurationId}'

required: true

schema:

type: string

'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/404'

'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:

configEventNotification:

'{$request.body#/configNotifUri':

post:

requestBody:

description: Notification of an event occurrence in the TSCTSF.

required: true

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfigNotif'

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'

'503':

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

default:

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

/subscriptions/{subscriptionId}/configurations/{configurationId}:

get:

summary: "Reads an existing Individual Time Synchronization Exposure Configuration"

operationId: GetIndividualTimeSynchronizationExposureConfiguration

tags:

- Individual Time Synchronization Exposure Configuration (Document)

parameters:

- name: subscriptionId

description: string identifying an Individual Time Synchronization Exposure Subscription

in: path

required: true

schema:

type: string

- name: configurationId

description: string identifying an Individual Time Synchronization Exposure Configuration

in: path

required: true

schema:

type: string

responses:

'200':

description: A representation of the resource is returned.

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfig'

'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':

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'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: ReplaceIndividualTimeSynchronizationExposureConfiguration

summary: Replace an individual Time Synchronization Exposure Configuration

tags:

- IndividualTimeSynchronizationExposureConfiguration (Document)

requestBody:

required: true

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfig'

parameters:

- name: subscriptionId

description: string identifying an Individual Time Synchronization Exposure Subscription

in: path

required: true

schema:

type: string

- name: configurationId

description: string identifying an Individual Time Synchronization Exposure Configuration

in: path

required: true

schema:

type: string

responses:

'200':

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

content:

application/json:

schema:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/TimeSyncExposureConfig'

'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'

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

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$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: DeleteIndividualTimeSynchronizationExposureConfiguration

summary: Delete an Individual TimeSynchronization Exposure Configuration

tags:

- Individual Time Synchronization Exposure Configuration (Document)

parameters:

- name: subscriptionId

in: path

description: string identifying an Individual Time Synchronization Exposure Subscription

required: true

schema:

type: string

- name: configurationId

description: string identifying an Individual Time Synchronization Exposure Configuration

in: path

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'

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

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

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$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:

ntsctsf-timesynchronization: Access to the Ntsctsf\_TimeSynchronization API

schemas:

TimeSyncExposureSubsc:

description: Contains the parameters for the subscription to notification of capability of time synchronization service.

type: object

properties:

supis:

type: array

items:

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

minItems: 1

interGrpId:

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

anyUeInd:

type: boolean

description: Identifies whether the request applies to any UE. This attribute shall set to "true" if applicable for any UE, otherwise, set to "false".

notifMethod:

$ref: 'TS29508\_Nsmf\_EventExposure.yaml#/components/schemas/NotificationMethod'

dnn:

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

snssai:

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

subscribedEvents:

type: array

items:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/SubscribedEvent'

minItems: 1

eventFilters:

type: array

items:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/EventFilter'

minItems: 1

subsNotifUri:

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

subsNotifId:

type: string

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

maxReportNbr:

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

expiry:

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

repPeriod:

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

suppFeat:

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

required:

- subsNotifUri

- subsNotifId

TimeSyncExposureSubsNotif:

description: Contains the notification of time synchronization service.

type: object

properties:

subsNotifId:

type: string

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

eventNotifs:

type: array

items:

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

minItems: 1

SubsEventNotification:

description: Contains the notification of capability of time synchronization for a list of UEs.

type: object

properties:

event:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/SubscribedEvent'

timeSyncCapas:

type: array

items:

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

minItems: 1

TimeSyncCapability:

description: Contains the capability of time synchronization service

type: object

properties:

upNodeId:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

gmCapables:

type: array

items:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/GmCapable'

minItems: 1

asTimeRes:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/AsTimeResource'

ptpCapForUes:

type: object

additionalProperties:

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

minProperties: 1

description: Contains the PTP capabilities supported by each of the UE(s). The key of the map is the supi.

required:

- upNodeId

anyOf:

- required: [gmCapables]

- required: [asTimeRes]

PtpCapabilitiesPerUe:

description: Contains the supported PTP capabilities per UE.

type: object

properties:

supi:

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

ptpCaps:

type: array

items:

$ref: 'TS29522\_TimeSyncExposure.yaml#/components/schemas/EventFilter'

minItems: 1

required:

- supi

- ptpCaps

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