**3GPP TSG-SA5 Meeting #162 *S5-253772***

Goteborg, Sweden, 25 - 29 August 2025

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **32.291** | **CR** | **0642** | **rev** | **-** | **Current version:** | **19.3.0** |  |
|  |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <http://www.3gpp.org/Change-Requests>.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **x** |

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|  |
| ***Title:***  | Add Service-level-AA for support of UAS charging |
|  |  |
| ***Source to WG:*** | China Mobile Com. Corporation |
| ***Source to TSG:*** | SA5 |
|  |  |
| ***Work item code:*** | UAS\_Ph3-CH |  | ***Date:*** | 2025-08-27 |
|  |  |  |  |  |
| ***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 canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
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| ***Reason for change:*** | Based on the discussion during SA5 #161, the SA5 charging working group recommends adding the IE already defined by CT WG to identify the UAV. The liaison S5-252788 has also been sent to CT3 and CT4. According to clause 8.3.1.16 and 8.3.7.15 of TS 24.501, the Service-level-AA container IE can be used to identify the PDU sessions for the UAS services, which can be reused to support UAS charging. |
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| ***Summary of change:*** | Extend the PDUSessionInformation and RegistrationChargingInformation IE with serviceLevelAA IE, and update the Forge. |
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| ***Consequences if not approved:*** | Converged charging support of UAS is incomplete. |
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| ***Clauses affected:*** | 6.1.6.2.2.8, 6.1.6.2.4.3, 6.1.8, 7.2, 7.4, 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 32.255 CR 0605 TS 32.256 CR 0056 TS 32.298 CR 1058  |
|  |  |
| ***Other comments:*** | Forge MR link: <https://forge.3gpp.org/rep/sa5/CH/-/merge_requests/97> at commit 774fee1d4b125f4d20e39f386953b23b557676c3 |
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| ***This CR's revision history:*** |  |

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| **First change** |

###### 6.1.6.2.2.8 Type PDUSessionInformation

Table 6.1.6.2.2.8-1: Definition of type PDUSessionInformation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| networkSlicingInfo | NetworkSlicingInfo  | OM | 0..1 | information of network slice serving the PDU session |  |
| pduSessionID | PduSessionId | M | 1 | identifier of the PDU session |  |
| pduType | PduSessionType | OM | 0..1 | type of the PDU session, the PDN type non-IP is mapped to unstructured |  |
| sscMode | SscMode | OC | 0..1 | information of SSC Mode type. |  |
| hPlmnId | PlmnId | OC | 0..1 | PLMN identifier of the home network |  |
| servingNetworkFunctionID | ServingNetworkFunctionID | OC | 0..1 | This field holds serving Network Function identifier. |  |
| servingCNPlmnId | PlmnId | OC | 0..1 | Serving Core Network Operator PLMN ID selected by the UE in shared networks. |  |
| ratType | RatType | OC | 0..1 | the RAT Type of the PDU session |  |
| mAPDUNon3GPPRATType | RatType | OC | 0..1 | the RAT Type of non-3GPP access for the MA PDU session | ATSSS |
| dnnId | Dnn | M | 1 | a Data Network Name |  |
| dnnSelectionMode | DnnSelectionMode | OC | 0..1 | This field indicates how the DNN was selected. |  |
| chargingCharacteristics | string | OC | 0..1 | the Charging Characteristics for this PDU session.It carries the value in hexadecimal representationPattern: '^[0-9a-fA-F]{1,4}$' |  |
| chargingCharacteristicsSelectionMode | ChargingCharacteristicsSelectionMode | OC | 0..1 | information about how the "Charging Characteristics" was selected.  |  |
| startTime | DateTime | OC | 0..1 | the UTC time which represents the start of a PDU session at the SMF |  |
| stopTime | DateTime | OC | 0..1 | the UTC time which represents the stop of a PDU session at the SMF |  |
| 3gppPSDataOffStatus | 3GPPPSDataOffStatus | OC | 0..1 | This field holds the 3GPP Data off Status when UE’s 3GPP Data Off status is Activated or Deactivated. |  |
| sessionStopIndicator | boolean | OC | 0..1 | This field indicates to the CHF that the PDU session has been terminated. |  |
| pduAddress | PDUAddress | OC | 0..1 | Group of user ip address/prefix |  |
| diagnostics | Diagnostics | OC | 0..1 | provides a detailed cause value from SMF. |  |
| enhancedDiagnostics | EnhancedDiagnostics5G | OC | 0..N | provides a more detailed cause value from SMF. | EnhancedDiagnostics |
| authorizedQoSInformation | AuthorizedDefaultQos | OC | 0..1 | This field holds the authorized QoS applied to PDU session. |  |
| subscribedQoSInformation | SubscribedDefaultQos | OC | 0..1 | This field holds the subscribed Default QoS  |  |
| authorizedSessionAMBR | Ambr | OC | 0..1 | This field holds the authorized session-AMBR. |  |
| subscribedSessionAMBR | Ambr | OC | 0..1 | This field holds the subscribed session-AMBR. |  |
| mAPDUSessionInformation | MAPDUSessionInformation | OC | 0..1 | This field holds the MA PDU session information. | ATSSS |
| redundantTransmissionType | RedundantTransmissionType | OC | 0..1 | Indicates the redundant transmission type.If this field isn’t present, it should be seen as a non-redundant transmission. | URLLC |
| pDUSessionPairID | Uint32 | OC | 0..1 | This field identifies the two redundant PDU Sessions that belong together for dual connectivity based end to end redundant user plane paths type. | URLLC |
| cpCIoTOptimisationIndicator | boolean | OC | 0..1 | This field holds the indicator whether control plane optimization CIoT for 5GS is used during the PDU session, if this feature is enabled.The default value is false. | 5GSCIoT |
| 5GSControl PlaneOnlyIndicator | boolean | OC | 0..1 | This field holds the indicator whether the control plane only is used, i.e., the PDU data only transfers to control plane in case of control plane CIoT optimization. The default value is false. | 5GSCIoT |
| smallDataRateControlIndicator | boolean | OC | 0..1 | This field holds the indicator whether the small data rate control for 5GS CIoT is used during the PDU session. The default value is false. | 5GSCIoT |
| 5GLANTypeService | 5GLANTypeService | OC | 0..1 | 5G LAN Type service information, if present, the 5G LAN Type service is used. | 5GLAN |
| sNPNInformation | SNPNInformation | OC | 0..1 | This field holds information associated to SNPN. | SNPN |
| 5GMulticastService | 5GMulticastService | OC | 0..1 | 5G Multicast service information, if present, the 5G MBS service is used. | 5MBS\_CH |
| 5GSBridgeInformation | 5GSBridgeInformation | OC | 0..1 | This field holds the bridge information of the 5GS TSN, including bridge ID and port numbers. | TSN |
| satelliteAccessIndicator | boolean | OC | 0..1 | This field holds the indicator whether the Satellite Access is used during the PDU session. The default value is false. | SatelliteAccess |
| satelliteBackhaulInformation | SatelliteBackhaulInformation | OC | 0..1 | Satellite backhaul Information, if present, the Satellite backhaul is used. | 5GSATB |
| serviceLevelAA | string | OC | 0..1 | This field holds the upper layer information for authentication and authorization. If present, the UAS service is used. | UAS |

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| **Next change** |

###### 6.1.6.2.4.3 Type RegistrationChargingInformation

Table 6.1.6.2.4.3-1: Definition of type RegistrationChargingInformation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| registrationMessagetype | RegistrationMessageType | M | 1 | Message type received by the AMF: registration (initial, initial, mobility, periodic, emergency), deregistration. |  |
| userInformation | UserInformation | OM | 0..1 | Includes information of user and user equipment |  |
| userLocationinfo | UserLocation | OC | 0..1 | Information on the location and location time |  |
| pSCellInformation | PSCellInformation | OC | 0..1 | Primary SCG (Secondary Cell Group) Cell |  |
| uetimeZone | TimeZone | OC | 0..1 | UE Timezone the UE is currently located |  |
| rATType | RatType | OC | 0..1 | RAT Type of the registration |  |
| 5gMMCapability | Bytes | OC | 0..1 | 5GMM capability IE as specified in clause 9.11.3.1 of 3GPP TS 24.501 [303] |  |
| mICOModeIndication | MICOModeIndication | OC | 0..1 | Indicates whether the requested use of MICO mode is accepted or not by the network |  |
| smsIndication | SmsIndication | OC | 0..1 | Indicates whether the SMS delivery over NAS is supported |  |
| taiList | array(Tai) | OC | 0..N | An array of TAIs representing the set of tracking areas composing the Registration Area. |  |
| serviceAreaRestriction | ServiceAreaRestriction | OC | 0..1 | Service Area Restriction for the UE. |  |
| requestedNSSAI | array(Snssai) | OC | 0..N | Requested NSSAI.  |  |
| allowedNssai | array(Snssai) | OC | 0..N | Allowed NSSAI.  |  |
| rejectedNSSAI | array(Snssai) | OC | 0..N | Rejected NSSAI.  |  |
| nSSAIMapList | array(NSSAIMap) | OC | 0..N | Mapping of VPLMN S-NSSAIs to HPLMN S-NSSAIs.  |  |
| alternativeNSSAIMap | Array(AlternativeNSSAIMap) | OC | 0..N | Mapping of S-NSSAIs to be replaced and alternative S-NSSAIs.  | NSREP |
| amfUeNgapId | integer | OM | 0..1 | UE association over the N2 interface within the AMF. |  |
| ranUeNgapId | integer | OM | 0..1 | RAN UE NGAP ID over N2 interface |  |
| ranNodeId | GlobalRanNodeId | OC | 0..1 | Identity of the RAN node.  |  |
| sNPNID | PlmnIdNid | OC | 0..1 | This field holds PLMN ID and the NID which identifies the SNPN. | SNPN |
| cAGIDList | array(CagId) | OC | 0..N | This field holds the Closed Access Group Identifier List. |  |
| satelliteAccessIndicator | boolean | OC | 0..1 | This field holds the indicator whether the Satellite Access is used. | SatelliteAccess |
| serviceLevelAA | string | OC | 0..1 | This field holds the upper layer information for authentication and authorization. If present, the UAS service is used. | UAS |

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| **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 |
| 39 | UAS | This feature indicated support of UAS services charging. |
| NOTE 1: The feature is used to indicate a charging domain or subsystem. |

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| **Next change** |

## 7.2 Bindings for 5G data connectivity

Table 7.2-1: Bindings of 5G data connectivity CDR field, Information Element and Resource Attribute

| Information Element | CDR Field | Resource Attribute |
| --- | --- | --- |
|  |  | **ChargingDataRequest** |
| Multiple Unit Usage |  List of Multiple Unit Usage | /multipleUnitUsage |
| UPF ID | UPF ID | /multipleUnitUsage/uPFID |
| Multi-homed PDU address | Multi-homed PDU address | /multipleUnitUsage/multihomedPDUAddress |
| Used Unit Container | Used Unit Container  | /multipleUnitUsage/usedUnitContainer |
| PDU Container Information | PDU Container Information | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation |
| Time of First Usage | Time of First Usage | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/timeofFirstUsage |
| Time of Last Usage | Time of Last Usage | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/timeofLastUsage |
| QoS Information | QoS Information | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qoSInformation |
| QoS Characteristics | QoS Characteristics | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qoSCharacteristics |
| AF Charging Identifier | AF Charging Identifier | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/afChargingIdentifier |
| AF Charging Id String | AF Charging Id String | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/afChargingIdString |
| User Location Information | User Location Information | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/userLocationInformation |
| UE Time Zone | UE Time Zone | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/uetimeZone |
| RAT Type | RAT Type | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/rATType |
| Serving Network Function ID | Serving Network Function ID | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/servingNodeID |
| Presence Reporting Area Information | Presence Reporting AreaInformation | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/ presenceReportingAreaInformation |
| 3GPP PS Data Off Status | 3GPP PS Data Off Status | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/3gppPSDataOffStatus |
| MA PDU Steering functionality | MA PDU Steering functionality | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mAPDUSteeringFunctionality |
| MA PDU Steering mode | MA PDU Steering mode | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mAPDUSteeringMode |
| Sponsor Identity | Sponsor Identity | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/sponsorIdentity |
| Application Service ProviderIdentity | Application Service ProviderIdentity | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/applicationserviceProviderIdentity |
| Charging Rule Base Name | Charging Rule Base Name | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/chargingRuleBaseName |
| Traffic Forwarding Way | Traffic Forwarding Way | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/trafficForwardingWay |
| Qos Monitoring Report | Qos Monitoring Report | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/qosMonitoringReport |
| MBS Session ID | MBS Session ID | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mBSSessionID |
| MBS Delivery Method | MBS Delivery Method | /multipleUnitUsage/usedUnitContainer/pDUContainerInformation/mBSDeliveryMethod |
| PDU Session Charging Information | PDU Session Charging Information | /pDUSessionChargingInformation  |
| Charging Id | Charging Id | /pDUSessionChargingInformation/chargingId |
| SMF Charging Id | SMF Charging Id | /pDUSessionChargingInformation/sMFchargingId |
| Home Provided ChargingId | Home Provided ChargingId | /pDUSessionChargingInformation/ homeProvidedChargingId |
| SMF Home Provided ChargingId | SMF Home Provided ChargingId | /pDUSessionChargingInformation/ sMFHomeProvidedChargingId |
| User Information | User Information | /pDUSessionChargingInformation/ userInformation |
| User Identifier | User Identifier | /pDUSessionChargingInformation/userInformation/servedGPSI |
| User Equipment Info | User Equipment Info | /pDUSessionChargingInformation/userInformation/ servedPEI |
| Unauthenticated Flag | Unauthenticated Flag | /pDUSessionChargingInformation/userInformation/ unauthenticatedFlag |
| Roamer In Out | Roamer In Out | /pDUSessionChargingInformation/userInformation/ roamerInOut |
| User Location Info | User Location Info | /pDUSessionChargingInformation/ userLocationinfo |
| User Location Time |
| IMS Session Information | Call Information | /pDUSessionChargingInformation/iMSSessionInformation |
| Caller Information | Caller Information | /pDUSessionChargingInformation/iMSSessionInformation/callerInformation |
| Callee Information | Callee Information | /pDUSessionChargingInformation/ iMSSessionInformation/calleeInformation |
| MA PDU Non 3GPP User Location info | MA PDU Non 3GPP User Location info  | /pDUSessionChargingInformation/mAPDUNon3GPPUserLocationInfo |
| Non 3GPP User Location Time | Non 3GPP User Location Time | /pDUSessionChargingInformation/non3GPPUserLocationTime |
| MA PDU Non 3GPP User Location Time | MA PDU Non 3GPP User Location Time | /pDUSessionChargingInformation/mAPDUNon3GPPUserLocationTime |
| UE Time Zone | UE Time Zone | /pDUSessionChargingInformation/uEtimeZone |
| Presence Reporting AreaInformation | Presence Reporting AreaInformation | /pDUSessionChargingInformation/ presenceReportingAreaInformation |
| PDU Session Information | PDU Session Information | /pDUSessionChargingInformation/pduSessionInformation |
| PDU Session ID | PDU Session ID | /pDUSessionChargingInformation/pduSessionInformation/pduSessionID |
| Network Slice InstanceIdentifier |  | /pDUSessionChargingInformation/pduSessionInformation/networkSlicingInfo |
| S NSSAI | Network Slice Instance Identifier | /pDUSessionChargingInformation/pduSessionInformation/networkSlicingInfo/sNSSAI |
| HPLMN S NSSAI | HPLMN S NSSAI | /pDUSessionChargingInformation/pduSessionInformation/networkSlicingInfo/hPlmnSNSSAI |
| PDU Type | PDU Type | /pDUSessionChargingInformation /pduSessionInformation/pduType |
| PDU Address | PDU Address | /pDUSessionChargingInformation /pduSessionInformation/pduAddress |
| PDU IPv4 Address | PDU IPv4 Address | /pDUSessionChargingInformation/pduSessionInformation/pduAddress/pduIPv4Address |
| PDU IPv6 Address withprefix | PDU IPv6 Address with prefix | /pDUSessionChargingInformation/pduSessionInformation/pduAddress/pduIPv6Addresswithprefix |
| PDU Address prefix length | PDU Address prefix length | /pDUSessionChargingInformation /pduSessionInformation/pduAddress/pduAddressprefixlength |
| IPv4 Dynamic AddressFlag | IPv4 Dynamic Address Flag | /pDUSessionChargingInformation /pduSessionInformation/pduAddress/ iPv4dynamicAddressFlag |
| IPv6 Dynamic Address Flag | IPv6 Dynamic Prefix Flag | pDUSessionChargingInformation /pduSessionInformation/pduAddress/ iPv6dynamicPrefixFlag |
| pDUSessionChargingInformation /pduSessionInformation/pduAddress/ addIpv6AddrPrefixList |
| Additional PDU IPv6Prefixes  | Additional PDU IPv6 Prefixes  | pDUSessionChargingInformation /pduSessionInformation/pduAddress/ addIpv6AddrPrefixes |
| SSC Mode | SSC Mode | /pDUSessionChargingInformation /pduSessionInformation/sscMode |
| MA PDU session information | MA PDU session information | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation |
| MA PDU session indicator | MA PDU session indicator | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation/mAPDUSessionIndicator |
| ATSSS capability | ATSSS capability | /pDUSessionChargingInformation /pduSessionInformation/mAPDUSessionInformation/aTSSSCapability |
| SUPI PLMN ID | SUPI PLMN ID | /pDUSessionChargingInformation /pduSessionInformation/hPlmnId |
| Serving Network Function ID | Serving Network Function ID | /pDUSessionChargingInformation /pduSessionInformation/ servingNetworkFunctionID |
| Serving CN PLMN ID | Serving CN PLMN ID | /pDUSessionChargingInformation/pduSessionInformation/servingCNPlmnId |
| RAT Type | RAT Type | /pDUSessionChargingInformation /pduSessionInformation/ratType |
| MA PDU Non 3GPP RAT Type | MA PDU Non 3GPP RAT Type | /pDUSessionChargingInformation /pduSessionInformation/mAPDUNon3GPPRATType |
| Data Network Name Identifier | Data Network Name Identifier | /pDUSessionChargingInformation /pduSessionInformation/dnnid |
| DNN Selection Mode | DNN Selection Mode | /pDUSessionChargingInformation /pduSessionInformation/dNNselectionMode |
| Authorized QoS information | Authorized Qos Information | /pDUSessionChargingInformation /pduSessionInformation/authorized qoSInformation |
| Subscribed QoS Information | Subscribed QoS Information | /pDUSessionChargingInformation /pduSessionInformation/subscribedQoSInformation |
| Authorized Session-AMBR | Authorized Session-AMBR | /pDUSessionChargingInformation /pduSessionInformation/authorizedSessionAMBR |
| Subscribed Session-AMBR | Subscribed Session-AMBR | /pDUSessionChargingInformation /pduSessionInformation/subscribedSessionAMBR |
| Charging Characteristics | Charging Characteristics | /pDUSessionChargingInformation /pduSessionInformation/ chargingCharacteristics |
| Charging CharacteristicsSelection Mode | Charging Characteristics Selection Mode | /pDUSessionChargingInformation /pduSessionInformation/chargingCharacteristicsSelectionMode |
| PDU session start Time | PDU session start Time | /pDUSessionChargingInformation /pduSessionInformation/startTime |
| PDU session stop Time | PDU session stop Time | /pDUSessionChargingInformation /pduSessionInformation/stopTime |
| Diagnostics | Diagnostics | /pDUSessionChargingInformation /pduSessionInformation/diagnostics |
| Enhanced Diagnostics | Enhanced Diagnostics | /pDUSessionChargingInformation /pduSessionInformation/enhancedDiagnostics |
| 3GPP PS Data Off Status | 3GPP PS Data Off Status | /pDUSessionChargingInformation /pduSessionInformation/3gppPSDataOffStatus |
| Session Stop Indicator | Session Stop Indicator | /pDUSessionChargingInformation /pduSessionInformation/sessionStopIndicator  |
| Redundant Transmission Type | Redundant Transmission Type | /pDUSessionChargingInformation /pduSessionInformation/redundantTransmissionType |
| PDU Session Pair ID | PDU Session Pair ID | /pDUSessionChargingInformation /pduSessionInformation/pDUSessionPairID |
| 5G LAN Type Service | 5G LAN Type Service | /pDUSessionChargingInformation /pduSessionInformation/5GLANTypeService |
| Internal Group Identifier | Internal Group Identifier | /pDUSessionChargingInformation /pduSessionInformation/5GLANTypeService/internalGroupIdentifier |
| SNPN Information | SNPN Information | /pDUSessionChargingInformation /pduSessionInformation/sNPNInformation |
| SNPN ID | SNPN ID | /pDUSessionChargingInformation /pduSessionInformation/sNPNInformation/sNPNID |
| Access Type | Access Type | /pDUSessionChargingInformation /pduSessionInformation/sNPNInformation/accessType |
| N3IWF FQDN | N3IWF FQDN | /pDUSessionChargingInformation /pduSessionInformation/sNPNInformation/Fqdn |
| 5G Multicast Service  | 5G Multicast Service  | /pDUSessionChargingInformation /pduSessionInformation/5GMulticastService |
| MBS Session Id List | MBS Session ID | /pDUSessionChargingInformation /pduSessionInformation/5GMulticastService/mBSSession ID |
| Satellite Access Indicator | Satellite Access Indicator | /pDUSessionChargingInformation /pduSessionInformation/ satelliteAccessIndicator |
| Satellite Backhaul Information | Satellite Backhaul Information | /pDUSessionChargingInformation /pduSessionInformation/ satelliteBackhaulInformation |
| Satellite Backhaul Category | Satellite Backhaul Category | /pDUSessionChargingInformation /pduSessionInformation/satelliteBackhaulInformation/satelliteBackhaulCategory |
| GEO Satellite ID | GEO Satellite ID | /pDUSessionChargingInformation /pduSessionInformation/satelliteBackhaulInformation/gEOSatelliteID |
| 5GS Bridge Information | 5GS Bridge Information | /pDUSessionChargingInformation /pduSessionInformation/5GSBridgeInformation |
| Bridge ID | Bridge ID | /pDUSessionChargingInformation /pduSessionInformation/5GSBridgeInformation/ bridgeId |
| NW-TT port numbers | NW-TT port numbers | /pDUSessionChargingInformation /pduSessionInformation/5GSBridgeInformation/ nWTTPortNumber |
| DS-TT port number | DS-TT port number | /pDUSessionChargingInformation /pduSessionInformation/5GSBridgeInformation/ dSTTPortNumber |
| Service-level-AA | Service level AA | /pDUSessionChargingInformation /pduSessionInformation/serviceLevelAA |
| Unit Count Inactivity Timer | - | /pDUSessionChargingInformation/unitCountInactivityTimer |
| RAN Secondary RAT Usage Report | RAN Secondary RAT Usage Report | /pDUSessionChargingInformation/rANSecondaryRATUsageReport |
| NG RAN Secondary RAT Type | NG RAN Secondary RAT Type | /pDUSessionChargingInformation/rANSecondaryRATUsageReport/rANSecondaryRATType |
| Qos Flows Usage Reports | Qos Flows Usage Reports | /pDUSessionChargingInformation/rANSecondaryRATUsageReport/qosFlowsUsageReports |
| Roaming QBC information | Roaming QBC information | /roamingQBCInformation |
| Multiple QFI container | Multiple QFI container | /roamingQBCInformation/multipleQFIcontainer |
| Triggers | Triggers | /roamingQBCInformation/multipleQFIcontainer/triggers |
| Trigger Timestamp | Trigger Timestamp | /roamingQBCInformation/multipleQFIcontainer/triggerTimestamp |
| Time | Time | /roamingQBCInformation/multipleQFIcontainer/time |
| Total Volume | Total Volume | /roamingQBCInformation/multipleQFIcontainer/totalVolume |
| Uplink Volume | Uplink Volume | /roamingQBCInformation/multipleQFIcontainer/uplinkVolume |
| Downlink Volume | Downlink Volume | /roamingQBCInformation/multipleQFIcontainer/downlinkVolume |
| Local Sequence Number | Local Sequence Number | /roamingQBCInformation/multipleQFIcontainer/localSequenceNumber |
| QFI Container information | QFI Container information | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation |
| QoS Flow Id | QoS Flow Id | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/qFI |
| Time of First Usage | Time of First Usage | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ timeofFirstUsage |
| Time of Last Usage | Time of Last Usage | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/timeofLastUsage |
| QoS Information | QoS Information | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/qoSInformation |
| QoS Characteristics | QoS Characteristics | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/qoSCharacteristics |
| User Location Information | User Location Information | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ userLocationInformation |
| UE Time Zone | UE Time Zone | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/uetimeZone |
| Presence Reporting Area Information | Presence Reporting Area Information | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/presenceReportingAreaInformation |
| RAT Type | RAT Type | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/rATType |
| Report Time | Report Time | /roamingQBCInformation/multipleQFIcontainer/ qFIContainerInformation/reportTime |
| Serving Network Function ID  | Serving Network Function ID  | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/ servingNetworkFunctionID |
| 3GPP PS Data Off Status | 3GPP PS Data Off Status | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/3gppPSDataOffStatus |
| EPS bearer Charging Id | EPS bearer Charging Id | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/3gppChargingId |
| Diagnostics | Diagnostics | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/diagnostics |
| Enhanced Diagnostics | Enhanced Diagnostics | /roamingQBCInformation/multipleQFIcontainer/qFIContainerInformation/enhancedDiagnostics |
| UPF ID | UPF ID | /roamingQBCInformation/uPFID |
| Roaming Charging Profile | Roaming Charging Profile | /roamingQBCInformation/roamingChargingProfile |
| Trigger  | Trigger  | /roamingQBCInformationroamingChargingProfile/trigger |
| Partial record method | Partial record method | /roamingQBCInformation/roamingChargingProfile/partialRecordMethod |
| Inter-CHF information | InterCHF information | /interCHFInformation |
| Remote CHF resource | RemoteCHFResource | /interCHFInformation/remoteCHFResource |
| Original NF Consumer Id | OriginalNFConsumerId | /interCHFInformation/originalNFConsumerId |
|  |  | **ChargingDataResponse** |
| Multiple Unit information | - | /multipleUnitInformation |
| UPF ID | - | /multipleUnitInformation/uPFID |
| PDU Session Charging Information | - | /pDUSessionChargingInformation  |
| Presence Reporting AreaInformation | - | /pDUSessionChargingInformation/ presenceReportingAreaInformation |
| Unit Count Inactivity Timer | - | /pDUSessionChargingInformation/unitCountInactivityTimer |
| Roaming QBC information | - | /roamingQBCInformation |
| Roaming Charging Profile | - | /roamingQBCInformation/roamingChargingProfile |
| Inter-CHF information | InterCHF information | /interCHFInformation |
| Remote CHF resource | RemoteCHFResource | /interCHFInformation/remoteCHFResource |

|  |
| --- |
| **Next change** |

## 7.4 Bindings for 5G connection and mobility

Table 7.4-1: Bindings of 5G 5G connection and mobility CDR field, Information Element and Resource Attribute

| Information Element | CDR Field | Resource Attribute |
| --- | --- | --- |
|  |  | **ChargingDataRequest** |
| AMF Identifier | AMF Identifier | /aMFId |
| Registration Charging Information |  Registration Charging Information | /registrationChargingInformation |
| Registration message type | Registration message type | /registrationChargingInformation/registrationMessagetype |
| User Information | User Information | /registrationChargingInformation/userInformation |
| User Identifier | User Identifier | /registrationChargingInformation/userInformation/servedGPSI |
| User Equipment Info  | User Equipment Info  | /registrationChargingInformation/userInformation/servedPEI |
| unauthenticatedFlag | unauthenticatedFlag | /registrationChargingInformation/userInformation/unauthenticatedFlag |
| Roamer In Out | Roamer In Out | /registrationChargingInformation/userInformation/roamerInOut |
| User Location Information | User Location Information | /registrationChargingInformation/userLocationinfo |
| PSCell Information | PSCell Information | /registrationChargingInformation/pSCellInformation |
| UE Time Zone | UE Time Zone | /registrationChargingInformation/uetimeZone |
| RAT Type | RAT Type | /registrationChargingInformation/rATType |
| 5GMM Capability | 5GMM Capability | /registrationChargingInformation/5gMMCapability |
| MICO Mode Indication | MICO Mode Indication | /registrationChargingInformation/mICOModeIndication |
| SMS Supported Indication | SMS Supported Indication | /registrationChargingInformation/smsIndication |
| TAI List | TAI List | /registrationChargingInformation/taiList |
| Service Area Restrictions | Service Area Restrictions | /registrationChargingInformation/serviceAreaRestriction |
| Requested NSSAI | Requested NSSAI | /registrationChargingInformation/requestedNSSAI |
| Allowed NSSAI | Allowed NSSAI | /registrationChargingInformation/allowedNssai |
| Rejected NSSAI | Rejected NSSAI | /registrationChargingInformation/rejectedNSSAI |
| NSSAI mapping list | NSSAI mapping list | /registrationChargingInformation/nSSAIMapList |
| AMF UE NGAP ID | AMF UE NGAP ID | /registrationChargingInformation/amfUeNgapId |
| RAN UE NGAP ID | RAN UE NGAP ID | /registrationChargingInformation/ranUeNgapId |
| RAN Node Id | RAN Node Id | /registrationChargingInformation/ranNodeId |
| SNPN ID | SNPN ID | /registrationChargingInformation/sNPNID |
| CAG ID List | CAG ID List | /registrationChargingInformation/cAGIDList |
| Satellite Access Indicator | Satellite Access Indicator | /registrationChargingInformation/satelliteAccessIndicator |
| Service-level-AA | Service level AA | /registrationChargingInformation/serviceLevelAA |
| N2 Connection Charging Information |  N2 Connection Charging Information | /n2ConnectionChargingInformation |
| N2 Connection message type | N2 Connection message type | /n2ConnectionChargingInformation/n2ConnectionMessageType |
| User Information | User Information | /registrationChargingInformation/userInformation |
| User Identifier | User Identifier | /n2ConnectionChargingInformation/userInformation/servedGPSI |
| User Equipment Info  | User Equipment Info  | /n2ConnectionChargingInformation/userInformation/servedPEI |
| unauthenticatedFlag | unauthenticatedFlag | /n2ConnectionChargingInformation/userInformation/unauthenticatedFlag |
| Roamer In Out | Roamer In Out | /n2ConnectionChargingInformation/userInformation/roamerInOut |
| User Location Information | User Location Information | /n2ConnectionChargingInformation/userLocationinfo |
| PSCell Information | PSCell Information | /n2ConnectionChargingInformation/pSCellInformation |
| UE Time Zone | UE Time Zone | /n2ConnectionChargingInformation/uetimeZone |
| RAT Type | RAT Type | /n2ConnectionChargingInformation/rATType |
| AMF UE NGAP ID | AMF UE NGAP ID | /n2ConnectionChargingInformation/amfUeNgapId |
| RAN UE NGAP ID | RAN UE NGAP ID | /n2ConnectionChargingInformation/ranUeNgapId |
| RAN Node Id | RAN Node Id | /n2ConnectionChargingInformation/ranNodeId |
| Mobility Restrictions | Mobility Restrictions | /n2ConnectionChargingInformation/restrictedRatList/n2ConnectionChargingInformation/forbiddenAreaList/n2ConnectionChargingInformation/serviceAreaRestriction/n2ConnectionChargingInformation/restrictedCnList |
| Allowed NSSAI | Allowed NSSAI | /n2ConnectionChargingInformation/allowedNssai |
| NSSAI mapping list | NSSAI mapping list | /n2ConnectionChargingInformation/nSSAIMapList |
| RRC Establishment Cause | RRC Establishment Cause | /n2ConnectionChargingInformation/rrcEstCause |
| Satellite Access Indicator | Satellite Access Indicator | /n2ConnectionChargingInformation/satelliteAccessIndicator |
| Location Reporting Charging Information |  Location Reporting Charging Information | /locationReportingChargingInformation |
| N2 Connection message type | N2 Connection message type | /locationReportingChargingInformation/n2ConnectionMessageType |
| User Information | User Information | /locationReportingChargingInformation/userInformation |
| User Identifier | User Identifier | /locationReportingChargingInformation/userInformation/servedGPSI |
| User Equipment Info  | User Equipment Info  | /locationReportingChargingInformation/userInformation/servedPEI |
| unauthenticatedFlag | unauthenticatedFlag | /locationReportingChargingInformation/userInformation/unauthenticatedFlag |
| Roamer In Out | Roamer In Out | /locationReportingChargingInformation/userInformation/roamerInOut |
| User Location Information | User Location Information | /locationReportingChargingInformation/userLocationinfo |
| PSCell Information | PSCell Information | locationReportingChargingInformation/pSCellInformation |
| UE Time Zone | UE Time Zone | /locationReportingChargingInformation/uetimeZone |
| Presence Reporting Area Information | Presence Reporting Area Information | /locationReportingChargingInformation/presenceReportingAreaInformation |
| RAT Type | RAT Type | /locationReportingChargingInformation/rATType |
| Satellite Access Indicator | Satellite Access Indicator | /locationReportingChargingInformation/satelliteAccessIndicator |
| Inter-CHF information | InterCHF information | /interCHFInformation |
| Remote CHF resource | RemoteCHFResource | /interCHFInformation/remoteCHFResource |
| Original NF Consumer Id | OriginalNFConsumerId | /interCHFInformation/originalNFConsumerId |
|  |  | **ChargingDataResponse** |
| Supported Features | - | **/**supportedFeatures- |
| Location Reporting Charging Information | - | /locationReportingChargingInformation |
| Location reporting message type | - | /locationReportingChargingInformation/locationReportingMessageType |
| Presence Reporting AreaInformation | - | /locationReportingChargingInformation /presenceReportingAreaInformation |
| Inter-CHF information | InterCHF information | /interCHFInformation |
| Remote CHF resource | RemoteCHFResource | /interCHFInformation/remoteCHFResource |

|  |
| --- |
| **Next change** |

\*\*\* 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).

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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'

 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'

 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'

 serviceLevelAA:

 type: string

 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

 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

 serviceLevelAA:

 type: string

 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 \*\*\*

|  |
| --- |
| **End of change** |