**3GPP TSG-SA5 Meeting #162 *S5-253776***

Goteborg, Sweden, 25 - 29 August 2025

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **291** | **CR** | **0639** | **rev** | **1** | **Current version:** | **19.3.0** |  |
|  | | | | | | | | |
| *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:*** | Rel-19 CR 32.291 Addition of charging information for MOCN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | CH\_MOCN\_NetShare | | | | |  | ***Date:*** | | | 2025-08-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Addition of network sharing changing information. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding networkSharingChargingInformation and networkSharingContainerInformation | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The network sharing charging would be incomplete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 3.3, 6.1.6.2.7.1, 6.1.6.2.7.3, 6.1.6.2.7.x (new), 6.1.6.2.7.y (new), 6.1.8, 7.6, and Forge | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Forge MR link: <https://forge.3gpp.org/rep/sa5/CH/-/merge_requests/94> at commit 718b2771df05aadb0341b6b2a420efcd3e174319 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Revision of S5-253585. | | | | | | | | |

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

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

AF Application Function

AMF Access and Mobility Management Function

ATSSS Access Traffic Steering, Switching, Splitting

CHF Charging Function

CEF Charging Enablement Function

CTF Charging Trigger Function

DS\_TT Device side TSN translator

ECUR Event Charging with Unit Reservation

GPSI Generic Public Subscription Identifier

GUAMI Globally Unique AMF Identifier

IEC Immediate Event Charging

I-SMF Intermediate SMF

MB-SMF Multicast/Broadcast Session Management Function

MnS Management Service

NSACF Network Slice Admission Control Function

NSSAA Network slice-specific Authentication and Authorization

NF Network Function

NW\_TT Network side TSN translator

PEC Post Event Charging

PEI Permanent Equipment Identifier

POP Participating Operator

QBC QoS flow Based Charging

QFI QoS Flow Identifier

SMSF Short Message Service Function

SMF Session Management Function

SSC Session and Service Continuity

SUPI Subscription Permanent Identifier

TSC Time sensitive communication

TSN Time sensitive networking

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

6.1.6.2.7.1 Type ChargingDataRequest

This clause is additional attributes of the type ChargingDataRequest defined in clause 6.1.6.2.7.1 for NS performance and analytics charging described in 3GPP TS 28.201[201].

**Table 6.1.6.2.7.1-1: NS performance and analytics Specified attribute of type ChargingDataRequest**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| nSPAChargingInformation | NSPAChargingInformation | OC | 0..1 | This field holds the network slice information, which is reported to the CHF |  |
| networkSharingChargingInformation | NetworkSharingChargingInformation | OC | 0..1 | This field holds 5G MOCN network sharing specific information | MOCN |

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

6.1.6.2.7.3 Type UsedUnitContainer

This clause is additional portion of the type UsedUnitContainer defined in clause 6.1.6.2.1.10 for NS performance and analytics charging described in 3GPP TS 28.201[201].

**Table 6.1.6.2.7.3-1: NS performance and analytics charging of type UsedUnitContainer**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| nSPAContainerInformation | NSPAContainerInformation | OC | 0..1 | the network slice performance and analytics container specific information. |  |
| networkSharingContainerInformation | NetworkSharingContainerInformation | OC | 0..1 | This field holds 5G MOCN network sharing container specific information | MOCN |

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

6.1.6.2.7.x Type NetworkSharingChargingInformation

**Table 6.1.6.2.7.x-1: Definition of type NetworkSharingChargingInformation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| plmnId | PlmnId | M | 1 | This field holds POP PLMN ID. |  |
| singleNSSAI | Snssai | OC | 0..1 | This field holds single Network Slice Selection Assistance Information for POP PLMN ID.. |  |

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

6.1.6.2.7.y Type NetworkSharingContainerInformation

**Table 6.1.6.2.7.y-1: Definition of type NetworkSharingContainerInformation**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** | **Applicability** |
| uplinkVolume | Integer | OC | 0..1 | This field holds the amount of requested volume (bytes) in uplink direction. |  |
| downlinkVolume | Integer | OC | 0..1 | This field holds the amount of requested volume (bytes) in downlink direction. |  |
| numberOfPDUSessionsReq | Integer | OC | 0..1 | This field holds the number of PDU sessions requested. |  |
| numberOfPDUSessionsSuccess | Integer | OC | 0..1 | This field holds the number of PDU sessions successfully setup. |  |

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

6.1.8 Feature negotiation

The optional features in table 6.1.8-1 are defined for the Nchf\_ConvergedCharging API. They shall be negotiated using the extensibility mechanism defined in subclause 6.6 of 3GPP TS 29.500 [299].

**Table 6.1.8-1: Supported Features**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feature number** | | **Feature Name** | | **Description** | |
| 1 | | CHFCQM | | CHF-controlled quota management i.e. support for temporary offline. | |
| 2 | | AF\_Charging\_Identifier | | Indicates the support of long character strings as charging identifiers. | |
| 3 | | 5GIEPC\_CH | | 5GS interworking with EPC. | |
| 4 | | ATSSS | | This feature indicates support of Access Traffic Steering, Switching, Splitting (ATSSS). | |
| 5 | | ETSUN | | This feature indicates support of Enhancing Topology of SMF and UPF in 5G Networks (ETSUN). | |
| 6 | | EnhancedDiagnostics | | Support the enhanced diagnostics. | |
| 7 | | AMF\_subs\_PRA | | PRA(s) subscription by CHF in AMF. | |
| 8 | | FilterRuleList | | Support of multiple filter rules in the final unit indication. | |
| 9 | | TEI17\_NIESGU | | This feature indicates support of GERAN/UTRAN access. | |
| 10 | | IMS | | This feature indicates support of IP Multimedia Subsystem (IMS). (NOTE 1). | |
| 11 | | QoSMonitoring | | This feature indicates support of QoS Monitoring. | |
| 12 | | Announcement | | This feature indicates support of announcements. (NOTE 1) | |
| 13 | | 5GLAN | | This feature indicates support of 5G LAN-type services. | |
| 14 | | URLLC | | This feature indicates support of URLLC. | |
| 15 | | NotifyInfoResponse | | This feature indicates support of response with information for a notification. | |
| 16 | | ES4xx | | Extended Support of HTTP 400, 403, 404 allowing use of either ChargingDataResponse or ProblemDetails in the response. | |
| 17 | | ES3xx | | Extended Support of HTTP 307 and 308 redirections, an NF that does not support this feature does only support HTTP redirection as specified for 3GPP Release 15 and 16. | |
| 18 | | EdgeComputing | | This feature indicates support of edge computing domain charging. (NOTE 1) | |
| 19 | | 5GSCIoT | | This feature indicates support of 5GS control plane CIoT optimization. | |
| 20 | | SMF\_Charging\_Id | | Indicates the support of strings as SMF charging identifiers. | |
| 21 | | SNPN | | This feature indicates support of Stand-alone Non-Public Network. | |
| 22 | | IDC\_CH | | This feature indicates support of IMS Data Channel charging. | |
| 23 | | 5MBS\_CH | | This feature indicates 5G multicast-broadcast services charging. (NOTE 1) | |
| 24 | | SatelliteAccess | | This feature indicates support of NR satellite access. | |
| 25 | | NSREP | | This feature indicates support of Network slice replacement charging. | |
| 26 | | TSN | | This feature indicates support of time sensitive networking. (NOTE 1) | |
| 27 | | 5GSATB | | This feature indicates support of satellite backhaul. | |
| 28 | | NSAC\_CH | | This feature indicates support of Network slice admission control charging. (NOTE 1) | |
| 29 | | NSSAA | | This feature indicates support of Network slice-specific authentication and authorization charging. (NOTE 1) | |
| 30 | | ProSe | | This feature indicates support of 5G ProSe. (NOTE 1) | |
| 31 | | INTER\_CHF | | This feature indicates support of inter-CHF communication. | |
| 32 | | RangingSL | | This feature indicates support of Ranging and Sidelink Positioning. | |
| 33 | | EE\_NS\_CH | | This feature indicates support of energy information for network slice. | |
| 34 | | AIOT\_API\_CH | | This feature indicates support of Ambient IoT service charging, allowing AIOTF as an API target network function in the northbound API exposure charging. | |
| 35 | | IDC\_APP\_CH | | This feature indicates support of IMS data channel application donwload charging from DCSF. | |
| 36 | | CCF | | This feature indicated support of CAPIF Framework | |
| 38 | | MOCN | | This feature indicated support of network sharing using MOCN. | |
| NOTE 1: The feature is used to indicate a charging domain or subsystem. | | | | | |

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

7.6 Bindings for NS performance and Analytics charging

**Table 7.6-1: Bindings of CDR field, Information Element and Resource Attribute for NS performance and Analytics charging**

| **Information Element** | **CDR Field** | **Resource Attribute** |
| --- | --- | --- |
|  |  | **ChargingDataRequest** |
| Multiple Unit Usage | List of Multiple Unit Usage | /multipleUnitUsage |
| Used Unit Container | Used Unit Container | /multipleUnitUsage/usedUnitContainer |
| NSPA Container Information | NSPA Container Information | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation |
| Uplink Latency | Uplink Latency | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/uplinkLatency |
| Downlink Latency | Downlink Latency | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/downlinkLatency |
| Uplink Throughput | Uplink Throughput | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/uplinkThroughput |
| Downlink Throughput | Downlink Throughput | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/downlinkThroughput |
| Maximum packet loss rate UL | Maximum packet loss rate UL | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/maximumPacketLossRateUL |
| Maximum packet loss rate DL | Maximum packet loss rate DL | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/maximumPacketLossRateDL |
| Service Experience statistics data | Service Experience statistics data | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/serviceExperienceStatisticsData |
| The number of PDU sessions | The number of PDU sessions | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/theNumberOfPDUSessions |
| The number of Registered Subscribers | The number of Registered Subscribers | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/theNumberOfRegisteredSubscribers |
| Load level | Load level | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/loadLevel |
| Estimated Energy Consumption | Estimated Energy Consumption | /multipleUnitUsage/usedUnitContainer/nSPAContanierInformation/estimatedEnergyConsumption |
| Network Sharing Container Information | Network Sharing Container Information | /multipleUnitUsage/usedUnitContainer/networkSharingChargingInformation |
| Downlink Data Volume | Downlink Data Volume | /multipleUnitUsage/usedUnitContainer/networkSharingChargingInformation/downlinkVolume |
| Uplink Data Volume | Uplink Data Volume | /multipleUnitUsage/usedUnitContainer/networkSharingChargingInformation/uplinkVolume |
| Number of PDU Sessions requested | Number of PDU Sessions requested | /multipleUnitUsage/usedUnitContainer/networkSharingChargingInformation/numberOfPDUSessionsReq |
| Number of PDU Sessions successful | Number of PDU Sessions successful | /multipleUnitUsage/usedUnitContainer/networkSharingChargingInformation/numberOfPDUSessionsSuccess |
| NSPA Charging Information | NSPA Charging Information | /nSPAChargingInformation |
| Single NSSAI | Single NSSAI | /nSPAChargingInformation/singleNSSAI |
| Network Sharing Charging Information | Network Sharing Charging Information | /networkSharingChargingInformation |
| PLMN Identifier | PLMN Identifier | /networkSharingChargingInformation/plmnId |
| Single NSSAI | Single NSSAI | /networkSharingChargingInformation/singleNSSAI |
|  |  | **ChargingDataResponse** |
| - | - | - |

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

\*\*\* START OF CHANGE 1 \*\*\*

\*\*\* OpenAPI/TS32291\_Nchf\_ConvergedCharging.yaml \*\*\*

<CODE BEGINS>

openapi: 3.0.0

info:

title: Nchf\_ConvergedCharging

version: 3.3.0-alpha.3

description: |

ConvergedCharging Service © 2025, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

All rights reserved.

externalDocs:

description: >

3GPP TS 32.291 V19.3.0: Telecommunication management; Charging management;

5G system, charging service; Stage 3.

url: 'http://www.3gpp.org/ftp/Specs/archive/32\_series/32.291/'

servers:

- url: '{apiRoot}/nchf-convergedcharging/v3'

variables:

apiRoot:

default: https://example.com

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

security:

- {}

- oAuth2ClientCredentials:

- nchf-convergedcharging

paths:

/chargingdata:

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'201':

description: Created

content:

application/json:

schema:

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

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'400':

description: Bad request

content:

application/problem+json:

schema:

oneOf:

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

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

'401':

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

'403':

description: Forbidden

content:

application/problem+json:

schema:

oneOf:

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

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

'404':

description: Not Found

content:

application/problem+json:

schema:

oneOf:

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

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

'405':

$ref: 'TS29571\_CommonData.yaml#/components/responses/405'

'408':

$ref: 'TS29571\_CommonData.yaml#/components/responses/408'

'410':

$ref: 'TS29571\_CommonData.yaml#/components/responses/410'

'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'

'504':

$ref: 'TS29571\_CommonData.yaml#/components/responses/504'

default:

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

callbacks:

chargingNotification:

'{$request.body#/notifyUri}':

post:

requestBody:

required: true

content:

application/json:

schema:

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

responses:

'200':

description: OK.

content:

application/ json:

schema:

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

'204':

description: 'No Content, Notification was succesfull'

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'400':

description: Bad request

content:

application/problem+json:

schema:

oneOf:

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

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

'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'

'504':

$ref: 'TS29571\_CommonData.yaml#/components/responses/504'

default:

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

'/chargingdata/{ChargingDataRef}/update':

post:

requestBody:

required: true

content:

application/json:

schema:

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

parameters:

- name: ChargingDataRef

in: path

description: a unique identifier for a charging data resource in a PLMN

required: true

schema:

type: string

responses:

'200':

description: OK. Updated Charging Data resource is returned

content:

application/json:

schema:

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

'307':

$ref: 'TS29571\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29571\_CommonData.yaml#/components/responses/308'

'400':

description: Bad request

content:

application/problem+json:

schema:

oneOf:

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

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

'401':

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

'403':

description: Forbidden

content:

application/problem+json:

schema:

oneOf:

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

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

'404':

description: Not Found

content:

application/problem+json:

schema:

oneOf:

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

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

'405':

$ref: 'TS29571\_CommonData.yaml#/components/responses/405'

'408':

$ref: 'TS29571\_CommonData.yaml#/components/responses/408'

'410':

$ref: 'TS29571\_CommonData.yaml#/components/responses/410'

'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'

'504':

$ref: 'TS29571\_CommonData.yaml#/components/responses/504'

default:

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

'/chargingdata/{ChargingDataRef}/release':

post:

requestBody:

required: true

content:

application/json:

schema:

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

parameters:

- name: ChargingDataRef

in: path

description: a unique identifier for a charging data resource in a PLMN

required: true

schema:

type: string

responses:

'204':

description: No Content.

'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':

description: Not Found

content:

application/problem+json:

schema:

oneOf:

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

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

'410':

$ref: 'TS29571\_CommonData.yaml#/components/responses/410'

'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'

'504':

$ref: 'TS29571\_CommonData.yaml#/components/responses/504'

default:

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

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{nrfApiRoot}/oauth2/token'

scopes:

nchf-convergedcharging: Access to the Nchf\_ConvergedCharging API

schemas:

ChargingDataRequest:

type: object

properties:

subscriberIdentifier:

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

tenantIdentifier:

type: string

chargingId:

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

mnSConsumerIdentifier:

type: string

nfConsumerIdentification:

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

invocationTimeStamp:

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

invocationSequenceNumber:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

retransmissionIndicator:

type: boolean

oneTimeEvent:

type: boolean

oneTimeEventType:

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

notifyUri:

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

supportedFeatures:

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

serviceSpecificationInfo:

type: string

multipleUnitUsage:

type: array

items:

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

minItems: 0

triggers:

type: array

items:

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

minItems: 0

easid:

type: string

ednid:

type: string

eASProviderIdentifier:

type: string

aMFId:

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

pDUSessionChargingInformation:

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

roamingQBCInformation:

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

sMSChargingInformation:

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

nEFChargingInformation:

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

registrationChargingInformation:

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

n2ConnectionChargingInformation:

$ref: '#/components/schemas/N2ConnectionChargingInformation'

locationReportingChargingInformation:

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

nSPAChargingInformation:

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

networkSharingChargingInformation:

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

nSMChargingInformation:

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

mMTelChargingInformation:

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

iMSChargingInformation:

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

edgeInfrastructureUsageChargingInformation:

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

eASDeploymentChargingInformation:

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

directEdgeEnablingServiceChargingInformation:

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

exposedEdgeEnablingServiceChargingInformation:

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

proSeChargingInformation:

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

mMSChargingInformation:

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

mBSSessionChargingInformation:

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

tSNChargingInformation:

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

interCHFInformation:

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

nSACFChargingInformation:

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

nSSAAChargingInformation:

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

rangingSLChargingInformation:

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

lCSInformation:

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

required:

- nfConsumerIdentification

- invocationTimeStamp

- invocationSequenceNumber

ChargingDataResponse:

type: object

properties:

invocationTimeStamp:

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

invocationSequenceNumber:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

invocationResult:

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

sessionFailover:

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

supportedFeatures:

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

multipleUnitInformation:

type: array

items:

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

minItems: 0

triggers:

type: array

items:

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

minItems: 0

pDUSessionChargingInformation:

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

roamingQBCInformation:

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

locationReportingChargingInformation:

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

mBSSessionChargingInformation:

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

interCHFInformation:

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

required:

- invocationTimeStamp

- invocationSequenceNumber

ChargingNotifyRequest:

type: object

properties:

notificationType:

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

reauthorizationDetails:

type: array

items:

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

minItems: 0

required:

- notificationType

ChargingNotifyResponse:

type: object

properties:

invocationResult:

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

NFIdentification:

type: object

properties:

nFName:

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

nFIPv4Address:

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

nFIPv6Address:

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

nFPLMNID:

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

nodeFunctionality:

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

nFFqdn:

type: string

required:

- nodeFunctionality

MultipleUnitUsage:

type: object

properties:

ratingGroup:

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

requestedUnit:

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

allocateUnit:

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

usedUnitContainer:

type: array

items:

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

minItems: 0

allocatedUnit:

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

uPFID:

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

multihomedPDUAddress:

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

mBUPFID:

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

required:

- ratingGroup

InvocationResult:

type: object

properties:

error:

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

failureHandling:

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

Trigger:

type: object

properties:

triggerType:

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

triggerCategory:

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

timeLimit:

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

volumeLimit:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

volumeLimit64:

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

eventLimit:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

maxNumberOfccc:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

tariffTimeChange:

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

required:

- triggerCategory

MultipleUnitInformation:

type: object

properties:

resultCode:

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

ratingGroup:

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

grantedUnit:

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

allocatedUnit:

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

triggers:

type: array

items:

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

minItems: 0

validityTime:

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

quotaHoldingTime:

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

finalUnitIndication:

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

timeQuotaThreshold:

type: integer

volumeQuotaThreshold:

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

unitQuotaThreshold:

type: integer

uPFID:

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

announcementInformation:

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

mBUPFID:

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

required:

- ratingGroup

RequestedUnit:

type: object

properties:

time:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

totalVolume:

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

uplinkVolume:

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

downlinkVolume:

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

serviceSpecificUnits:

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

UsedUnitContainer:

type: object

properties:

serviceId:

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

quotaManagementIndicator:

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

triggers:

type: array

items:

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

minItems: 0

triggerTimestamp:

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

time:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

totalVolume:

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

uplinkVolume:

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

downlinkVolume:

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

serviceSpecificUnits:

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

eventTimeStamps:

type: array

items:

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

minItems: 0

localSequenceNumber:

type: integer

pDUContainerInformation:

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

nSPAContainerInformation:

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

networkSharingContainerInformation:

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

pC5ContainerInformation:

$ref: '#/components/schemas/PC5ContainerInformation'

mBSContainerInformation:

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

required:

- localSequenceNumber

AllocateUnit:

type: object

properties:

allocateUnitIndicator:

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

nSACContainerInformation:

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

AllocatedUnit:

type: object

properties:

quotaManagementIndicator:

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

triggers:

type: array

items:

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

minItems: 0

triggerTimestamp:

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

localSequenceNumber:

type: integer

nSACContainerInformation:

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

required:

- localSequenceNumber

GrantedUnit:

type: object

properties:

tariffTimeChange:

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

time:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

totalVolume:

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

uplinkVolume:

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

downlinkVolume:

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

serviceSpecificUnits:

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

FinalUnitIndication:

type: object

properties:

finalUnitAction:

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

restrictionFilterRule:

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

restrictionFilterRuleList:

type: array

items:

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

minItems: 1

filterId:

type: string

filterIdList:

type: array

items:

type: string

minItems: 1

redirectServer:

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

required:

- finalUnitAction

RedirectServer:

type: object

properties:

redirectAddressType:

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

redirectServerAddress:

type: string

required:

- redirectAddressType

- redirectServerAddress

ReauthorizationDetails:

type: object

properties:

serviceId:

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

ratingGroup:

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

quotaManagementIndicator:

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

PDUSessionChargingInformation:

type: object

properties:

chargingId:

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

sMFchargingId:

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

homeProvidedChargingId:

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

sMFHomeProvidedChargingId:

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

userInformation:

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

userLocationinfo:

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

iMSSessionInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/CallInfo'

mAPDUNon3GPPUserLocationInfo:

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

non3GPPUserLocationTime:

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

mAPDUNon3GPPUserLocationTime:

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

presenceReportingAreaInformation:

type: object

additionalProperties:

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

minProperties: 0

uetimeZone:

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

pduSessionInformation:

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

unitCountInactivityTimer:

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

rANSecondaryRATUsageReport:

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

UserInformation:

type: object

properties:

servedGPSI:

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

servedPEI:

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

unauthenticatedFlag:

type: boolean

roamerInOut:

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

PDUSessionInformation:

type: object

properties:

networkSlicingInfo:

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

pduSessionID:

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

pduType:

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

sscMode:

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

hPlmnId:

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

servingNetworkFunctionID:

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

ratType:

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

mAPDUNon3GPPRATType:

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

dnnId:

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

dnnSelectionMode:

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

chargingCharacteristics:

type: string

pattern: '^[0-9a-fA-F]{1,4}$'

chargingCharacteristicsSelectionMode:

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

startTime:

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

stopTime:

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

3gppPSDataOffStatus:

$ref: '#/components/schemas/3GPPPSDataOffStatus'

sessionStopIndicator:

type: boolean

pduAddress:

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

diagnostics:

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

authorizedQoSInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/AuthorizedDefaultQos'

subscribedQoSInformation:

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

authorizedSessionAMBR:

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

subscribedSessionAMBR:

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

servingCNPlmnId:

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

mAPDUSessionInformation:

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

enhancedDiagnostics:

$ref: '#/components/schemas/EnhancedDiagnostics5G'

redundantTransmissionType:

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

pDUSessionPairID:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

cpCIoTOptimisationIndicator:

type: boolean

5GSControlPlaneOnlyIndicator:

type: boolean

smallDataRateControlIndicator:

type: boolean

5GLANTypeService:

$ref: '#/components/schemas/5GLANTypeService'

sNPNInformation:

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

5GMulticastService:

$ref: '#/components/schemas/5GMulticastService'

5GSBridgeInformation:

$ref: '#/components/schemas/5GSBridgeInformation'

satelliteAccessIndicator:

type: boolean

satelliteBackhaulInformation:

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

required:

- pduSessionID

- dnnId

PDUContainerInformation:

type: object

properties:

timeofFirstUsage:

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

timeofLastUsage:

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

qoSInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosData'

qoSCharacteristics:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosCharacteristics'

afChargingIdentifier:

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

afChargingIdString:

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

userLocationInformation:

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

uetimeZone:

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

rATType:

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

servingNodeID:

type: array

items:

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

minItems: 0

presenceReportingAreaInformation:

type: object

additionalProperties:

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

minProperties: 0

3gppPSDataOffStatus:

$ref: '#/components/schemas/3GPPPSDataOffStatus'

sponsorIdentity:

type: string

applicationserviceProviderIdentity:

type: string

chargingRuleBaseName:

type: string

mAPDUSteeringFunctionality:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/SteeringFunctionality'

mAPDUSteeringMode:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/SteeringMode'

trafficForwardingWay:

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

qosMonitoringReport:

type: array

items:

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

minItems: 0

mBSSessionID:

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

mBSDeliveryMethod:

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

NSPAContainerInformation:

type: object

properties:

uplinkLatency:

type: integer

downlinkLatency:

type: integer

uplinkThroughput:

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

downlinkThroughput:

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

maximumPacketLossRateUL:

type: integer

maximumPacketLossRateDL:

type: integer

serviceExperienceStatisticsData:

$ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/ServiceExperienceInfo'

theNumberOfPDUSessions:

type: integer

theNumberOfRegisteredSubscribers:

type: integer

loadLevel:

$ref: 'TS29520\_Nnwdaf\_EventsSubscription.yaml#/components/schemas/NsiLoadLevelInfo'

estimatedEnergyConsumption:

type: integer

NSPAChargingInformation:

type: object

properties:

singleNSSAI:

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

required:

- singleNSSAI

NetworkSharingContainerInformation:

type: object

properties:

uplinkVolume:

type: integer

downlinkVolume:

type: integer

numberOfPDUSessionsReq:

type: integer

numberOfPDUSessionsSuccess:

type: integer

NetworkSharingChargingInformation:

type: object

properties:

plmnId:

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

singleNSSAI:

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

required:

- plmnId

NetworkSlicingInfo:

type: object

properties:

sNSSAI:

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

hPlmnSNSSAI:

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

alternativeSNSSAI:

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

required:

- sNSSAI

PDUAddress:

type: object

properties:

pduIPv4Address:

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

pduIPv6AddresswithPrefix:

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

pduAddressprefixlength:

type: integer

iPv4dynamicAddressFlag:

type: boolean

iPv6dynamicPrefixFlag:

type: boolean

addIpv6AddrPrefixes:

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

addIpv6AddrPrefixList:

type: array

items:

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

ServingNetworkFunctionID:

type: object

properties:

servingNetworkFunctionInformation:

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

aMFId:

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

required:

- servingNetworkFunctionInformation

RoamingQBCInformation:

type: object

properties:

multipleQFIcontainer:

type: array

items:

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

minItems: 0

uPFID: # Included for backwards compatibility and

# can be included based on operators requirement

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

roamingChargingProfile:

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

MultipleQFIcontainer:

type: object

properties:

triggers:

type: array

items:

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

minItems: 0

triggerTimestamp:

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

time:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

totalVolume:

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

uplinkVolume:

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

downlinkVolume:

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

localSequenceNumber:

type: integer

qFIContainerInformation:

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

required:

- localSequenceNumber

QFIContainerInformation:

type: object

properties:

qFI:

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

reportTime:

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

timeofFirstUsage:

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

timeofLastUsage:

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

qoSInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosData'

qoSCharacteristics:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosCharacteristics'

userLocationInformation:

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

uetimeZone:

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

presenceReportingAreaInformation:

type: object

additionalProperties:

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

minProperties: 0

rATType:

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

servingNetworkFunctionID:

type: array

items:

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

minItems: 0

3gppPSDataOffStatus:

$ref: '#/components/schemas/3GPPPSDataOffStatus'

3gppChargingId:

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

diagnostics:

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

enhancedDiagnostics:

type: array

items:

type: string

required:

- reportTime

RoamingChargingProfile:

type: object

properties:

triggers:

type: array

items:

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

minItems: 0

partialRecordMethod:

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

SMSChargingInformation:

type: object

properties:

originatorInfo:

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

recipientInfo:

type: array

items:

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

minItems: 0

userEquipmentInfo:

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

roamerInOut:

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

userLocationinfo:

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

uetimeZone:

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

rATType:

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

sMSCAddress:

type: string

sMDataCodingScheme:

type: integer

sMMessageType:

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

sMReplyPathRequested:

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

sMUserDataHeader:

type: string

pattern: '^[0-9a-fA-F]+$'

sMStatus:

type: string

pattern: '^[0-9a-fA-F]+$'

sMDischargeTime:

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

numberofMessagesSent:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

sMServiceType:

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

sMSequenceNumber:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

sMSresult:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

submissionTime:

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

sMPriority:

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

messageReference:

type: string

messageSize:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

messageClass:

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

deliveryReportRequested:

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

OriginatorInfo:

type: object

properties:

originatorSUPI:

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

originatorGPSI:

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

originatorOtherAddress:

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

originatorReceivedAddress:

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

originatorSCCPAddress:

type: string

sMOriginatorInterface:

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

sMOriginatorProtocolId:

type: string

RecipientInfo:

type: object

properties:

recipientSUPI:

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

recipientGPSI:

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

recipientOtherAddress: # Included for backwards compatibility, shall not be used

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

recipientOtherAddresses:

type: array

items:

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

minItems: 0

recipientReceivedAddress:

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

recipientSCCPAddress:

type: string

sMDestinationInterface:

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

sMrecipientProtocolId:

type: string

SMAddressInfo:

type: object

properties:

sMaddressType:

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

sMaddressData:

type: string

sMaddressDomain:

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

RecipientAddress:

type: object

properties:

recipientAddressInfo:

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

sMaddresseeType:

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

MessageClass:

type: object

properties:

classIdentifier:

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

tokenText:

type: string

SMAddressDomain:

type: object

properties:

domainName:

type: string

3GPPIMSIMCCMNC:

type: string

SMInterface:

type: object

properties:

interfaceId:

type: string

interfaceText:

type: string

interfacePort:

type: string

interfaceType:

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

RANSecondaryRATUsageReport:

type: object

properties:

rANSecondaryRATType:

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

qosFlowsUsageReports:

type: array

items:

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

Diagnostics:

type: integer

IPFilterRule:

type: string

QosFlowsUsageReport:

type: object

properties:

qFI:

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

startTimestamp:

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

endTimestamp:

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

uplinkVolume:

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

downlinkVolume:

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

5GLANTypeService:

type: object

properties:

internalGroupIdentifier:

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

5GSBridgeInformation:

type: object

properties:

bridgeId:

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

nWTTPortNumber:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint16'

dSTTPortNumber:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint16'

required:

- bridgeId

NEFChargingInformation:

type: object

properties:

externalIndividualIdentifier:

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

externalIndividualIdList:

type: array

items:

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

minItems: 1

internalIndividualIdentifier:

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

internalIndividualIdList:

type: array

items:

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

minItems: 1

externalGroupIdentifier:

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

groupIdentifier:

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

aPIDirection:

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

aPITargetNetworkFunction:

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

aPIResultCode:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

aPIName:

type: string

aPIReference:

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

aPIOperation:

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

aPIContent:

type: string

required:

- aPIName

SNPNInformation:

type: object

properties:

sNPNID:

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

accessType:

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

n3IwfFqdn:

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

required:

- sNPNID

RegistrationChargingInformation:

type: object

properties:

registrationMessagetype:

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

userInformation:

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

userLocationinfo:

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

pSCellInformation:

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

uetimeZone:

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

rATType:

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

5GMMCapability:

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

mICOModeIndication:

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

smsIndication:

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

taiList:

type: array

items:

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

minItems: 0

serviceAreaRestriction:

type: array

items:

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

minItems: 0

requestedNSSAI:

type: array

items:

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

minItems: 0

allowedNSSAI:

type: array

items:

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

minItems: 0

rejectedNSSAI:

type: array

items:

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

minItems: 0

nSSAIMapList:

type: array

items:

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

minItems: 0

alternativeNSSAIMap:

type: array

items:

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

minItems: 0

amfUeNgapId:

type: integer

ranUeNgapId:

type: integer

ranNodeId:

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

sNPNID:

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

cAGIDList:

type: array

items:

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

minItems: 0

satelliteAccessIndicator:

type: boolean

required:

- registrationMessagetype

PSCellInformation:

type: object

properties:

nrcgi:

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

ecgi:

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

NSSAIMap:

type: object

properties:

servingSnssai:

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

homeSnssai:

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

required:

- servingSnssai

- homeSnssai

AlternativeNSSAIMap:

type: object

properties:

snssai:

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

alternativeSnssai:

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

required:

- snssai

- alternativeSnssai

N2ConnectionChargingInformation:

type: object

properties:

n2ConnectionMessageType:

$ref: '#/components/schemas/N2ConnectionMessageType'

userInformation:

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

userLocationinfo:

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

pSCellInformation:

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

uetimeZone:

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

rATType:

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

amfUeNgapId:

type: integer

ranUeNgapId:

type: integer

ranNodeId:

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

restrictedRatList:

type: array

items:

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

minItems: 0

forbiddenAreaList:

type: array

items:

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

minItems: 0

serviceAreaRestriction:

type: array

items:

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

minItems: 0

restrictedCnList:

type: array

items:

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

minItems: 0

allowedNSSAI:

type: array

items:

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

minItems: 0

nSSAIMapList:

type: array

items:

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

minItems: 0

rrcEstCause:

type: string

pattern: '^[0-9a-fA-F]+$'

satelliteAccessIndicator:

type: boolean

required:

- n2ConnectionMessageType

LocationReportingChargingInformation:

type: object

properties:

locationReportingMessageType:

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

userInformation:

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

userLocationinfo:

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

pSCellInformation:

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

uetimeZone:

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

rATType:

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

presenceReportingAreaInformation:

type: object

additionalProperties:

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

minProperties: 0

satelliteAccessIndicator:

type: boolean

required:

- locationReportingMessageType

N2ConnectionMessageType:

type: integer

LocationReportingMessageType:

type: integer

NSMChargingInformation:

type: object

properties:

managementOperation:

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

idNetworkSliceInstance:

type: string

listOfserviceProfileChargingInformation:

type: array

items:

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

minItems: 0

managementOperationStatus:

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

managementOperationalState:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/OperationalState'

managementAdministrativeState:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/AdministrativeState'

required:

- managementOperation

ServiceProfileChargingInformation:

type: object

properties:

serviceProfileIdentifier:

type: string

sNSSAIList:

type: array

items:

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

minItems: 0

sST:

$ref: 'TS28541\_NrNrm.yaml#/components/schemas/Sst'

latency:

type: integer

availability:

type: number

resourceSharingLevel:

$ref: 'TS28541\_SliceNrm.yaml#/components/schemas/SharingLevel'

jitter:

type: integer

reliability:

type: string

maxNumberofUEs:

type: integer

coverageArea:

type: string

uEMobilityLevel:

$ref: 'TS28541\_SliceNrm.yaml#/components/schemas/MobilityLevel'

delayToleranceIndicator:

$ref: 'TS28541\_SliceNrm.yaml#/components/schemas/Support'

dLThptPerSlice:

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

dLThptPerUE:

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

uLThptPerSlice:

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

uLThptPerUE:

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

maxNumberofPDUsessions:

type: integer

kPIMonitoringList:

type: string

supportedAccessTechnology:

type: integer

v2XCommunicationModeIndicator:

$ref: 'TS28541\_SliceNrm.yaml#/components/schemas/Support'

energyEfficiency:

$ref: 'TS28541\_SliceNrm.yaml#/components/schemas/EEPerfReq'

addServiceProfileInfo:

type: string

Throughput:

type: object

properties:

guaranteedThpt:

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

maximumThpt:

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

MAPDUSessionInformation:

type: object

properties:

mAPDUSessionIndicator:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/MaPduIndication'

aTSSSCapability:

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

EnhancedDiagnostics5G:

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

RanNasCauseList:

type: array

items:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/RanNasRelCause'

QosMonitoringReport:

description: Contains reporting information on QoS monitoring.

type: object

properties:

ulDelays:

type: array

items:

type: integer

minItems: 0

dlDelays:

type: array

items:

type: integer

minItems: 0

rtDelays:

type: array

items:

type: integer

minItems: 0

AnnouncementInformation:

type: object

properties:

announcementIdentifier:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

announcementReference:

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

variableParts:

type: array

items:

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

minItems: 0

timeToPlay:

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

quotaConsumptionIndicator:

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

announcementPriority:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

playToParty:

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

announcementPrivacyIndicator:

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

Language:

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

VariablePart:

type: object

properties:

variablePartType:

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

variablePartValue:

type: array

items:

type: string

minItems: 1

variablePartOrder:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

required:

- variablePartType

- variablePartValue

Language:

type: string

MMTelChargingInformation:

type: object

properties:

supplementaryServices:

type: array

items:

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

minItems: 1

SupplementaryService:

type: object

properties:

supplementaryServiceType:

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

supplementaryServiceMode:

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

numberOfDiversions:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

associatedPartyAddress:

type: string

conferenceId:

type: string

participantActionType:

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

changeTime:

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

numberOfParticipants:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

cUGInformation:

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

IMSChargingInformation:

type: object

properties:

eventType:

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

iMSNodeFunctionality:

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

roleOfNode:

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

userInformation:

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

userLocationInfo:

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

ueTimeZone:

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

3gppPSDataOffStatus:

$ref: '#/components/schemas/3GPPPSDataOffStatus'

isupCause:

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

controlPlaneAddress:

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

vlrNumber:

$ref: '#/components/schemas/E164'

mscAddress:

$ref: '#/components/schemas/E164'

userSessionID:

type: string

outgoingSessionID:

type: string

sessionPriority:

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

callingPartyAddresses:

type: array

items:

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

minItems: 1

calledPartyAddress:

type: string

numberPortabilityRoutinginformation:

type: string

carrierSelectRoutingInformation:

type: string

alternateChargedPartyAddress:

type: string

requestedPartyAddress:

type: array

items:

type: string

minItems: 1

calledAssertedIdentities:

type: array

items:

type: string

minItems: 1

calledIdentityChanges:

type: array

items:

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

minItems: 1

associatedURI:

type: array

items:

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

minItems: 1

timeStamps:

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

applicationServerInformation:

type: array

items:

type: string

minItems: 1

interOperatorIdentifier:

type: array

items:

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

minItems: 1

imsChargingIdentifier:

type: string

relatedICID:

type: string

relatedICIDGenerationNode:

type: string

transitIOIList:

type: array

items:

type: string

minItems: 1

earlyMediaDescription:

type: array

items:

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

minItems: 1

sdpSessionDescription:

type: array

items:

type: string

minItems: 1

sdpMediaComponent:

type: array

items:

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

minItems: 1

servedPartyIPAddress:

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

serverCapabilities:

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

trunkGroupID:

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

bearerService:

type: string

imsServiceId:

type: string

messageBodies:

type: array

items:

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

minItems: 1

accessNetworkInformation:

type: array

items:

type: string

minItems: 1

additionalAccessNetworkInformation:

type: string

cellularNetworkInformation:

type: string

accessTransferInformation:

type: array

items:

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

minItems: 1

accessNetworkInfoChange:

type: array

items:

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

minItems: 1

imsCommunicationServiceID:

type: string

imsApplicationReferenceID:

type: string

causeCode:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

reasonHeader:

type: array

items:

type: string

minItems: 1

initialIMSChargingIdentifier:

type: string

nniInformation:

type: array

items:

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

minItems: 1

fromAddress:

type: string

imsEmergencyIndication:

type: boolean

imsVisitedNetworkIdentifier:

type: string

sipRouteHeaderReceived:

type: string

sipRouteHeaderTransmitted:

type: string

tadIdentifier:

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

feIdentifierList:

type: string

imsDCAppInfo:

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

satelliteIdList:

type: array

items:

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

minItems: 1

IMSDCAppInfo:

type: object

properties:

applicationId:

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

httpUrl:

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

EdgeInfrastructureUsageChargingInformation:

type: object

properties:

meanVirtualCPUUsage:

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

meanVirtualMemoryUsage:

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

meanVirtualDiskUsage:

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

measuredInBytes:

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

measuredOutBytes:

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

durationStartTime:

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

durationEndTime:

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

EASDeploymentChargingInformation:

type: object

properties:

eEASDeploymentRequirements:

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

lCMEventType:

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

lCMStartTime:

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

lCMEndTime:

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

satelliteBackhaulInformation:

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

MMSChargingInformation:

type: object

properties:

mmOriginatorInfo:

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

mmRecipientInfoList:

type: array

items:

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

minItems: 0

userLocationinfo:

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

uetimeZone:

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

rATType:

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

correlationInformation:

type: string

submissionTime:

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

mmContentType:

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

mmPriority:

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

messageID:

type: string

messageType:

type: string

messageSize:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

messageClass:

type: string

deliveryReportRequested:

type: boolean

readReplyReportRequested:

type: boolean

applicID:

type: string

replyApplicID:

type: string

auxApplicInfo:

type: string

contentClass:

type: string

dRMContent:

type: boolean

adaptations:

type: boolean

vasID:

type: string

vaspID:

type: string

MMOriginatorInfo:

type: object

properties:

originatorSUPI:

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

originatorGPSI:

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

originatorOtherAddress:

type: array

items:

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

minItems: 0

MMRecipientInfo:

type: object

properties:

recipientSUPI:

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

recipientGPSI:

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

recipientOtherAddress:

type: array

items:

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

TSNChargingInformation:

type: object

properties:

dNN:

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

sNSSAI:

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

internalGroupIdentifier:

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

externalIndividualIdList:

type: array

items:

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

minItems: 0

5GSBridgeInformation:

$ref: '#/components/schemas/5GSBridgeInformation'

tSNQoSInformation:

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

tSCAssistanceInformation:

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

timeSynchronizationInformation:

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

TSNQoSInformation:

type: object

properties:

priority:

type: integer

bridgeDelay:

type: array

items:

type: integer

minItems: 0

TSCAssistanceInformation:

type: object

properties:

flowDirection:

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

periodicity:

type: integer

TimeSynchronizationInformation:

type: object

properties:

distributionMethod:

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

tSNtimeDomainNumber:

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

temporalValidityInformation:

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

spatialValidityInformation:

type: array

items:

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

minItems: 0

timeSynchronizationErrorBudget:

type: integer

synchronizationState:

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

clockQuality:

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

parentTimeSource:

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

PC5ContainerInformation:

type: object

properties:

coverageInfoList:

type: array

items:

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

radioParameterSetInfoList:

type: array

items:

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

transmitterInfoList:

type: array

items:

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

minItems: 0

timeOfFirstTransmission:

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

timeOfFirstReception:

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

CoverageInfo:

type: object

properties:

coverageStatus:

type: boolean

changeTime:

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

locationInfo:

type: array

items:

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

minItems: 0

RadioParameterSetInfo:

type: object

properties:

radioParameterSetValues:

type: array

items:

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

minItems: 0

changeTimestamp:

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

TransmitterInfo:

type: object

properties:

proseSourceIPAddress:

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

proseSourceL2Id:

type: string

ProseChargingInformation:

type: object

properties:

announcingPlmnID:

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

announcingUeHplmnIdentifier:

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

announcingUeVplmnIdentifier:

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

monitoringUeHplmnIdentifier:

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

monitoringUeVplmnIdentifier:

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

discovererUeHplmnIdentifier:

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

discovererUeVplmnIdentifier:

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

discovereeUeHplmnIdentifier:

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

discovereeUeVplmnIdentifier:

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

monitoredPlmnIdentifier:

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

proseApplicationID:

type: string

ApplicationId:

type: string

applicationSpecificDataList:

type: array

items:

type: string

minItems: 0

proseFunctionality:

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

proseEventType:

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

directDiscoveryModel:

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

validityPeriod:

type: integer

roleOfUE:

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

proseRequestTimestamp:

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

pC3ProtocolCause:

type: integer

monitoringUEIdentifier:

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

requestedPLMNIdentifier:

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

timeWindow:

type: integer

rangeClass:

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

proximityAlertIndication:

type: boolean

proximityAlertTimestamp:

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

proximityCancellationTimestamp:

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

hopCount:

type: integer

intermediateRelayInformationContainer:

type: array

items:

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

minItems: 0

relayIPAddress:

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

proseUEToNetworkRelayUEID :

type: string

proseDestinationLayer2ID:

type: string

pFIContainerInformation:

type: array

items:

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

minItems: 0

transmissionDataContainer:

type: array

items:

$ref: '#/components/schemas/PC5DataContainer'

minItems: 0

receptionDataContainer:

type: array

items:

$ref: '#/components/schemas/PC5DataContainer'

minItems: 0

required:

- aPIName

InterCHFInformation:

type: object

properties:

remoteCHFResource:

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

originalNFConsumerId:

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

NSACFChargingInformation:

type: object

properties:

nSACChargingIndicator:

type: boolean

NSACContainerInformation:

type: object

properties:

numberOfUEs:

type: integer

numberOfPDUs:

type: integer

NSSAAChargingInformation:

type: object

properties:

nSSAAMessageType:

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

userIdentification:

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

aAAPAddress:

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

aAASAddress:

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

eAPIDResponse:

type: string

eAPauthstatus:

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

aMFId:

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

required:

- nSSAAMessageType

- userIdentification

RangingSLChargingInformation:

type: object

properties:

targetUEID:

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

sLReferenceUEID:

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

sLPositioningServerUEID:

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

locatedUEID:

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

locationType:

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

locationEstimate:

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

LCSInformation:

type: object

properties:

lCSClientID:

type: string

locationType:

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

locationEstimate:

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

positioningData:

type: string

targetUEID:

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

LocationEstimate:

type: object

properties:

userLocationInformation:

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

horizontalAccuracy:

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

verticalAccuracy:

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

IntermediateRelayInformationContainer:

type: object

properties:

intermediateRelayIPAddress:

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

proseUEToNetworkIntermediateRelayUEID:

type: string

PFIContainerInformation:

type: object

properties:

pFI:

type: string

reportTime:

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

timeofFirstUsage:

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

timeofLastUsage:

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

qoSInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosData'

qoSCharacteristics:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosCharacteristics'

userLocationInformation:

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

uetimeZone:

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

presenceReportingAreaInformation:

type: object

additionalProperties:

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

minProperties: 0

PC5DataContainer:

type: object

properties:

localSequenceNumber:

type: string

changeTime:

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

coverageStatus:

type: boolean

userLocationInformation:

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

dataVolume:

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

changeCondition:

type: string

radioResourcesId:

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

radioFrequency:

type: string

pC5RadioTechnology:

type: string

OctetString:

type: string

pattern: '^[0-9a-fA-F]+$'

E164:

type: string

pattern: '^[0-9a-fA-F]+$'

IMSAddress:

type: object

properties:

ipv4Addr:

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

ipv6Addr:

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

e164:

$ref: '#/components/schemas/E164'

anyOf:

- required: [ ipv4Addr ]

- required: [ ipv6Addr ]

- required: [ e164 ]

ServingNodeAddress:

type: object

properties:

ipv4Addr:

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

ipv6Addr:

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

anyOf:

- required: [ ipv4Addr ]

- required: [ ipv6Addr ]

SIPEventType:

type: object

properties:

sIPMethod:

type: string

eventHeader:

type: string

expiresHeader:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

ISUPCause:

type: object

properties:

iSUPCauseLocation:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

iSUPCauseValue:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

iSUPCauseDiagnostics:

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

enhancedDiagnostics:

$ref: '#/components/schemas/EnhancedDiagnostics5G'

CalledIdentityChange:

type: object

properties:

calledIdentity:

type: string

changeTime:

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

InterOperatorIdentifier:

type: object

properties:

originatingIOI:

type: string

terminatingIOI:

type: string

EarlyMediaDescription:

type: object

properties:

sDPTimeStamps:

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

sDPMediaComponent:

type: array

items:

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

minItems: 0

sDPSessionDescription:

type: array

items:

type: string

minItems: 0

SDPTimeStamps:

type: object

properties:

sDPOfferTimestamp:

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

sDPAnswerTimestamp:

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

SDPMediaComponent:

type: object

properties:

sDPMediaName:

type: string

SDPMediaDescription:

type: array

items:

type: string

minItems: 0

localGWInsertedIndication:

type: boolean

ipRealmDefaultIndication:

type: boolean

transcoderInsertedIndication:

type: boolean

mediaInitiatorFlag:

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

mediaInitiatorParty:

type: string

threeGPPChargingId:

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

accessNetworkChargingIdentifierValue:

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

sDPType:

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

ServerCapabilities:

type: object

properties:

mandatoryCapability:

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

minItems: 0

optionalCapability :

type: array

items:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

minItems: 0

serverName:

type: array

items:

type: string

minItems: 0

TrunkGroupID:

type: object

properties:

incomingTrunkGroupID:

type: string

outgoingTrunkGroupID:

type: string

MessageBody:

type: object

properties:

contentType:

type: string

contentLength:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

contentDisposition:

type: string

originator:

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

required:

- contentType

- contentLength

AccessTransferInformation:

type: object

properties:

accessTransferType:

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

accessNetworkInformation:

type: array

items:

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

minItems: 0

cellularNetworkInformation:

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

interUETransfer:

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

userEquipmentInfo:

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

instanceId:

type: string

relatedIMSChargingIdentifier:

type: string

relatedIMSChargingIdentifierNode:

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

changeTime:

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

AccessNetworkInfoChange:

type: object

properties:

accessNetworkInformation:

type: array

items:

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

minItems: 0

cellularNetworkInformation:

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

changeTime:

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

NNIInformation:

type: object

properties:

sessionDirection:

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

nNIType:

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

relationshipMode:

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

neighbourNodeAddress:

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

SatelliteId:

type: string

EASRequirements:

type: object

properties:

requiredEASservingLocation:

$ref: 'TS28538\_EdgeNrm.yaml#/components/schemas/ServingLocation'

softwareImageInfo:

$ref: 'TS28538\_EdgeNrm.yaml#/components/schemas/SoftwareImageInfo'

affinityAntiAffinity:

$ref: 'TS28538\_EdgeNrm.yaml#/components/schemas/AffinityAntiAffinity'

serviceContinuity:

type: boolean

virtualResource:

$ref: 'TS28538\_EdgeNrm.yaml#/components/schemas/VirtualResource'

MMContentType:

type: object

properties:

typeNumber:

type: string

addtypeInfo:

type: string

contentSize:

type: integer

mmAddContentInfo:

type: array

items:

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

minItems: 0

MMAddContentInfo:

type: object

properties:

typeNumber:

type: string

addtypeInfo:

type: string

contentSize:

type: integer

APIOperation:

type: object

properties:

name:

type: string

description:

type: string

5GMulticastService:

type: object

properties:

mBSSessionIdList:

type: array

items:

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

minItems: 1

MBSSessionChargingInformation:

type: object

properties:

mBSSessionID:

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

mBSServiceType:

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

serviceArea:

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

mBSStartTime:

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

mBSEndTime:

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

mBSServiceActivityStatus:

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

servingNetworkFunctionID:

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

required:

- mBSSessionID

- mBSServiceType

ServiceArea:

type: object

properties:

mBSServiceArea:

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

uPFIDs:

type: array

items:

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

minItems: 0

ranNodeIDs:

type: array

items:

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

minItems: 0

MBSContainerInformation:

type: object

properties:

timeofFirstUsage:

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

timeofLastUsage:

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

qoSInformation:

$ref: 'TS29512\_Npcf\_SMPolicyControl.yaml#/components/schemas/QosData'

establishedConnectionInfo:

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

EstablishedConnectionInfo:

type: object

properties:

uPFIDs:

type: array

items:

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

minItems: 0

ranNodeIDs:

type: array

items:

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

minItems: 0

SatelliteBackhaulInformation:

type: object

properties:

satelliteBackhaulCategory:

type: array

items:

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

minItems: 0

gEOSatelliteID:

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

NotificationType:

anyOf:

- type: string

enum:

- REAUTHORIZATION

- ABORT\_CHARGING

- type: string

NodeFunctionality:

anyOf:

- type: string

enum:

- AMF

- SMF

- SMS # Included for backwards compatibility, shall not be used

- SMSF

- PGW\_C\_SMF

- NEFF # Included for backwards compatibility, shall not be used

- SGW

- I\_SMF

- ePDG

- CEF

- NEF

- MnS\_Producer

- SGSN

- V\_SMF

- 5G\_DDNMF

- IMS\_Node

- MMS\_Node

- EES

- PCF

- UDM

- UPF

- TSN\_AF

- TSCTSF

- MB\_SMF

- CHF

- GMLC

- AIOTF

- CCF

- type: string

ChargingCharacteristicsSelectionMode:

anyOf:

- type: string

enum:

- HOME\_DEFAULT

- ROAMING\_DEFAULT

- VISITING\_DEFAULT

- type: string

TriggerType:

anyOf:

- type: string

enum:

# SMF TriggerType

- QUOTA\_THRESHOLD

- QHT

- FINAL

- QUOTA\_EXHAUSTED

- VALIDITY\_TIME

- OTHER\_QUOTA\_TYPE

- FORCED\_REAUTHORISATION

- UNUSED\_QUOTA\_TIMER # Included for backwards compatibility, shall not be used

- UNIT\_COUNT\_INACTIVITY\_TIMER

- ABNORMAL\_RELEASE

- QOS\_CHANGE

- VOLUME\_LIMIT

- TIME\_LIMIT

- EVENT\_LIMIT

- PLMN\_CHANGE

- USER\_LOCATION\_CHANGE

- RAT\_CHANGE

- SESSION\_AMBR\_CHANGE

- UE\_TIMEZONE\_CHANGE

- TARIFF\_TIME\_CHANGE

- MAX\_NUMBER\_OF\_CHANGES\_IN\_CHARGING\_CONDITIONS

- MANAGEMENT\_INTERVENTION

- CHANGE\_OF\_UE\_PRESENCE\_IN\_PRESENCE\_REPORTING\_AREA

- CHANGE\_OF\_3GPP\_PS\_DATA\_OFF\_STATUS

- SERVING\_NODE\_CHANGE

- REMOVAL\_OF\_UPF

- ADDITION\_OF\_UPF

- INSERTION\_OF\_ISMF

- REMOVAL\_OF\_ISMF

- CHANGE\_OF\_ISMF

- START\_OF\_SERVICE\_DATA\_FLOW

- ECGI\_CHANGE

- TAI\_CHANGE

- HANDOVER\_CANCEL

- HANDOVER\_START

- HANDOVER\_COMPLETE

- GFBR\_GUARANTEED\_STATUS\_CHANGE

- ADDITION\_OF\_ACCESS

- REMOVAL\_OF\_ACCESS

- START\_OF\_SDF\_ADDITIONAL\_ACCESS

- REDUNDANT\_TRANSMISSION\_CHANGE

- CGI\_SAI\_CHANGE

- RAI\_CHANGE

- JOIN\_MULTICAST

- MBS\_DELIVERY\_METHOD\_CHANGE

- LEAVE\_MULTICAST

- VSMF\_CHANGE

- SNSSAI\_REPLACEMENT

- SATELLITE\_BACKHAUL\_CATEGORY\_CHANGE

- GEO\_SATELLITE\_ID\_CHANGE

# IMS TriggerType

- SIP\_INVITE

- SIP\_RE-INVITE\_OR\_UPDATE

- SIP\_2XX\_ACKNOWLEDGING

- SIP\_1XX\_PROVISIONAL\_RESPONSE

- SIP\_4XX\_5XX\_OR\_6XX\_RESPONSE

- ANY\_OTHER\_SIP\_MESSAGE - SIP\_BYE\_MESSAGE

- SIP\_2XX\_ACKNOWLEDGING\_A\_SIP\_BYE

- ABORTING\_A\_SIP\_SESSION\_SET-UP

- SIP\_3XX\_FINAL\_OR\_REDIRECTION\_RESPONSE

- SIP\_4XX\_5XX\_OR\_6XX\_FINAL\_RESPONSE

# MB-SMF TriggerType

- MBS\_CONNECTION\_ESTABLISHED\_WITH\_NG-RAN

- MBS\_CONNECTION\_RELEASED\_WITH\_NG-RAN

- MBS\_CONNECTION\_ESTABLISHED\_WITH\_UPF

- MBS\_CONNECTION\_RELEASED\_WITH\_UPF

- MBS\_SESSION\_ACTIVITY\_STATUS\_CHANGE\_TO\_ACTIVE

- MBS\_SESSION\_ACTIVITY\_STATUS\_CHANGE\_TO\_INACTIVE

- MBS\_SESSION\_CONTEXT\_UPDATE

# NSAC TriggerType

- NSAC\_THRESHOLD\_INITIAL

- NSAC\_THRESHOLD\_UPWARDS\_REACHED

- NSAC\_THRESHOLD\_UPWARDS\_CROSSED

- NSAC\_THRESHOLD\_DOWNWARDS\_CROSSED

- NSAC\_QUOTA\_THRESHOLD

- NSAC\_QUOTA\_EXHAUSTED

- NSAC\_VALIDITY\_TIME

- NSAC\_QHT

- NSAC\_THRESHOLD\_TERMINATION

- NS\_TERMINATION

FinalUnitAction:

anyOf:

- type: string

enum:

- TERMINATE

- REDIRECT

- RESTRICT\_ACCESS

- type: string

RedirectAddressType:

anyOf:

- type: string

enum:

- IPV4

- IPV6

- URL

- URI

- type: string

TriggerCategory:

anyOf:

- type: string

enum:

- IMMEDIATE\_REPORT

- DEFERRED\_REPORT

- type: string

QuotaManagementIndicator:

anyOf:

- type: string

enum:

- ONLINE\_CHARGING

- OFFLINE\_CHARGING

- QUOTA\_MANAGEMENT\_SUSPENDED

- type: string

FailureHandling:

anyOf:

- type: string

enum:

- TERMINATE

- CONTINUE

- RETRY\_AND\_TERMINATE

- type: string

SessionFailover:

anyOf:

- type: string

enum:

- FAILOVER\_NOT\_SUPPORTED

- FAILOVER\_SUPPORTED

- type: string

3GPPPSDataOffStatus:

anyOf:

- type: string

enum:

- ACTIVE

- INACTIVE

- type: string

ResultCode:

anyOf:

- type: string

enum:

- SUCCESS

- END\_USER\_SERVICE\_DENIED

- QUOTA\_MANAGEMENT\_NOT\_APPLICABLE

- QUOTA\_LIMIT\_REACHED

- END\_USER\_SERVICE\_REJECTED

- USER\_UNKNOWN #Included for backwards compatibility, shall not be used

- RATING\_FAILED

- QUOTA\_MANAGEMENT

- type: string

PartialRecordMethod:

anyOf:

- type: string

enum:

- DEFAULT

- INDIVIDUAL

- type: string

RoamerInOut:

anyOf:

- type: string

enum:

- IN\_BOUND

- OUT\_BOUND

- type: string

SMMessageType:

anyOf:

- type: string

enum:

- SUBMISSION

- DELIVERY\_REPORT

- SM\_SERVICE\_REQUEST

- DELIVERY

- type: string

SMPriority:

anyOf:

- type: string

enum:

- LOW

- NORMAL

- HIGH

- type: string

DeliveryReportRequested:

anyOf:

- type: string

enum:

- YES

- NO

- type: string

InterfaceType:

anyOf:

- type: string

enum:

- UNKNOWN

- MOBILE\_ORIGINATING

- MOBILE\_TERMINATING

- APPLICATION\_ORIGINATING

- APPLICATION\_TERMINATING

- type: string

ClassIdentifier:

anyOf:

- type: string

enum:

- PERSONAL

- ADVERTISEMENT

- INFORMATIONAL

- AUTO

- type: string

SMAddressType:

anyOf:

- type: string

enum:

- EMAIL\_ADDRESS

- MSISDN # Included for backwards compatibility, shall not be used

- IPV4\_ADDRESS

- IPV6\_ADDRESS

- NUMERIC\_SHORTCODE

- ALPHANUMERIC\_SHORTCODE

- OTHER

- IMSI # Included for backwards compatibility, shall not be used

- type: string

SMAddresseeType:

anyOf:

- type: string

enum:

- TO

- CC

- BCC

- type: string

SMServiceType:

anyOf:

- type: string

enum:

- VAS4SMS\_SHORT\_MESSAGE\_CONTENT\_PROCESSING

- VAS4SMS\_SHORT\_MESSAGE\_FORWARDING

- VAS4SMS\_SHORT\_MESSAGE\_FORWARDING\_MULTIPLE\_SUBSCRIPTIONS

- VAS4SMS\_SHORT\_MESSAGE\_FILTERING

- VAS4SMS\_SHORT\_MESSAGE\_RECEIPT

- VAS4SMS\_SHORT\_MESSAGE\_NETWORK\_STORAGE

- VAS4SMS\_SHORT\_MESSAGE\_TO\_MULTIPLE\_DESTINATIONS

- VAS4SMS\_SHORT\_MESSAGE\_VIRTUAL\_PRIVATE\_NETWORK(VPN)

- VAS4SMS\_SHORT\_MESSAGE\_AUTO\_REPLY

- VAS4SMS\_SHORT\_MESSAGE\_PERSONAL\_SIGNATURE

- VAS4SMS\_SHORT\_MESSAGE\_DEFERRED\_DELIVERY

- type: string

ReplyPathRequested:

anyOf:

- type: string

enum:

- NO\_REPLY\_PATH\_SET

- REPLY\_PATH\_SET

- type: string

oneTimeEventType:

anyOf:

- type: string

enum:

- IEC

- PEC

- type: string

dnnSelectionMode:

anyOf:

- type: string

enum:

- VERIFIED

- UE\_DNN\_NOT\_VERIFIED

- NW\_DNN\_NOT\_VERIFIED

- type: string

APIDirection:

anyOf:

- type: string

enum:

- INVOCATION

- NOTIFICATION

- type: string

RegistrationMessageType:

anyOf:

- type: string

enum:

- INITIAL

- MOBILITY

- PERIODIC

- EMERGENCY

- DEREGISTRATION

- type: string

MICOModeIndication:

anyOf:

- type: string

enum:

- MICO\_MODE

- NO\_MICO\_MODE

- type: string

SmsIndication:

anyOf:

- type: string

enum:

- SMS\_SUPPORTED

- SMS\_NOT\_SUPPORTED

- type: string

ManagementOperation:

anyOf:

- type: string

enum:

- CreateMOI #Included for backwards compatibility, shall not be used

- ModifyMOIAttributes #Included for backwards compatibility, shall not be used

- DeleteMOI #Included for backwards compatibility, shall not be used

- CREATE\_MOI

- MODIFY\_MOI\_ATTR

- DELETE\_MOI

- NOTIFY\_MOI\_CREATION

- NOTIFY\_MOI\_ATTR\_CHANGE

- NOTIFY\_MOI\_DELETION

- type: string

ManagementOperationStatus:

anyOf:

- type: string

enum:

- OPERATION\_SUCCEEDED

- OPERATION\_FAILED

- type: string

RedundantTransmissionType:

anyOf:

- type: string

enum:

- NON\_TRANSMISSION

- END\_TO\_END\_USER\_PLANE\_PATHS

- N3\_N9

- TRANSPORT\_LAYER

- type: string

VariablePartType:

anyOf:

- type: string

enum:

- INTEGER

- NUMBER

- TIME

- DATE

- CURRENCY

- type: string

QuotaConsumptionIndicator:

anyOf:

- type: string

enum:

- QUOTA\_NOT\_USED

- QUOTA\_IS\_USED

- type: string

PlayToParty:

anyOf:

- type: string

enum:

- SERVED

- REMOTE

- type: string

AnnouncementPrivacyIndicator:

anyOf:

- type: string

enum:

- NOT\_PRIVATE

- PRIVATE

- type: string

SupplementaryServiceType:

anyOf:

- type: string

enum:

- OIP

- OIR

- TIP

- TIR

- HOLD

- CB

- CDIV

- CW

- MWI

- CONF

- FA

- CCBS

- CCNR

- MCID

- CAT

- CUG

- PNM

- CRS

- ECT

- type: string

SupplementaryServiceMode:

anyOf:

- type: string

enum:

- CFU

- CFB

- CFNR

- CFNL

- CD

- CFNRC

- ICB

- OCB

- ACR

- BLIND\_TRANFER

- CONSULTATIVE\_TRANFER

- type: string

ParticipantActionType:

anyOf:

- type: string

enum:

- CREATE

- JOIN

- INVITE\_INTO

- QUIT

- type: string

TrafficForwardingWay:

anyOf:

- type: string

enum:

- N6

- N19

- LOCAL\_SWITCH

- type: string

IMSNodeFunctionality:

anyOf:

- type: string

enum:

# The applicable IMS Nodes are MRFC, IMS-GWF (connected to S-CSCF using ISC), SIP AS and DCSF.

- S\_CSCF

- P\_CSCF

- I\_CSCF

- MRFC

- MGCF

- BGCF

- AS

- IBCF

- S-GW

- P-GW

- HSGW

- E-CSCF

- MME

- TRF

- TF

- ATCF

- PROXY

- EPDG

- TDF

- TWAG

- SCEF

- IWK\_SCEF

- IMS\_GWF

- DCSF

- type: string

RoleOfIMSNode:

anyOf:

- type: string

enum:

- ORIGINATING

- TERMINATING

- FORWARDING

- type: string

IMSSessionPriority:

anyOf:

- type: string

enum:

- PRIORITY\_0

- PRIORITY\_1

- PRIORITY\_2

- PRIORITY\_3

- PRIORITY\_4

- type: string

MediaInitiatorFlag:

anyOf:

- type: string

enum:

- CALLED\_PARTY

- CALLING\_PARTY

- UNKNOWN

- type: string

SDPType:

anyOf:

- type: string

enum:

- OFFER

- ANSWER

- type: string

OriginatorPartyType:

anyOf:

- type: string

enum:

- CALLING

- CALLED

- type: string

AccessTransferType:

anyOf:

- type: string

enum:

- PS\_TO\_CS

- CS\_TO\_PS

- PS\_TO\_PS

- CS\_TO\_CS

- type: string

UETransferType:

anyOf:

- type: string

enum:

- INTRA\_UE

- INTER\_UE

- type: string

NNISessionDirection:

anyOf:

- type: string

enum:

- INBOUND

- OUTBOUND

- type: string

NNIType:

anyOf:

- type: string

enum:

- NON\_ROAMING

- ROAMING\_NO\_LOOPBACK

- ROAMING\_LOOPBACK

- type: string

NNIRelationshipMode:

anyOf:

- type: string

enum:

- TRUSTED

- NON\_TRUSTED

- type: string

TADIdentifier:

anyOf:

- type: string

enum:

- CS

- PS

- type: string

ProseFunctionality:

anyOf:

- type: string

enum:

- DIRECT\_DISCOVERY

- DIRECT\_COMMUNICATION

- type: string

ProseEventType:

anyOf:

- type: string

enum:

- ANNOUNCING

- MONITORING

- MATCH\_REPORT

- type: string

DirectDiscoveryModel:

anyOf:

- type: string

enum:

- MODEL\_A

- MODEL\_B

- type: string

RoleOfUE:

anyOf:

- type: string

enum:

- ANNOUNCING\_UE

- MONITORING\_UE

- REQUESTOR\_UE

- REQUESTED\_UE

- type: string

RangeClass:

anyOf:

- type: string

enum:

- RESERVED

- 50\_METER

- 100\_METER

- 200\_METER

- 500\_METER

- 1000\_METER

- UNUSED

- type: string

RadioResourcesIndicator:

anyOf:

- type: string

enum:

- OPERATOR\_PROVIDED

- CONFIGURED

- type: string

MbsDeliveryMethod:

anyOf:

- type: string

enum:

- SHARED

- INDIVIDUAL

- type: string

TSCFlowDirection:

anyOf:

- type: string

enum:

- UPLINK

- DOWNLINK

- type: string

TimeDistributionMethod:

anyOf:

- type: string

enum:

- GPTP

- ASTI

- type: string

AllocateUnitIndicator:

anyOf:

- type: string

enum:

- CHF\_DETERMINED

- CTF\_DETERMINED

- type: string

NSSAAMessageType:

anyOf:

- type: string

enum:

- Authenticate

- Re-Authentication-Notification

- Revocation Notification

- type: string

LocationType:

anyOf:

- type: string

enum:

- CURRENT\_LOCATION

- LAST\_KNOWN\_LOCATION

- INITIAL\_LOCATION

- DEFERRED\_LOCATION

- NOTIFICATION\_VERIFICATION

- type: string

<CODE ENDS>

\*\*\* END OF CHANGE 1 \*\*\*