**3GPP TSG-CT WG3 Meeting #128C3-232204**

**Bratislava, Slovakia, 22nd - 26th May, 2023 (revision of C3-23xxxx)**

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **29.514** | **CR** | 0518 | **rev** | **-** | **Current version:** | **18.1.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- |
|  |
| ***Title:***  | Support for URSP awareness |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | eUEPO |  | ***Date:*** | 2023-05-26 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** |  A new event reporting from the PCF is defined for the UE reporting Connection Capabilities from associated URSP rule.( S2-2306253) |
|  |  |
| ***Summary of change:*** | Define the procedure to subscribe and report the event |
|  |  |
| ***Consequences if not approved:*** | The PCF for a UE can’t make policy control decisions based on awareness of URSP rule enforcement for an application. |
|  |  |
| ***Clauses affected:*** | 4.2.5.1, 4.2.5.23(new), 4.2.6.1, 4.2.6.13(new), 5.6.1, 5.6.2.9, 5.6.2.50(new), 5.6.3.7, 5.8, A.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 23.503 ... CR#0947 ... |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | This CR introduces a backward compatible feature to the OpenAPI file. |
|  |  |
| ***This CR's revision history:*** |  |

**Additional discussion(if needed):**

**Proposed changes:**

\*\*\* 1st Change \*\*\*

#### 4.2.5.1 General

The Npcf\_PolicyAuthorization\_Notify service operation enables notification to NF service consumers that the previously subscribed event for the existing application session context occurred or that the application session context is no longer valid.

The following procedures using the Npcf\_PolicyAuthorization\_Notify service operation are supported:

- Notification about application session context event.

- Notification about application session context termination.

- Notification about Service Data Flow QoS notification control.

- Notification about service data flow deactivation.

- Reporting usage for sponsored data connectivity.

- Notification of resources allocation outcome.

- Reporting access network information.

- Notification of signalling path status.

- Notification about out of credit.

- Notification about TSC user plane node management information and/or port management information, Individual Application Session Context exists.

- Notification about Service Data Flow QoS Monitoring control.

- Report of EPS Fallback.

- Notification about TSC user plane node Information, no Individual Application Session Context exists.

- Notification about reallocation of credit.

- Notification of MPS for DTS outcome.

- Notification about application detection information.

- Notification about satellite backhaul category changes.

- Notification about UP path change enforcement failure.

- Notification about PDU session established/terminated events.

- Notification about extra UE addresses.

- Notification about UE reporting Connection Capabilities.

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

#### 4.2.5.24 Notification about UE reporting Connection Capabilities

When the "URSPEnforcement" feature is supported, when the PCF gets the UE reporting Connection Capabilities from an associated URSP rule as defined in 3GPP TS 29.512 [8], the PCF shall inform the NF service consumer accordingly if the NF service consumer has previously subscribed as described in clauses 4.2.6.13.

The PCF shall notify the NF service consumer by including the "EventsNotification" data type in the body of the HTTP POST request as described in clause 4.2.5.2.

The PCF shall include, for the UE reporting Connection Capabilities:

- within the "evNotifs" attribute an event entry of the "AfEventNotification" data type with the matched event "URSP\_ENF\_INFO" in the "event" attribute; and

- within the "urspEnfRep" attitube, shall include:

a) the received connection capabilities within the "connCaps" attribute;

b) the PDU session ID within the "pduSessionId" attribute; and

- within the "accessType" attribute and "ratType" attribute shall include the access type, if available.

When the NF service consumer receives the HTTP POST request, it shall acknowledge the request by sending a "204 No Content" response to the PCF.

Signalling flows for the notification of UE reporting Connection Capabilities from an associated URSP rule are presented in 3GPP TS 29.513 [7].\*\*\* Next Change \*\*\*

#### 4.2.6.1 General

The Npcf\_PolicyAuthorization\_Subscribe service operation enables NF service consumers handling of subscription to events for the existing application session context. Subscription to events shall be created:

- within the application session context establishment procedure by invoking the Npcf\_PolicyAuthorization\_Create service operation, as described in clause 4.2.2; or

- within the application session context modification procedure by invoking the Npcf\_PolicyAuthorization\_Update service operation, as described in clause 4.2.3; or

- by invoking the Npcf\_PolicyAuthorization\_Subscribe service operation for the existing application session context, as described in clause 4.2.6.2.

The following procedures using the Npcf\_PolicyAuthorization\_Subscribe service operation is supported:

- Handling of subscription to events for the existing application session context.

- Initial subscription to events without provisioning of service information.

- Subscription to usage monitoring of sponsored data connectivity.

- Request of access network information.

- Subscription to notification of signalling path status.

- Subscription to Service Data Flow QoS Monitoring Information.

- Subscription to application detection notifications.

- Subscription to satellite backhaul category changes.

- Subscription to the report of extra UE addresses.

- Subscription to UE reporting Connection Capabilities notification.

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

#### 4.2.6.13 Subscription to UE reporting Connection Capabilities notification

This procedure is used by a NF service consumer to request the PCF the subscription to UE reporting Connection Capabilities notification, if the "URSPEnforcement" feature is supported.

The NF service consumer may request the subscription to notification of UE reporting Connection Capabilities event without providing service information:

- at initial subscription to events, using the HTTP POST request message as described in clause 4.2.6.3; and

- at modification of the subscription to events, using the HTTP PUT request message as described in clause 4.2.6.2.

The NF service consumer shall include:

- To subscribe to notifications about UE reporting Connection Capabilities the "evSubsc" attribute within the POST request as described in clause 4.2.6.3, with the "events" array, including an event with the "event" attribute value set to "URSP\_ENF\_INFO"; and

- To remove the subscription to notifications about UE reporting Connection Capabilities, an "events" array within the PUT request as described in clause 4.2.6.2, without including any event with the "event" attribute value "URSP\_ENF\_INFO".

The PCF shall reply to the NF service consumer with the HTTP POST response as described in clause 4.2.6.3 and with the HTTP PUT response as described in clause 4.2.6.2. If the UE report Connection Capabilites corresponding to the subscription is available, the PCF shall include the received UE report Connection Capabilites in the "evsNotif" attribute as defined in clause 4.2.5.24.

The PCF shall set the appropriate subscription to UE reporting Connection Capabilities notification as described in 3GPP TS 29.512 [8].

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

### 5.6.1 General

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

Table 5.6.1-1 specifies the data types defined for the Npcf\_PolicyAuthorization service based interface protocol.

Table 5.6.1-1: Npcf\_PolicyAuthorization specific Data Types

| Data type | Section defined | Description | Applicability |
| --- | --- | --- | --- |
| AcceptableServiceInfo | 5.6.2.30 | Acceptable maximum requested bandwidth. |  |
| AccessNetChargingIdentifier | 5.6.2.32 | Contains the access network charging identifier. | IMS\_SBI |
| AfAppId | 5.6.3.2 | Contains an AF application identifier. |  |
| AfEvent | 5.6.3.7 | Represents an event to notify to the NF service consumer. |  |
| AfEventNotification | 5.6.2.11 | Represents the notification of an event. |  |
| AfEventSubscription | 5.6.2.10 | Represents the subscription to events. |  |
| AfNotifMethod | 5.6.3.8 | Represents the notification methods that can be subscribed for an event. |  |
| AfRequestedData | 5.6.3.18 | Represents the information the NF service consumer requested to be exposed. | IMS\_SBI |
| AfRoutingRequirement | 5.6.2.13 | Describes the routing requirements for the application traffic flows. | InfluenceOnTrafficRouting |
| AfRoutingRequirementRm | 5.6.2.24 | This data type is defined in the same way as the "AfRoutingRequirement" data type, but with the OpenAPI "nullable: true" property. | InfluenceOnTrafficRouting |
| AfSfcRequirement | 5.6.2.49 | Describes the requirements to steer the traffic to a pre-configured chain of service functions on N6-LAN. | SFC |
| AlternativeServiceRequirementsData | 5.6.2.47 | Contains alternative QoS related parameter sets. | AltSerReqsWithIndQoS |
| AnGwAddress | 5.6.2.20 | Carries the control plane address of the access network gateway. |  |
| AppDetectionReport | 5.6.2.44 | Indicates the start or stop of the detected application traffic and the detected AF application identifier. | ApplicationDetectionEvents |
| AppDetectionNotifType | 5.6.3.23 | Represents the types of reports bound to the notification of application detection information. | ApplicationDetectionEvents |
| AppSessionContext | 5.6.2.2 | Represents an Individual Application Session Context resource. |  |
| AppSessionContextReqData | 5.6.2.3 | Represents the Individual Application Session Context resource data received in an HTTP POST request message. |  |
| AppSessionContextRespData | 5.6.2.4 | Represents the Individual Application Session Context resource data produced by the server and returned in an HTTP response message. |  |
| AppSessionContextUpdateData | 5.6.2.5 | Describes the modifications to the "ascReqData" property of an Individual Application Session Context resource. |  |
| AppSessionContextUpdateDataPatch | 5.6.2.43 | Describes the modifications to an Individual Application Session Context resource | PatchCorrection |
| AspId | 5.6.3.2 | Contains an identity of an application service provider. | SponsoredConnectivity |
| CodecData | 5.6.3.2 | Contains a codec related information. |  |
| ContentVersion | 5.6.3.2 | Represents the version of a media component. | MediaComponentVersioning |
| EthFlowDescription | 5.6.2.17 | Defines a packet filter for an Ethernet flow. |  |
| EventsNotification | 5.6.2.9 | Describes the notification about the events occurred within an Individual Application Session Context resource. |  |
| EventsSubscPutData | 5.6.2.42 | Identifies the events the application subscribes to within an Events Subscription sub-resource data. It may also include the attributes of the notification about the events already met at the time of subscription. It is represented as a non-exclusive list of two data types: EventsSubscReqData and EventsNotification. |  |
| EventsSubscReqData | 5.6.2.6 | Identifies the events the application subscribes to within an Individual Application Session Context resource. |  |
| EventsSubscReqDataRm | 5.6.2. 25 | This data type is defined in the same way as the "EventsSubscReqData" data type, but with the OpenAPI "nullable: true" property. |  |
| ExtendedProblemDetails | 5.6.2.29 | Data type that extends ProblemDetails. |  |
| FlowDescription | 5.6.3.2 | Defines a packet filter for an IP flow. |  |
| Flows | 5.6.2.21 | Identifies the flows related to a media component. |  |
| FlowStatus | 5.6.3.12 | Describes whether the IP flow(s) are enabled or disabled. |  |
| FlowUsage | 5.6.3.14 | Describes the flow usage of the flows described by a media subcomponent. |  |
| MediaComponent | 5.6.2.7 | Contains service information for a media component of an AF session. |  |
| MediaComponentRm | 5.6.2.26 | This data type is defined in the same way as the "MediaComponent" data type, but with the OpenAPI "nullable: true" property. |  |
| MediaComponentResourcesStatus | 5.6.3.13 | Indicates whether the media component is active or inactive. |  |
| MediaSubComponent | 5.6.2.8 | Contains the requested bitrate and filters for the set of IP flows identified by their common flow identifier. |  |
| MediaSubComponentRm | 5.6.2.27 | This data type is defined in the same way as the "MediaSubComponent" data type, but with the OpenAPI "nullable: true" property. |  |
| MediaType | 5.6.3.3 | Indicates the media type of a media component. |  |
| MpsAction | 5.6.3.22 | Indicates whethe it is an invocation, a revocation or an invocation with authorization of the MPS for DTS service. | MPSforDTS |
| MultiModalId | 5.6.3.2 | Contains a multi-modal service identifier. | XRM\_5G |
| OutOfCreditInformation | 5.6.2.33 | Indicates the service data flows without available credit and the corresponding termination action. | IMS\_SBI |
| PcfAddressingInfo | 5.6.2.46 | Contains PCF address information. |  |
| PcscfRestorationRequestData | 5.6.2.36 | Indicates P-CSCF restoration. | PCSCF-Restoration-Enhancement |
| PduSessionEventNotification | 5.6.2.45 | Indicates PDU session information for the established/terminated PDU session. |  |
| PduSessionStatus | 5.6.3.24 | Indicates whether the PDU session is established or terminated. |  |
| PduSessionTsnBridge | 5.6.2.40 | Contains the TSC user plane node Information and DS-TT port and/or NW-TT ports management information of a new detected TSC user plane node in the context of a new PDU session. | TimeSensitiveNetworking |
| PeriodicityRange | 5.6.2.48 | Contains the acceptable lower bound and upper bound of the periodicity of the start two bursts in reference to the external GM. | EnTSCAC |
| PreemptionControlInformation | 5.6.3.19 | Pre-emption control information. | MCPTT-Preemption |
| PreemptionControlInformationRm | 5.6.3.21 | This data type is defined in the same way as the "PreemptionControlInformation" data type, but with the OpenAPI "nullable: true" property. | MCPTT-Preemption |
| PrioritySharingIndicator | 5.6.3.20 | Priority sharing indicator. | PrioritySharing |
| QosMonitoringInformation | 5.6.2.34 | QoS monitoring information (e.g. UL, DL or round trip packet delay). | QoSMonitoring |
| QosMonitoringInformationRm | 5.6.2.41 | This data type is defined in the same way as the "QosMonitoringInformation" data type, but with the OpenAPI "nullable: true" property. | QoSMonitoring |
| QosMonitoringReport | 5.6.2.37 | Contains QoS monitoring reporting information. | QoSMonitoring |
| QosNotificationControlInfo | 5.6.2.15 | Indicates whether the QoS targets related to certain media component are not guaranteed or are guaranteed again. |  |
| QosNotifType | 5.6.3.9 | Indicates type of notification for QoS Notification Control. |  |
| RequiredAccessInfo | 5.6.3.15 | Indicates the access network information required for an AF session. | NetLoc |
| ReservPriority | 5.6.3.4 | Indicates the reservation priority. |  |
| ResourcesAllocationInfo | 5.6.2.14 | Indicates the status of the PCC rule(s) related to certain media component. |  |
| ServAuthInfo | 5.6.3.5 | Indicates the result of the Policy Authorization service request from the NF service consumer. |  |
| ServiceInfoStatus | 5.6.3.16 | Preliminary or final service information status. | IMS\_SBI |
| ServiceUrn | 5.6.3.2 | Service URN. | IMS\_SBI |
| SipForkingIndication | 5.6.3.17 | Describes if several SIP dialogues are related to an "Individual Application Session Context" resource. | IMS\_SBI |
| SpatialValidity | 5.6.2.16 | Describes the spatial validity of an NF service consumer request for influencing traffic routing. | InfluenceOnTrafficRouting |
| SpatialValidityRm | 5.6.2.28 | This data type is defined in the same way as the "SpatialValidity" data type, but with the OpenAPI "nullable: true" property. | InfluenceOnTrafficRouting |
| SponId | 5.6.3.2 | Contains an Identity of a sponsor. | SponsoredConnectivity |
| SponsoringStatus | 5.6.3.6 | Represents whether sponsored data connectivity is enabled or disabled/not enabled. | SponsoredConnectivity |
| TemporalValidity | 5.6.2.22 | Indicates the time interval during which the NF service consumer request is to be applied. | InfluenceOnTrafficRouting |
| TerminationCause | 5.6.3.10 | Indicates the cause for requesting the deletion of the Individual Application Session Context resource. |  |
| TerminationInfo | 5.6.2.12 | Includes information related to the termination of the Individual Application Session Context resource. |  |
| TosTrafficClass | 5.6.3.2 | Contains the IPv4 Type-of-Service or the IPv6 Traffic-Class field and the ToS/Traffic Class mask field. |  |
| TosTrafficClassRm | 5.6.3.2 | This data type is defined in the same way as the "TosTrafficClass" data type, but with the OpenAPI "nullable: true" property. |  |
| TscPriorityLevel | 5.6.3.2 | Priority of TSC Flows | TimeSensitiveNetworking |
| TscPriorityLevelRm | 5.6.3.2 | This data type is defined in the same way as the "TscPriorityLevel" data type, but with the OpenAPI "nullable: true" property | TimeSensitiveNetworking |
| TscaiInputContainer | 5.6.2.39 | TSCAI Input information container. | TimeSensitiveNetworking |
| TsnQosContainer | 5.6.2.35 | TSC traffic QoS parameters. | TimeSensitiveNetworking |
| TsnQosContainerRm | 5.6.2.38 | This data type is defined in the same way as the "TsnQosContainer" data type, but with the OpenAPI "nullable: true" property. | TimeSensitiveNetworking |
| UeIdentityInfo | 5.6.2.31 | Represents 5GS-Level UE Identities. | IMS\_SBI |
| UrspEnforcementReport | 5.6.2.50 | Indicates the UE reporting Connection Capabilities from an associated URSP rule. | URSPEnforcement |

Table 5.6.1-2 specifies data types re-used by the Npcf\_PolicyAuthorization service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Npcf\_PolicyAuthorization service based interface.

Table 5.6.1-2: Npcf\_PolicyAuthorization re-used Data Types

| Data type | Reference | Comments | Applicability |
| --- | --- | --- | --- |
| AccNetChargingAddress | 3GPP TS 29.512 [8] | Indicates the IP address of the network entity within the access network performing charging. | IMS\_SBI |
| AccessType | 3GPP TS 29.571 [12] | The identification of the type of access network. |  |
| AccumulatedUsage | 3GPP TS 29.122 [15] | Accumulated Usage. | SponsoredConnectivity |
| AdditionalAccessInfo | 3GPP TS 29.512 [8] | Indicates the combination of additional Access Type and RAT Type for MA PDU session | ATSSS |
| AfSigProtocol | 3GPP TS 29.512 [8] | Represents the protocol used for signalling between the UE and the NF service consumer. | ProvAFsignalFlow |
| ApplicationChargingId | 3GPP TS 29.571 [12] | Application provided charging identifier allowing correlation of charging information. | IMS\_SBI |
| BdtReferenceId | 3GPP TS 29.122 [15] | Identifies transfer policies. |  |
| BitRate | 3GPP TS 29.571 [12] | Specifies bitrate in kbits per second. |  |
| BitRateRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "BitRate" data type, but with the OpenAPI "nullable: true" property. |  |
| BridgeManagementContainer | 3GPP TS 29.512 [8] | Contains TSC user plane node management information. | TimeSensitiveNetworking |
| Bytes | 3GPP TS 29.571 [12] | String with format "byte". |  |
| ChargingId | 3GPP TS 29.571 [12] | Charging identifier allowing correlation of charging information. | IMS\_SBI |
| DateTime | 3GPP TS 29.571 [12] | String with format "date-time" as defined in OpenAPI Specification [11]. | InfluenceOnTrafficRouting, TimeSensitiveNetworking |
| Dnn | 3GPP TS 29.571 [12] | Data Network Name. |  |
| DurationSec | 3GPP TS 29.571 [12] | Identifies a period of time in units of seconds. | TimeSensitiveNetworking, EnhancedSubscriptionToNotification,SimultConnectivity  |
| DurationSecRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "DurationSec" data type, but with the OpenAPI "nullable: true" property. | SimultConnectivity  |
| EasIpReplacementInfo | 3GPP TS 29.571 [12] | Contains EAS IP replacement information for a Source and a Target EAS. | EASIPreplacement |
| FinalUnitAction | 3GPP TS 32.291 [22] | Indicates the action to be taken when the user's account cannot cover the service cost. |  |
| Float | 3GPP TS 29.571 [12] | Number with format "float" as defined in OpenAPI Specification [11]. | FLUS |
| FloatRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "Float" data type, but with the OpenAPI "nullable: true" property. | FLUS |
| FlowDirection | 3GPP TS 29.512 [8] | Flow Direction. |  |
| Fqdn | 3GPP TS 29.571 [12] | Contains a FQDN |  |
| ExtMaxDataBurstVol | 3GPP TS 29.571 [12] | Maximum Burst Size. | TimeSensitiveNetworking |
| ExtMaxDataBurstVolRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "ExtMaxDataBurstVol" data type, but with the OpenAPI "nullable: true" property | TimeSensitiveNetworking |
| Gpsi | 3GPP TS 29.571 [12] | Identifies the GPSI. |  |
| Ipv4Addr | 3GPP TS 29.571 [12] | Identifies an IPv4 address. |  |
| Ipvd4AddrMask | 3GPP TS 29.571 [12] | IPv4 address mask | ExtraUEaddrReport |
| Ipv6Addr | 3GPP TS 29.571 [12] | Identifies an IPv6 address. |  |
| IpEndPoint | 3GPP TS 29.510 [27] | Contains a NF IPv4 and/or IPv6 end points. |  |
| MacAddr48 | 3GPP TS 29.571 [12] | MAC Address. |  |
| Metadata | 3GPP TS 29.571 [12] | This datatype contains opaque information for the service functions in the N6-LAN that is provided by AF and transparently sent to UPF. | SFC |
| NetLocAccessSupport | 3GPP TS 29.512 [8] | Indicates the access network does not support the report of the requested access network information. | NetLoc |
| NullValue | 3GPP TS 29.571 [12] | JSON's null value, used as an explicit value of an enumeration. | MCPTT-Preemption |
| PacketDelBudget | 3GPP TS 29.571 [12] | Packet Delay Budget. | TimeSensitiveNetworking |
| PacketDelBudgetRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "PacketDelBudget" data type, but with the OpenAPI "nullable: true" property | TimeSensitiveNetworking |
| PacketErrRate | 3GPP TS 29.571 [12] | String representing Packet Error Rate (see clauses 5.7.3.5 and 5.7.4 of 3GPP TS 23.501 [8]), expressed as a "*scalar* x 10-k" where the scalar and the *exponent k are each encoded as one decimal digit*.Pattern: '^([0-9]E-[0-9])$'Examples:Packer Error Rate 4x10-6 shall be encoded as "4E-6".Packer Error Rate 10-2 shall be encoded as "1E-2". | ExtQoS |
| PacketErrRateRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "PacketErrRate" data type, but with the OpenAPI "nullable: true" property. | ExtQoS |
| PacketLossRateRm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "PacketLossRate" data type, but with the OpenAPI "nullable: true" property. | CHEM |
| PduSessionId | 3GPP TS 29.571 [12] | The identification of the PDU session. | URSPEnforcement |
| Pei | 3GPP TS 29.571 [12] | Identifies the PEI. | IMS\_SBI |
| PlmnIdNid | 3GPP TS 29.571 [12] | Identifies the network: the PLMN Identifier (the mobile country code and the mobile network code) or the SNPN Identifier (the PLMN Identifier and the NID). |  |
| PreemptionCapability | 3GPP TS 29.571 [12] | Pre-emption capability. | MCPTT-Preemption |
| PreemptionVulnerability | 3GPP TS 29.571 [12] | Pre-emption vulnerability. | MCPTT-Preemption |
| PreemptionCapabilityRm | 3GPP TS 29.571 [12] | It is defined in the same way as the "PreemptionCapability" data type, but with the OpenAPI "nullable: true" property. | MCPTT-Preemption |
| PreemptionVulnerabilityRm | 3GPP TS 29.571 [12] | It is defined in the same way as the "PreemptionVulnerability" data type, but with the OpenAPI "nullable: true" property. | MCPTT-Preemption |
| PresenceInfo | 3GPP TS 29.571 [12] | Represents an area of interest, e.g. a Presence Reporting Area. | InfluenceOnTrafficRouting |
| PortManagementContainer | 3GPP TS 29.512 [8] | Contains port management information for a related port. | TimeSensitiveNetworking |
| ProblemDetails | 3GPP TS 29.571 [12] | Contains a detailed information about an error. |  |
| RanNasRelCause | 3GPP TS 29.512 [8] | Indicates RAN and/or NAS release cause code information. | RAN-NAS-Cause |
| RedirectResponse | 3GPP TS 29.571 [12] | Contains redirection related information. | ES3XX |
| RequestedQosMonitoringParameter | 3GPP TS 29.512 [8] | Indicate the QoS information to be monitored, e.g. UL packet delay, DL packet delay or round trip packet delay between the UE and the UPF is to be monitored when the QoS Monitoring for packet delay is enabled for the service data flow. | QoSMonitoring |
| RatType | 3GPP TS 29.571 [12] | RAT Type. |  |
| RouteToLocation | 3GPP TS 29.571 [12] | Identifies routes to locations of applications. | InfluenceOnTrafficRouting |
| SatelliteBackhaulCategory | 3GPP TS 29.571 [12] | Indicates the satellite or non-satellite backhaul category | SatelliteBackhaul |
| Snssai | 3GPP TS 29.571 [12] | Identifies the S-NSSAI. |  |
| Supi | 3GPP TS 29.571 [12] | Identifies the SUPI. |  |
| SupportedFeatures | 3GPP TS 29.571 [12] | Used to negotiate the applicability of the optional features defined in table 5.8-1. |  |
| TimeWindow | 3GPP TS 29.122 [15] | Time window identified by a start time and a stop time. | EnTSCAC |
| TrafficCorrelationInfo | 3GPP TS 29.522 [55] | Contains the information for traffic correlation. | CommonEASDNAI |
| TimeZone | 3GPP TS 29.571 [12] | Time Zone. | NetLoc |
| TsnBridgeInfo | 3GPP TS 29.512 [8] | TSC user plane node information. | TimeSensitiveNetworking |
| Uint32 | 3GPP TS 29.571 [12] | Unsigned 32-bit integers, i.e. only value 0 and 32-bit integers above 0 are permissible. | ResourceSharing |
| Uint32Rm | 3GPP TS 29.571 [12] | This data type is defined in the same way as the "Uint32" data type, but with the OpenAPI "nullable: true" property. | ResourceSharing |
| Uinteger | 3GPP TS 29.571 [12] | Unsigned Integer, i.e. only value 0 and integers above 0 are permissible.Minimum = 0. | TimeSensitiveNetworking |
| UpPathChgEvent | 3GPP TS 29.512 [8] | Contains the subscription information to be delivered to SMF for the UP path management events. | InfluenceOnTrafficRouting |
| Uri | 3GPP TS 29.571 [12] | String providing an URI. |  |
| UsageThreshold | 3GPP TS 29.122 [15] | Usage Thresholds. | SponsoredConnectivity |
| UsageThresholdRm | 3GPP TS 29.122 [15] | This data type is defined in the same way as the "UsageThreshold" data type, but with the OpenAPI "nullable: true" property. | SponsoredConnectivity |
| UserLocation | 3GPP TS 29.571 [12] | User Location(s). | NetLoc |

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

#### 5.6.2.9 Type EventsNotification

Table 5.6.2.9-1: Definition of type EventsNotification

| Attribute name | Data type | P | Cardinality | Description | Applicability |
| --- | --- | --- | --- | --- | --- |
| adReports | array(AppDetectionReport) | C | 0..1 | Includes the detected application report. It shall be present when the notified event is "APP\_DETECTION". | ApplicationDetectionEvents |
| accessType | AccessType | C | 0..1 | Includes the access type. It shall be present when the notified event is "ACCESS\_TYPE\_CHANGE". |  |
| addAccessInfo | AdditionalAccessInfo | O | 0..1 | Indicates the additional combination of Access Type and RAT Type available for MA PDU session. It may be present when the notified event is "ACCESS\_TYPE\_CHANGE" and the PDU session is a Multi-Access PDU session. | ATSSS |
| relAccessInfo | AdditionalAccessInfo | O | 0..1 | Indicates the released combination of Access Type and RAT Type previously available for MA PDU session. It may be present when the notified event is "ACCESS\_TYPE\_CHANGE" and the PDU session is a Multi-Access PDU session. | ATSSS |
| anChargAddr | AccNetChargingAddress | O | 0..1 | Includes the access network charging address. It shall be present if available when the notified event is "CHARGING\_CORRELATION". | IMS\_SBI |
| anChargIds | array(AccessNetChargingIdentifier) | C | 1..N | Includes the access network charging identifier(s). It shall be present when the notified event is "CHARGING\_CORRELATION". | IMS\_SBI |
| anGwAddr | AnGwAddress | O | 0..1 | Access network Gateway Address. It carries the IP address of the ePDG used as IPSec tunnel endpoint with the UE for EPC/ePDG and 5GS interworking. It shall be present, if applicable, when the notified event is "ACCESS\_TYPE\_CHANGE". |  |
| evSubsUri | Uri | M | 1 | The Events Subscription URI. Identifies the Events Subscription sub-resource that triggered the notification.(NOTE 1) |  |
| evNotifs | array(AfEventNotification) | M | 1..N | Notifications about individual events. |  |
| failedResourcAllocReports | array(ResourcesAllocationInfo) | C | 1..N | Indicates the status of the PCC rule(s) related to certain failed media components. It shall be included when the event trigger is "FAILED\_RESOURCES\_ALLOCATION". |  |
| succResourcAllocReports | array(ResourcesAllocationInfo) | O | 1..N | Indicates the alternative service requirement the NG-RAN can guarantee to certain media components. It may be included when the event trigger is "SUCCESSFUL\_RESOURCES\_ALLOCATION". | AuthorizationWithRequiredQoS |
| noNetLocSupp | NetLocAccessSupport | O | 0..1 | Indicates the access network does not support the report of the requested access network information. | NetLoc |
| outOfCredReports | array(OutOfCreditInformation) | C | 1..N | Out of credit information per service data flow. It shall be present when the notified event is "OUT\_OF\_CREDIT". | IMS\_SBI |
| plmnId | PlmnIdNid | C | 0..1 | PLMN Identifier or the SNPN Identifier. It shall be present when the notified event is "PLMN\_CHG" or, if location information is required but is not available when the notified event is "ANI\_REPORT". It shall be present if available when the notified event is "RAN\_NAS\_CAUSE".(NOTE 2) |  |
| qncReports | array(QosNotificationControlInfo) | C | 1..N | QoS notification control information. It shall be present when the notified event is "QOS\_NOTIF". |  |
| qosMonReports | array(QosMonitoringReport) | C | 1..N | QoS Monitoring reporting information. It shall be present when the notified event is "QOS\_MONITORING". | QoSMonitoring |
| ranNasRelCauses | array(RanNasRelCause) | C | 1..N | RAN-NAS release cause. It shall be present if available when the notified event is "RAN\_NAS\_CAUSE". | RAN-NAS-Cause |
| ratType | RatType | O | 0..1 | RAT type. It shall be present, if applicable, when the notified event is "ACCESS\_TYPE\_CHANGE". |  |
| satBackhaulCategory | SatelliteBackhaulCategory | C | 0..1 | Indicates the satellite or non-satellite backhaul category of the PDU session. It shall be present, if applicable, when the notified event is "SAT\_CATEGORY\_CHG". | SatelliteBackhaul |
| ueLoc | UserLocation | O | 0..1 | E-UTRA, or NR, and/or non-3GPP trusted and untrusted access user location information. "n3gppTai" and "n3IwfId" attributes within the "N3gaLocation" data type shall not be supplied. It shall be present if required and available when the notified event is "ANI\_REPORT". It shall be present if available when the notified event is "RAN\_NAS\_CAUSE".(NOTE 3) (NOTE 4) | NetLoc, RAN-NAS-Cause |
| ueLocTime | DateTime | O | 0..1 | Contains the NTP time at which the UE was last known to be in the location.(NOTE 3) | NetLoc |
| ueTimeZone | TimeZone | O | 0..1 | UE time zone.It shall be present if required and available when the notified event is "ANI\_REPORT". It shall be present if available when the notified event is "RAN\_NAS\_CAUSE". | NetLoc, RAN-NAS-Cause |
| usgRep | AccumulatedUsage | C | 0..1 | Indicates the measured volume and/or time for sponsored data connectivity. It shall be present when the notified event is "USAGE\_REPORT". | SponsoredConnectivity |
| urspEnfRep | UrspEnforcementReport | C | 0..1 | Include the UE reporting Connection Capabilities from an associated URSP rule. It shall be present when the notified event is "URSP\_ENF\_INFO". | URSPEnforcement |
| tsnBridgeManCont | BridgeManagementContainer | O | 0..1 | Transports TSC user plane node management information. | TimeSensitiveNetworking |
| tsnPortManContDstt | PortManagementContainer | O | 0..1 | Transports port management information for the DS-TT port. | TimeSensitiveNetworking |
| tsnPortManContNwtts | array(PortManagementContainer) | O | 1..N | Transports port management information for one or more NW-TT ports. | TimeSensitiveNetworking |
| ipv4AddrList | array(Ipv4AddrMask) | O | 1..N | List of Framed Route information of IPv4. | ExtraUEaddrReport |
| ipv6PrefixList | array(Ipv6Prefix) | O | 1..N | List of Framed Route information of IPv6 or list of IPv6 address prefixes of the served UE. | ExtraUEaddrReport |
| NOTE 1: Either the complete resource URI included in the "evSubsUri" attribute or the "apiSpecificResourceUriPart" component (see clause 5.1) of the resource URI included in the "evSubsUri" attribute may be used by the NF service consumer for the identification of the Individual Application Session Context resource related to the notification.NOTE 2: The SNPN Identifier consists of the PLMN Identifier and the NID.NOTE 3: Whether the "ueLoc" attribute also encodes the age of location is implementation specific.NOTE 4: When the "ueLoc" attribute contains both, the 3GPP and the non-3GPP UE location, the "ueLocTime" attribute contains the age of the last known 3GPP UE location. |

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

#### 5.6.2.50 Type UrspEnforcementReport

Table 5.6.2.50-1: Definition of type UrspEnforcementReport

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| connCaps | array(ConnectionCapabilities) | M | 1..N | Contains the connection capabilities of URSP rule enforcement. |  |
| pduSessionId | PduSessionId | M | 1 | PDU session Id. |  |

Editor’s note: The parameters of IP address, SSC Mode, RSN and PDU Session Pair ID are FFS.

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

#### 5.6.3.7 Enumeration: AfEvent

The enumeration "AfEvent" represents the traffic events the PCF can notify to the NF service consumer.

Table 5.6.3.7-1: Enumeration AfEvent

| Enumeration value(NOTE 1) | Description | Applicability |
| --- | --- | --- |
| ACCESS\_TYPE\_CHANGE | Access type change. |  |
| ANI\_REPORT | Access Network Information Report requested. | NetLoc |
| APP\_DETECTION | Application detection report is requested. | ApplicationDetectionEvents |
| CHARGING\_CORRELATION | Access Network Charging Correlation Information. | IMS\_SBI |
| UP\_PATH\_CHG\_FAILURE | Indicates that the enforcement of the AF required routing requirements (i.e. DNAI change) failed. | RoutingReqOutcome |
| EPS\_FALLBACK | Indicates the rejection of the establishment of the QoS flow for the requested voice media type in 5GS and the subsequent fallback to EPS. | EPSFallbackReport |
| EXTRA\_UE\_ADDR | Indicates the report of extra IP addresses or address ranges allocated for the given PDU session resulting from framed routes or IPv6 prefix delegation. | ExtraUEaddrReport |
| FAILED\_QOS\_UPDATE | Indicates that the invocation/revocation indication included in the mpsAction requested by the NF service consumer has failed.  | MPSforDTS |
| FAILED\_RESOURCES\_ALLOCATION | Indicates that one or more of the SDFs of an Individual Application Session Context are deactivated at the SMF. It also indicates that the resources requested for a particular service information cannot be successfully allocated.(NOTE 2) |  |
| OUT\_OF\_CREDIT | Out of credit.(NOTE 2) | IMS\_SBI |
| PDU\_SESSION\_STATUS | Indicates the status of the PDU session (established/terminated). It only applies to notifications to the PCF for a UE as specified in clause 4.2.5.22. |  |
| PLMN\_CHG | This trigger indicates PLMN change. |  |
| QOS\_NOTIF | The GBR QoS targets of a SDF are not guaranteed or are guaranteed again. |  |
| QOS\_MONITORING | Indicates PCF to enable Qos Monitoring for the Service Data Flow. | QoSMonitoring |
| RAN\_NAS\_CAUSE | This trigger indicates RAN-NAS release cause information is available in the PCF from the SMF.This event does not require explicit subscription. | RAN-NAS-Cause |
| REALLOCATION\_OF\_CREDIT | Credit has been reallocated after a former out of credit indication.(NOTE 2) | IMS\_SBI, ReallocationOfCredit |
| SAT\_CATEGORY\_CHG | Indicates that the SMF has detected a change between different satellite backhaul category, or non-satellite backhaul. | SatelliteBackhaul |
| SUCCESSFUL\_QOS\_UPDATE | Indicates that the invocation/revocation indication included in the mpsAction requested by the NF service consumer has been successful.  | MPSforDTS |
| SUCCESSFUL\_RESOURCES\_ALLOCATION | Indicates that the resources requested for particular service information have been successfully allocated.(NOTE 2) |  |
| TSN\_BRIDGE\_INFO | 5GS Bridge information (UMIC and/or PMIC(s)) received by the PCF from the SMF. | TimeSensitiveNetworking |
| USAGE\_REPORT | Volume and/or time usage for sponsored data connectivity. | SponsoredConnectivity |
| UE\_TEMPORARILY\_UNAVAILABLE | UE is temporary unavailable. | UEUnreachable |
| URSP\_ENF\_INFO | Request to forward UE reporting Connection Capabilities from an associated URSP rule. | URSPEnforcement |
| NOTE 1: The subscription to events applies at AF session level, i.e., to all the media components/subcomponents of the Individual Application Session Context resource, unless otherwise specified in the AF event definition.NOTE 2: To ensure the event reports the requested information for all the media components of the Individual Application Session Context resource, the event should be subscribed during the initial provisioning of the service information. When the event is subscribed after the initial provisioning of the service information, it is unknown the status for the unmodified service information previously provisioned, and in this case, only future status changes may be reported. |

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

## 5.8 Feature negotiation

The optional features in table 5.8-1 are defined for the Npcf\_PolicyAuthorization API. They shall be negotiated using the extensibility mechanism defined in clause 6.6.2 of 3GPP TS 29.500 [5].

When requesting the PCF to create an Individual Application Session Context resource the NF service consumer shall indicate the optional features the NF service consumer supports for the Npcf\_PolicyAuthorization service by including the "suppFeat" attribute in the "AppSessionContextReqData" data type of the HTTP POST request.

The PCF shall determine the supported features for the created Individual Application Session Context resource as specified in clause 6.6.2 of 3GPP TS 29.500 [5]. The PCF shall indicate the supported features in the HTTP response confirming the creation of the Individual Application Session Context resource by including the "suppFeat" attribute in the "AppSessionContextRespData" data type.

Table 5.8-1: Supported Features

| Feature number | Feature Name | Description |
| --- | --- | --- |
| 1 | InfluenceOnTrafficRouting | Indicates support of Application Function influence on traffic routing. If the PCF supports this feature, the NF service consumer may influence SMF routing to applications or subscribe to notifications of UP path management for the traffic flows of an active PDU session. |
| 2 | SponsoredConnectivity | Indicates support of sponsored data connectivity. If the PCF supports this feature, the NF service consumer may provide sponsored data connectivity to the SUPI. |
| 3 | MediaComponentVersioning | Indicates the support of the media component versioning. |
| 4 | URLLC | Indicates support of Ultra-Reliable Low-Latency Communication (URLLC) requirements, i.e. AF application relocation acknowledgement and UE address(es) preservation. The InfluenceOnTrafficRouting feature shall be supported in order to support this feature. |
| 5 | IMS\_SBI | Indicates support of the communication with the 5GC IMS NF service consumer via Service Based Interfaces. |
| 6 | NetLoc | Indicates the support of access network information reporting. |
| 7 | ProvAFsignalFlow | This indicates support for the feature of provisioning of AF signalling flow information as described in clauses 4.2.2.16 and 4.2.3.17. If the PCF supports this feature the NF service consumer may provision AF signalling flow information.NOTE: This feature is used by the IMS Restoration Procedures to provide to the SMF the address of the P-CSCF selected by the UE, refer to 3GPP TS 23.380 [39].The IMS\_SBI feature shall be supported in order to support this feature. |
| 8 | ResourceSharing | This feature indicates the support of resource sharing across several "Individual Application Session Context" resources. The IMS\_SBI feature shall be supported in order to support this feature. |
| 9 | MCPTT | This feature indicates the support of Mission Critical Push To Talk services as described in 3GPP TS 24.379 [41]. |
| 10 | MCVideo | This feature indicates the support of Mission Critical Video services as described in 3GPP TS 24.281 [43]. |
| 11 | PrioritySharing | This feature indicates that Priority Sharing is supported as described in 3GPP TS 23.503 [4], clause 6.1.3.15. |
| 12 | MCPTT-Preemption | This feature indicates the support of service pre-emption based on the information provided by the NF service consumer. It requires that both PrioritySharing and MCPTT features are also supported. |
| 13 | MacAddressRange | Indicates the support of a set of MAC addresses with a specific range in the traffic filter. |
| 14 | RAN-NAS-Cause | This feature indicates the support for the release cause code information from the access network. |
| 15 | EnhancedSubscriptionToNotification | Indicates the support of:- Subscription to periodic notifications.- Definition of a waiting time between the reporting of two event triggered events.- Indication of whether the event has to be reported at PDU Session termination.- Notification Correlation Id for a subscription to an event. |
| 16 | QoSMonitoring | Indicates the support of QoS monitoring functionality and the report of packet delay monitoring. This feature requires the support of the EnhancedSubscriptionToNotification feature. |
| 17 | AuthorizationWithRequiredQoS | Indicates support of policy authorization for the AF session with required QoS. |
| 18 | TimeSensitiveNetworking | Indicates that the 5G System is integrated within the external network as a TSN bridge. |
| 19 | PCSCF-Restoration-Enhancement | This feature indicates support of P-CSCF Restoration Enhancement. It is used for the PCF and the P-CSCF to indicate if they support P-CSCF Restoration Enhancement. |
| 20 | CHEM | This feature indicates the support of Coverage and Handover Enhancements for Media (CHEM). |
| 21 | FLUS | This feature indicates the support of FLUS functionality as described in 3GPP TS 26.238 [51]. |
| 22 | EPSFallbackReport | This feature indicates the support of the report of EPS Fallback as defined in clauses 4.2.2.30, 4.2.3.29 and 4.2.5.15. |
| 23 | ATSSS | Indicates the support of the report of the multiple access types of a MA PDU session. |
| 24 | QoSHint | This feature indicates the support of specific QoS hint parameters as described in 3GPP TS 26.114 [30], clause 6.2.10. |
| 25 | ReallocationOfCredit | This feature indicates the support of notifications of reallocation of credits events. It requires the support of IMS\_SBI feature. |
| 26 | ES3XX | Extended Support for 3xx redirections. This feature indicates the support of redirection for any service operation, according to Stateless NF procedures as specified in clauses 6.5.3.2 and 6.5.3.3 of 3GPP TS 29.500 [5] and according to HTTP redirection principles for indirect communication, as specified in clause 6.10.9 of 3GPP TS 29.500 [5].  |
| 27 | DisableUENotification | Indicates the support of disabling QoS flow parameters signalling to the UE when the SMF is notified by the NG-RAN of changes in the fulfilled QoS situation. This feature requires that the AuthorizationWithRequiredQoS featute is also supported. |
| 28 | PatchCorrection | Indicates support of the correction to the PATCH method:When this feature is not supported, the interoperability between a NF service consumer and the PCF can only be ensured when it is not required the update of the Individual Application Session Context resource. |
| 29 | MPSforDTS | Indicates support for MPS for DTS as described in clauses 4.2.2.12.2 and 4.2.3.12. |
| 30 | ApplicationDetectionEvents | This feature indicates the support of the subscription to notifications of the detection of the start and stop of an application's traffic. |
| 31 | TimeSensitiveCommunication | Indicates that the 5G System is integrated within the external network as a TSC user plane node to enable Time Sensitive Communication, Time Synchronization and Deterministic Networking. This feature requires that the TimeSensitiveNetworking feature is also supported. |
| 32 | ExposureToEAS | This feature indicates the support of the indication of direct event notification of QoS monitoring events from the UPF to the Local NEF or AF in 5GC. This indication requires that the QoSMonitoring feature is supported. |
| 33 | SatelliteBackhaul | Indicates the support of the report of the satellite or non-satellite backhaul category of the PDU session. |
| 34 | RoutingReqOutcome | Indicates the support of:- the report of UP path change failures; and - the indication of whether AF routing requirements are applied.It requires the support of InfluenceOnTrafficRouting feature. |
| 35 | EASDiscovery | This feature indicates the support of EAS (re)discovery. |
| 36 | AltSerReqsWithIndQoS | Indicates the support of provisioning Alternative Service Requirements with individual QoS parameters. This feature requires that the AuthorizationWithRequiredQoS feature is also supported. |
| 37 | SimultConnectivity | This feature indicates the support of the indication of temporary simultaneous connectivity over source and target PSA at edge relocation. This indication requires that the InfluenceOnTrafficRouting feature is supported. |
| 38 | EASIPreplacement | This feature indicates the support of provisioning of EAS IP replacement info. This support requires that InfluenceOnTrafficRouting feature is also supported |
| 39 | AccNetChargId\_String | This feature indicates the support of long character strings as access network charging identifier. |
| 40 | WLAN\_Location | This feature indicates the support of the report of the WLAN location information received from the ePDG/EPC, if available. It is only applicable to EPS interworking scenarios as described in 3GPP TS 29.512 [8], Annex B. |
| 41 | AF\_latency | This feature indicates support for edge relocation considering user plane latency. |
| 42 | UEUnreachable | This feature indicates the support for the reporting of UE temporary unavailable. |
| 43 | AltQoSProfilesSupportReport | This feature indicates the support of the report of whether Alternative QoS parameters are supported by NG-RAN. This feature requires that AuthorizationWithRequiredQoS feature is also supported. |
| 44 | PacketDelayFailureReport | Indicates the support of packet delay failure report as part of QoS Monitoring procedures. This feature requires that QoSMonitoring feature is supported. |
| 45 | EnTSCAC | Indicates the support of extensions to TSCAC, e.g. burst arrival time window adaptation, periodicity adjustment.This feature requires that the TimeSensitiveCommunication feature is also supported. |
| 46 | SignalingPathValidation | This feature indicates the support of the validation of the NF type that originates the Npcf\_PolicyAuthorization\_Create request. |
| 47 | ExtQoS | This feature indicates the support for the extensions to the QoS mechanisms. |
| 48 | CommonEASDNAI | This feature controls the support of the common EAS/DNAI selection. |
| 49 | SFC | This feature indicates support of Service Function Chaining functionality.  |
| 50 | XRM\_5G | This feature indicates the support of multi-modal communication service for extended reality (XR) and interactive media services.Editor’s Note: Feature name and granartulity is FFS |
| 51 | EnSatBackhaulCatChg | This feature indicates the support also of the report of the dynamicsatellite backhaul category of the PDU session. This feature requires the support of SatelliteBackhaul feature. |
| 52 | MTU\_Size | This feature indicates the support of the report of the MTU size of the device side port. This feature requires that the TimeSensitiveCommunication feature is also supported. |
| 53 | ExtraUEaddrReport | This feature indicates the support of the report of additional IP addresses or address ranges allocated for the given PDU session resulting from framed routes or IPv6 prefix delegation. |
| 54 | AuthorizationForMpsSignalling | This feature indicates support for use of the "mpsAction" attribute to signal that the UE's MPS subscription shall be checked by the PCF prior to enabling MPS for AF signalling. |
| 55 | URSPEnforcement | This feature indicates the support of awareness of URSP rule enforcement |

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

# A.2 Npcf\_PolicyAuthorization API

openapi: 3.0.0

info:

 title: Npcf\_PolicyAuthorization Service API

 version: 1.3.0-alpha.2

 description: |

 PCF Policy Authorization Service.

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externalDocs:

 description: 3GPP TS 29.514 V18.1.0; 5G System; Policy Authorization Service; Stage 3.

 url: 'https://www.3gpp.org/ftp/Specs/archive/29\_series/29.514/'

servers:

 - url: '{apiRoot}/npcf-policyauthorization/v1'

 variables:

 apiRoot:

 default: https://example.com

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

security:

 - {}

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

paths:

 /app-sessions:

 post:

 summary: Creates a new Individual Application Session Context resource

 operationId: PostAppSessions

 tags:

 - Application Sessions (Collection)

 security:

 - {}

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - npcf-policyauthorization:policy-auth-mgmt

 requestBody:

 description: Contains the information for the creation the resource.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: Successful creation of the resource

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

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

 according to the structure

 {apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}

 or the URI of the created events subscription sub-resource,

 according to the structure

 {apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}

 /events-subscription

 required: true

 schema:

 type: string

 '303':

 description: >

 See Other. The result of the HTTP POST request would be equivalent to the existing

 Application Session Context.

 headers:

 Location:

 description: >

 Contains the URI of the existing individual Application Session Context resource.

 required: true

 schema:

 type: string

 '400':

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

 '401':

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

 '403':

 description: Forbidden

 content:

 application/problem+json:

 schema:

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

 headers:

 Retry-After:

 description: >

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

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

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

 retry a new request.

 schema:

 anyOf:

 - type: integer

 - type: string

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 callbacks:

 terminationRequest:

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

 post:

 requestBody:

 description: >

 Request of the termination of the Individual Application Session Context.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 eventNotification:

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

 post:

 requestBody:

 description: Notification of an event occurrence in the PCF.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 detected5GsBridgeForPduSession:

 '{$request.body#/ascReqData/evSubsc/notifUri}/new-bridge':

 post:

 requestBody:

 description: Notification of a new TSC user plane node detected in the PCF.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 eventNotificationPduSession:

 '{$request.body#/ascReqData/evSubsc/notifUri}/pdu-session':

 post:

 requestBody:

 description: Notification of PDU session established or terminated.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 /app-sessions/pcscf-restoration:

 post:

 summary: "Indicates P-CSCF restoration and does not create an Individual Application Session Context"

 operationId: PcscfRestoration

 tags:

 - PCSCF Restoration Indication

 requestBody:

 description: PCSCF Restoration Indication.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The deletion is confirmed without returning additional data.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 /app-sessions/{appSessionId}:

 get:

 summary: "Reads an existing Individual Application Session Context"

 operationId: GetAppSession

 tags:

 - Individual Application Session Context (Document)

 security:

 - {}

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - npcf-policyauthorization:policy-auth-mgmt

 parameters:

 - name: appSessionId

 description: String identifying the resource.

 in: path

 required: true

 schema:

 type: string

 responses:

 '200':

 description: A representation of the resource is returned.

 content:

 application/json:

 schema:

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

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '406':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/406'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 patch:

 summary: "Modifies an existing Individual Application Session Context"

 operationId: ModAppSession

 tags:

 - Individual Application Session Context (Document)

 security:

 - {}

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - npcf-policyauthorization:policy-auth-mgmt

 parameters:

 - name: appSessionId

 description: String identifying the resource.

 in: path

 required: true

 schema:

 type: string

 requestBody:

 description: Modification of the resource.

 required: true

 content:

 application/merge-patch+json:

 schema:

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

 responses:

 '200':

 description: >

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

 returned.

 content:

 application/json:

 schema:

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

 '204':

 description: The successful modification.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

 description: Forbidden

 content:

 application/problem+json:

 schema:

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

 headers:

 Retry-After:

 description: >

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

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

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

 a new request.

 schema:

 anyOf:

 - type: integer

 - type: string

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 callbacks:

 eventNotification:

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

 post:

 requestBody:

 description: Notification of an event occurrence in the PCF.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 /app-sessions/{appSessionId}/delete:

 post:

 summary: "Deletes an existing Individual Application Session Context"

 operationId: DeleteAppSession

 tags:

 - Individual Application Session Context (Document)

 security:

 - {}

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - oAuth2ClientCredentials:

 - npcf-policyauthorization

 - npcf-policyauthorization:policy-auth-mgmt

 parameters:

 - name: appSessionId

 description: String identifying the Individual Application Session Context resource.

 in: path

 required: true

 schema:

 type: string

 requestBody:

 description: >

 Deletion of the Individual Application Session Context resource, req notification.

 required: false

 content:

 application/json:

 schema:

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

 responses:

 '200':

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

 content:

 application/json:

 schema:

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

 '204':

 description: The deletion is confirmed without returning additional data.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

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

 put:

 summary: "creates or modifies an Events Subscription subresource"

 operationId: updateEventsSubsc

 tags:

 - Events Subscription (Document)

 parameters:

 - name: appSessionId

 description: String identifying the Events Subscription resource.

 in: path

 required: true

 schema:

 type: string

 requestBody:

 description: Creation or modification of an Events Subscription resource.

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '201':

 description: >

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

 returned.

 content:

 application/json:

 schema:

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

 headers:

 Location:

 description: >

 Contains the URI of the created Events Subscription resource,

 according to the structure

 {apiRoot}/npcf-policyauthorization/v1/app-sessions/{appSessionId}/

 events-subscription

 required: true

 schema:

 type: string

 '200':

 description: >

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

 returned.

 content:

 application/json:

 schema:

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

 '204':

 description: >

 The modification of the Events Subscription subresource is confirmed without returning

 additional data.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 callbacks:

 eventNotification:

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

 post:

 requestBody:

 description: >

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

 required: true

 content:

 application/json:

 schema:

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

 responses:

 '204':

 description: The receipt of the notification is acknowledged.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '411':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/411'

 '413':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/413'

 '415':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/415'

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

 delete:

 summary: deletes the Events Subscription subresource

 operationId: DeleteEventsSubsc

 tags:

 - Events Subscription (Document)

 parameters:

 - name: appSessionId

 description: String identifying the Individual Application Session Context resource.

 in: path

 required: true

 schema:

 type: string

 responses:

 '204':

 description: >

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

 returning additional data.

 '307':

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

 '308':

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

 '400':

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

 '401':

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

 '403':

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

 '404':

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

 '429':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/429'

 '500':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/500'

 '502':

 $ref: 'TS29571\_CommonData.yaml#/components/responses/502'

 '503':

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

 default:

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

components:

 securitySchemes:

 oAuth2ClientCredentials:

 type: oauth2

 flows:

 clientCredentials:

 tokenUrl: '{nrfApiRoot}/oauth2/token'

 scopes:

 npcf-policyauthorization: Access to the Npcf\_PolicyAuthorization API

 npcf-policyauthorization:policy-auth-mgmt: >

 Access to service operations applying to PCF Policy Authorization for creation,

 updation, deletion, retrieval.

 schemas:

 AppSessionContext:

 description: Represents an Individual Application Session Context resource.

 type: object

 properties:

 ascReqData:

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

 ascRespData:

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

 evsNotif:

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

 AppSessionContextReqData:

 description: Identifies the service requirements of an Individual Application Session Context.

 type: object

 required:

 - notifUri

 - suppFeat

 oneOf:

 - required: [ueIpv4]

 - required: [ueIpv6]

 - required: [ueMac]

 properties:

 afAppId:

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

 afChargId:

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

 afReqData:

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

 afRoutReq:

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

 afSfcReq:

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

 aspId:

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

 bdtRefId:

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

 dnn:

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

 evSubsc:

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

 mcpttId:

 description: Indication of MCPTT service request.

 type: string

 mcVideoId:

 description: Indication of MCVideo service request.

 type: string

 medComponents:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains media component information. The key of the map is the medCompN attribute.

 ipDomain:

 type: string

 mpsAction:

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

 mpsId:

 description: Indication of MPS service request.

 type: string

 mcsId:

 description: Indication of MCS service request.

 type: string

 preemptControlInfo:

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

 resPrio:

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

 servInfStatus:

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

 notifUri:

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

 servUrn:

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

 sliceInfo:

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

 sponId:

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

 sponStatus:

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

 supi:

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

 gpsi:

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

 suppFeat:

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

 ueIpv4:

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

 ueIpv6:

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

 ueMac:

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

 tsnBridgeManCont:

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

 tsnPortManContDstt:

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

 tsnPortManContNwtts:

 type: array

 items:

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

 minItems: 1

 multiModalId:

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

 AppSessionContextRespData:

 description: >

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

 the PCF.

 type: object

 properties:

 servAuthInfo:

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

 ueIds:

 type: array

 items:

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

 minItems: 1

 suppFeat:

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

 AppSessionContextUpdateDataPatch:

 description: >

 Identifies the modifications to an Individual Application Session Context and/or the

 modifications to the sub-resource Events Subscription.

 type: object

 properties:

 ascReqData:

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

 AppSessionContextUpdateData:

 description: >

 Identifies the modifications to the "ascReqData" property of an Individual Application

 Session Context which may include the modifications to the sub-resource Events Subscription.

 type: object

 properties:

 afAppId:

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

 afRoutReq:

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

 afSfcReq:

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

 aspId:

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

 bdtRefId:

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

 evSubsc:

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

 mcpttId:

 description: Indication of MCPTT service request.

 type: string

 mcVideoId:

 description: Indication of modification of MCVideo service.

 type: string

 medComponents:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains media component information. The key of the map is the medCompN attribute.

 mpsAction:

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

 mpsId:

 description: Indication of MPS service request.

 type: string

 mcsId:

 description: Indication of MCS service request.

 type: string

 preemptControlInfo:

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

 resPrio:

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

 servInfStatus:

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

 sipForkInd:

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

 sponId:

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

 sponStatus:

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

 tsnBridgeManCont:

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

 tsnPortManContDstt:

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

 tsnPortManContNwtts:

 type: array

 items:

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

 minItems: 1

 EventsSubscReqData:

 description: Identifies the events the application subscribes to.

 type: object

 required:

 - events

 properties:

 events:

 type: array

 items:

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

 minItems: 1

 notifUri:

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

 reqQosMonParams:

 type: array

 items:

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

 minItems: 1

 qosMon:

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

 reqAnis:

 type: array

 items:

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

 minItems: 1

 usgThres:

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

 notifCorreId:

 type: string

 afAppIds:

 type: array

 items:

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

 minItems: 1

 directNotifInd:

 type: boolean

 EventsSubscReqDataRm:

 description: >

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

 the OpenAPI nullable property set to true.

 type: object

 required:

 - events

 properties:

 events:

 type: array

 items:

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

 notifUri:

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

 reqQosMonParams:

 type: array

 items:

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

 minItems: 1

 qosMon:

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

 reqAnis:

 type: array

 items:

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

 minItems: 1

 usgThres:

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

 notifCorreId:

 type: string

 directNotifInd:

 type: boolean

 nullable: true

 nullable: true

 MediaComponent:

 description: Identifies a media component.

 type: object

 required:

 - medCompN

 allOf:

 - not:

 required: [altSerReqs,altSerReqsData]

 - not:

 required: [qosReference,altSerReqsData]

 properties:

 afAppId:

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

 afRoutReq:

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

 afSfcReq:

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

 qosReference:

 type: string

 disUeNotif:

 type: boolean

 altSerReqs:

 type: array

 items:

 type: string

 minItems: 1

 altSerReqsData:

 type: array

 items:

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

 minItems: 1

 description: >

 Contains alternative service requirements that include individual QoS parameter sets.

 contVer:

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

 codecs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 desMaxLatency:

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

 desMaxLoss:

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

 flusId:

 type: string

 fStatus:

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

 marBwDl:

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

 marBwUl:

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

 maxPacketLossRateDl:

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

 maxPacketLossRateUl:

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

 maxSuppBwDl:

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

 maxSuppBwUl:

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

 medCompN:

 type: integer

 medSubComps:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains the requested bitrate and filters for the set of service data flows identified

 by their common flow identifier. The key of the map is the fNum attribute.

 medType:

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

 minDesBwDl:

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

 minDesBwUl:

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

 mirBwDl:

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

 mirBwUl:

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

 preemptCap:

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

 preemptVuln:

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

 prioSharingInd:

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

 resPrio:

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

 rrBw:

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

 rsBw:

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

 sharingKeyDl:

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

 sharingKeyUl:

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

 tsnQos:

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

 tscaiInputDl:

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

 tscaiInputUl:

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

 tscaiTimeDom:

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

 capBatAdaptation:

 type: boolean

 description: >

 Indicates the capability for AF to adjust the burst sending time, when it is supported

 and set to "true". The default value is "false" if omitted.

 MediaComponentRm:

 description: >

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

 OpenAPI nullable property set to true.

 type: object

 required:

 - medCompN

 not:

 required: [altSerReqs,altSerReqsData]

 properties:

 afAppId:

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

 afRoutReq:

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

 afSfcReq:

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

 qosReference:

 type: string

 nullable: true

 altSerReqs:

 type: array

 items:

 type: string

 minItems: 1

 nullable: true

 altSerReqsData:

 type: array

 items:

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

 minItems: 1

 description: >

 Contains removable alternative service requirements that include individual QoS

 parameter sets.

 nullable: true

 disUeNotif:

 type: boolean

 contVer:

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

 codecs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 desMaxLatency:

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

 desMaxLoss:

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

 flusId:

 type: string

 nullable: true

 fStatus:

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

 marBwDl:

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

 marBwUl:

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

 maxPacketLossRateDl:

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

 maxPacketLossRateUl:

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

 maxSuppBwDl:

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

 maxSuppBwUl:

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

 medCompN:

 type: integer

 medSubComps:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Contains the requested bitrate and filters for the set of service data flows identified

 by their common flow identifier. The key of the map is the fNum attribute.

 medType:

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

 minDesBwDl:

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

 minDesBwUl:

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

 mirBwDl:

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

 mirBwUl:

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

 preemptCap:

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

 preemptVuln:

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

 prioSharingInd:

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

 resPrio:

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

 rrBw:

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

 rsBw:

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

 sharingKeyDl:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32Rm'

 sharingKeyUl:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Uint32Rm'

 tsnQos:

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

 tscaiInputDl:

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

 tscaiInputUl:

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

 tscaiTimeDom:

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

 capBatAdaptation:

 type: boolean

 description: >

 Indicates the capability for AF to adjust the burst sending time, when it is supported

 and set to "true". The default value is "false" if omitted.

 nullable: true

 MediaSubComponent:

 description: Identifies a media subcomponent.

 type: object

 required:

 - fNum

 properties:

 afSigProtocol:

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

 ethfDescs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 fNum:

 type: integer

 fDescs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 fStatus:

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

 marBwDl:

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

 marBwUl:

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

 tosTrCl:

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

 flowUsage:

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

 MediaSubComponentRm:

 description: >

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

 OpenAPI nullable property set to true. Removable attributes marBwDl and marBwUl are defined

 with the corresponding removable data type.

 type: object

 required:

 - fNum

 properties:

 afSigProtocol:

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

 ethfDescs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 nullable: true

 fNum:

 type: integer

 fDescs:

 type: array

 items:

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

 minItems: 1

 maxItems: 2

 nullable: true

 fStatus:

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

 marBwDl:

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

 marBwUl:

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

 tosTrCl:

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

 flowUsage:

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

 nullable: true

 EventsNotification:

 description: Describes the notification of a matched event.

 type: object

 required:

 - evSubsUri

 - evNotifs

 properties:

 adReports:

 type: array

 items:

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

 minItems: 1

 description: Includes the detected application report.

 accessType:

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

 addAccessInfo:

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

 relAccessInfo:

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

 anChargAddr:

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

 anChargIds:

 type: array

 items:

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

 minItems: 1

 anGwAddr:

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

 evSubsUri:

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

 evNotifs:

 type: array

 items:

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

 minItems: 1

 failedResourcAllocReports:

 type: array

 items:

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

 minItems: 1

 succResourcAllocReports:

 type: array

 items:

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

 minItems: 1

 noNetLocSupp:

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

 outOfCredReports:

 type: array

 items:

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

 minItems: 1

 plmnId:

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

 qncReports:

 type: array

 items:

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

 minItems: 1

 qosMonReports:

 type: array

 items:

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

 minItems: 1

 ranNasRelCauses:

 type: array

 items:

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

 minItems: 1

 description: Contains the RAN and/or NAS release cause.

 ratType:

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

 satBackhaulCategory:

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

 ueLoc:

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

 ueLocTime:

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

 ueTimeZone:

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

 usgRep:

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

 urspEnfRep:

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

 tsnBridgeManCont:

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

 tsnPortManContDstt:

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

 tsnPortManContNwtts:

 type: array

 items:

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

 minItems: 1

 ipv4AddrList:

 type: array

 items:

 $ref: 'TS29571\_CommonData.yaml#/components/schemas/Ipv4AddrMask'

 minItems: 1

 ipv6PrefixList:

 type: array

 items:

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

 minItems: 1

 AfEventSubscription:

 description: Describes the event information delivered in the subscription.

 type: object

 required:

 - event

 properties:

 event:

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

 notifMethod:

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

 repPeriod:

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

 waitTime:

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

 AfEventNotification:

 description: Describes the event information delivered in the notification.

 type: object

 required:

 - event

 properties:

 event:

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

 flows:

 type: array

 items:

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

 minItems: 1

 retryAfter:

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

 TerminationInfo:

 description: >

 Indicates the cause for requesting the deletion of the Individual Application Session

 Context resource.

 type: object

 required:

 - termCause

 - resUri

 properties:

 termCause:

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

 resUri:

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

 AfRoutingRequirement:

 description: Describes AF requirements on routing traffic.

 type: object

 properties:

 appReloc:

 type: boolean

 routeToLocs:

 type: array

 items:

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

 minItems: 1

 spVal:

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

 tempVals:

 type: array

 items:

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

 minItems: 1

 upPathChgSub:

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

 addrPreserInd:

 type: boolean

 simConnInd:

 type: boolean

 description: >

 Indicates whether simultaneous connectivity should be temporarily maintained for the

 source and target PSA.

 simConnTerm:

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

 easIpReplaceInfos:

 type: array

 items:

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

 minItems: 1

 description: Contains EAS IP replacement information.

 easRedisInd:

 type: boolean

 description: Indicates the EAS rediscovery is required.

 maxAllowedUpLat:

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

 tfcCorreInfo:

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

 AfSfcRequirement:

 description: Describes AF requirements on steering traffic to N6-LAN.

 type: object

 properties:

 sfcDlId:

 type: string

 description: Reference to a pre-configured SFC policy for downlink traffic.

 nullable: true

 sfcUlId:

 type: string

 description: Reference to a pre-configured SFC policy for uplink traffic.

 nullable: true

 spVal:

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

 metadata:

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

 nullable: true

 SpatialValidity:

 description: Describes explicitly the route to an Application location.

 type: object

 required:

 - presenceInfoList

 properties:

 presenceInfoList:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Defines the presence information provisioned by the AF. The praId attribute within the

 PresenceInfo data type is the key of the map.

 SpatialValidityRm:

 description: >

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

 OpenAPI nullable property set to true.

 type: object

 required:

 - presenceInfoList

 properties:

 presenceInfoList:

 type: object

 additionalProperties:

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

 minProperties: 1

 description: >

 Defines the presence information provisioned by the AF. The praId attribute within the

 PresenceInfo data type is the key of the map.

 nullable: true

 AfRoutingRequirementRm:

 description: >

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

 the OpenAPI nullable property set to true and the spVal and tempVals attributes defined as

 removable.

 type: object

 properties:

 appReloc:

 type: boolean

 routeToLocs:

 type: array

 items:

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

 minItems: 1

 nullable: true

 spVal:

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

 tempVals:

 type: array

 items:

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

 minItems: 1

 nullable: true

 upPathChgSub:

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

 addrPreserInd:

 type: boolean

 nullable: true

 simConnInd:

 type: boolean

 nullable: true

 description: >

 Indicates whether simultaneous connectivity should be temporarily maintained for the

 source and target PSA.

 simConnTerm:

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

 easIpReplaceInfos:

 type: array

 items:

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

 minItems: 1

 description: Contains EAS IP replacement information.

 nullable: true

 easRedisInd:

 type: boolean

 description: Indicates the EAS rediscovery is required.

 maxAllowedUpLat:

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

 tfcCorreInfo:

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

 nullable: true

 AnGwAddress:

 description: Describes the address of the access network gateway control node.

 type: object

 anyOf:

 - required: [anGwIpv4Addr]

 - required: [anGwIpv6Addr]

 properties:

 anGwIpv4Addr:

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

 anGwIpv6Addr:

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

 Flows:

 description: Identifies the flows.

 type: object

 required:

 - medCompN

 properties:

 contVers:

 type: array

 items:

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

 minItems: 1

 fNums:

 type: array

 items:

 type: integer

 minItems: 1

 medCompN:

 type: integer

 EthFlowDescription:

 description: Identifies an Ethernet flow.

 type: object

 required:

 - ethType

 properties:

 destMacAddr:

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

 ethType:

 type: string

 fDesc:

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

 fDir:

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

 sourceMacAddr:

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

 vlanTags:

 type: array

 items:

 type: string

 minItems: 1

 maxItems: 2

 srcMacAddrEnd:

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

 destMacAddrEnd:

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

 ResourcesAllocationInfo:

 description: Describes the status of the PCC rule(s) related to certain media components.

 type: object

 properties:

 mcResourcStatus:

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

 flows:

 type: array

 items:

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

 minItems: 1

 altSerReq:

 type: string

 description: >

 Indicates whether NG-RAN supports alternative QoS parameters. The default value false

 shall apply if the attribute is not present. It shall be set to false to indicate that

 the lowest priority alternative QoS profile could not be fulfilled.

 TemporalValidity:

 description: Indicates the time interval(s) during which the AF request is to be applied.

 type: object

 properties:

 startTime:

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

 stopTime:

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

 QosNotificationControlInfo:

 description: >

 Indicates whether the QoS targets for a GRB flow are not guaranteed or guaranteed again.

 type: object

 required:

 - notifType

 properties:

 notifType:

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

 flows:

 type: array

 items:

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

 minItems: 1

 altSerReq:

 type: string

 description: >

 Indicates the alternative service requirement NG-RAN can guarantee. When it is omitted

 and the notifType attribute is set to NOT\_GUAARANTEED it indicates that the lowest

 priority alternative alternative service requirement could not be fulfilled by NG-RAN.

 altSerReqNotSuppInd:

 type: boolean

 description: >

 When present and set to true it indicates that Alternative Service Requirements are not

 supported by NG-RAN.

 AcceptableServiceInfo:

 description: Indicates the maximum bandwidth that shall be authorized by the PCF.

 type: object

 properties:

 accBwMedComps:

 type: object

 additionalProperties:

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

 description: >

 Indicates the maximum bandwidth that shall be authorized by the PCF for each media

 component of the map. The key of the map is the media component number.

 minProperties: 1

 marBwUl:

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

 marBwDl:

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

 UeIdentityInfo:

 description: Represents 5GS-Level UE identities.

 type: object

 anyOf:

 - required: [gpsi]

 - required: [pei]

 - required: [supi]

 properties:

 gpsi:

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

 pei:

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

 supi:

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

 AccessNetChargingIdentifier:

 description: Describes the access network charging identifier.

 type: object

 oneOf:

 - required: [accNetChaIdValue]

 - required: [accNetChargIdString]

 properties:

 accNetChaIdValue:

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

 accNetChargIdString:

 type: string

 description: A character string containing the access network charging identifier.

 flows:

 type: array

 items:

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

 minItems: 1

 OutOfCreditInformation:

 description: >

 Indicates the SDFs without available credit and the corresponding termination action.

 type: object

 required:

 - finUnitAct

 properties:

 finUnitAct:

 $ref: 'TS32291\_Nchf\_ConvergedCharging.yaml#/components/schemas/FinalUnitAction'

 flows:

 type: array

 items:

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

 minItems: 1

 QosMonitoringInformation:

 description: >

 Indicates the QoS Monitoring information to report, i.e. UL and/or DL and or round trip delay.

 type: object

 properties:

 repThreshDl:

 type: integer

 repThreshUl:

 type: integer

 repThreshRp:

 type: integer

 PduSessionTsnBridge:

 description: >

 Contains the new TSC user plane node information and may contain the DS-TT port and/or

 NW-TT port management information.

 type: object

 required:

 - tsnBridgeInfo

 properties:

 tsnBridgeInfo:

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

 tsnBridgeManCont:

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

 tsnPortManContDstt:

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

 tsnPortManContNwtts:

 type: array

 items:

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

 minItems: 1

 ueIpv4Addr:

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

 dnn:

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

 snssai:

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

 ipDomain:

 type: string

 description: IPv4 address domain identifier.

 ueIpv6AddrPrefix:

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

 QosMonitoringInformationRm:

 description: >

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

 with the OpenAPI nullable property set to true.

 type: object

 properties:

 repThreshDl:

 type: integer

 repThreshUl:

 type: integer

 repThreshRp:

 type: integer

 nullable: true

 PcscfRestorationRequestData:

 description: Indicates P-CSCF restoration.

 type: object

 oneOf:

 - required: [ueIpv4]

 - required: [ueIpv6]

 properties:

 dnn:

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

 ipDomain:

 type: string

 sliceInfo:

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

 supi:

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

 ueIpv4:

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

 ueIpv6:

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

 QosMonitoringReport:

 description: QoS Monitoring reporting information.

 type: object

 properties:

 flows:

 type: array

 items:

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

 minItems: 1

 ulDelays:

 type: array

 items:

 type: integer

 minItems: 1

 dlDelays:

 type: array

 items:

 type: integer

 minItems: 1

 rtDelays:

 type: array

 items:

 type: integer

 minItems: 1

 pdmf:

 type: boolean

 description: Represents the packet delay measurement failure indicator.

 TsnQosContainer:

 description: Indicates TSC Traffic QoS.

 type: object

 properties:

 maxTscBurstSize:

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

 tscPackDelay:

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

 maxPer:

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

 tscPrioLevel:

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

 TsnQosContainerRm:

 description: Indicates removable TSC Traffic QoS.

 type: object

 properties:

 maxTscBurstSize:

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

 tscPackDelay:

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

 maxPer:

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

 tscPrioLevel:

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

 nullable: true

 TscaiInputContainer:

 description: Indicates TSC Traffic pattern.

 type: object

 properties:

 periodicity:

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

 burstArrivalTime:

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

 surTimeInNumMsg:

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

 surTimeInTime:

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

 burstArrivalTimeWnd:

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

 periodicityRange:

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

 nullable: true

 AppDetectionReport:

 description: >

 Indicates the start or stop of the detected application traffic and the application

 identifier of the detected application traffic.

 type: object

 required:

 - adNotifType

 - afAppId

 properties:

 adNotifType:

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

 afAppId:

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

 PduSessionEventNotification:

 description: >

 Indicates PDU session information for the concerned established/terminated PDU session.

 type: object

 required:

 - evNotif

 properties:

 evNotif:

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

 supi:

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

 ueIpv4:

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

 ueIpv6:

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

 ueMac:

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

 status:

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

 pcfInfo:

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

 dnn:

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

 snssai:

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

 gpsi:

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

 PcfAddressingInfo:

 description: Contains PCF address information.

 type: object

 properties:

 pcfFqdn:

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

 pcfIpEndPoints:

 type: array

 items:

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

 minItems: 1

 description: IP end points of the PCF hosting the Npcf\_PolicyAuthorization service.

 bindingInfo:

 type: string

 description: contains the binding indications of the PCF.

 AlternativeServiceRequirementsData:

 description: Contains an alternative QoS related parameter set.

 type: object

 required:

 - altQosParamSetRef

 properties:

 altQosParamSetRef:

 type: string

 description: Reference to this alternative QoS related parameter set.

 gbrUl:

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

 gbrDl:

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

 pdb:

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

 per:

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

 EventsSubscPutData:

 description: >

 Identifies the events the application subscribes to within an Events Subscription

 sub-resource data. It may contain the notification of the already met events.

 anyOf:

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

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

 PeriodicityRange:

 description: >

 Contains the acceptable lower bound and upper bound of the periodicity of the start two

 bursts in reference to the external GM.

 type: object

 required:

 - lowerBound

 - upperBound

 properties:

 lowerBound:

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

 upperBound:

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

 UrspEnforcementReport:

 description: >

 Include the UE reporting Connection Capabilities from an associated URSP rule.

 type: object

 required:

 - connCaps

 - pduSessionId

 properties:

 connCaps:

 type: array

 items:

 $ref: 'TS29522\_ServiceParameter.yaml#/components/schemas/ConnectionCapabilities'

 minItems: 1

 pduSessionId:

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

#

# EXTENDED PROBLEMDETAILS

#

 ExtendedProblemDetails:

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

 allOf:

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

 - type: object

 properties:

 acceptableServInfo:

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

#

# SIMPLE DATA TYPES

#

 AfAppId:

 description: Contains an AF application identifier.

 type: string

 AspId:

 description: Contains an identity of an application service provider.

 type: string

 CodecData:

 description: Contains codec related information.

 type: string

 ContentVersion:

 description: Represents the content version of some content.

 type: integer

 FlowDescription:

 description: Defines a packet filter of an IP flow.

 type: string

 SponId:

 description: Contains an identity of a sponsor.

 type: string

 ServiceUrn:

 description: Contains values of the service URN and may include subservices.

 type: string

 TosTrafficClass:

 description: >

 2-octet string, where each octet is encoded in hexadecimal representation. The first octet

 contains the IPv4 Type-of-Service or the IPv6 Traffic-Class field and the second octet

 contains the ToS/Traffic Class mask field.

 type: string

 TosTrafficClassRm:

 description: >

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

 OpenAPI nullable property set to true.

 type: string

 nullable: true

 MultiModalId:

 description: >

 This data type contains a multi-modal service identifier.

 type: string

 TscPriorityLevel:

 description: Represents the priority level of TSC Flows.

 type: integer

 minimum: 1

 maximum: 8

 TscPriorityLevelRm:

 description: >

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

 OpenAPI nullable property set to true.

 type: integer

 minimum: 1

 maximum: 8

 nullable: true

#

# ENUMERATIONS DATA TYPES

#

 MediaType:

 description: Indicates the media type of a media component.

 anyOf:

 - type: string

 enum:

 - AUDIO

 - VIDEO

 - DATA

 - APPLICATION

 - CONTROL

 - TEXT

 - MESSAGE

 - OTHER

 - type: string

 description: >

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

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

 MpsAction:

 description: >

 Indicates whether it is an invocation, a revocation or an invocation with authorization of

 the MPS for DTS service.

 anyOf:

 - type: string

 enum:

 - DISABLE\_MPS\_FOR\_DTS

 - ENABLE\_MPS\_FOR\_DTS

 - AUTHORIZE\_AND\_ENABLE\_MPS\_FOR\_DTS

 - type: string

 description: >

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

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

 ReservPriority:

 description: Indicates the reservation priority.

 anyOf:

 - type: string

 enum:

 - PRIO\_1

 - PRIO\_2

 - PRIO\_3

 - PRIO\_4

 - PRIO\_5

 - PRIO\_6

 - PRIO\_7

 - PRIO\_8

 - PRIO\_9

 - PRIO\_10

 - PRIO\_11

 - PRIO\_12

 - PRIO\_13

 - PRIO\_14

 - PRIO\_15

 - PRIO\_16

 - type: string

 description: >

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

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

 ServAuthInfo:

 description: Indicates the result of the Policy Authorization service request from the AF.

 anyOf:

 - type: string

 enum:

 - TP\_NOT\_KNOWN

 - TP\_EXPIRED

 - TP\_NOT\_YET\_OCURRED

 - ROUT\_REQ\_NOT\_AUTHORIZED

 - type: string

 description: >

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

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

 SponsoringStatus:

 description: Indicates whether sponsored data connectivity is enabled or disabled/not enabled.

 anyOf:

 - type: string

 enum:

 - SPONSOR\_DISABLED

 - SPONSOR\_ENABLED

 - type: string

 description: >

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

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

 AfEvent:

 description: Represents an event to notify to the AF.

 anyOf:

 - type: string

 enum:

 - ACCESS\_TYPE\_CHANGE

 - EXTRA\_UE\_ADDR

 - ANI\_REPORT

 - APP\_DETECTION

 - CHARGING\_CORRELATION

 - EPS\_FALLBACK

 - FAILED\_QOS\_UPDATE

 - FAILED\_RESOURCES\_ALLOCATION

 - OUT\_OF\_CREDIT

 - PDU\_SESSION\_STATUS

 - PLMN\_CHG

 - QOS\_MONITORING

 - QOS\_NOTIF

 - RAN\_NAS\_CAUSE

 - REALLOCATION\_OF\_CREDIT

 - SAT\_CATEGORY\_CHG

 - SUCCESSFUL\_QOS\_UPDATE

 - SUCCESSFUL\_RESOURCES\_ALLOCATION

 - TSN\_BRIDGE\_INFO

 - UP\_PATH\_CHG\_FAILURE

 - USAGE\_REPORT

 - UE\_TEMPORARILY\_UNAVAILABLE

 - URSP\_ENF\_INFO

 - type: string

 description: >

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

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

 AfNotifMethod:

 description: Represents the notification methods that can be subscribed for an event.

 anyOf:

 - type: string

 enum:

 - EVENT\_DETECTION

 - ONE\_TIME

 - PERIODIC

 - PDU\_SESSION\_RELEASE

 - type: string

 description: >

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

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

 QosNotifType:

 description: Indicates the notification type for QoS Notification Control.

 anyOf:

 - type: string

 enum:

 - GUARANTEED

 - NOT\_GUARANTEED

 - type: string

 description: >

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

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

 TerminationCause:

 description: >

 Indicates the cause behind requesting the deletion of the Individual Application Session

 Context resource.

 anyOf:

 - type: string

 enum:

 - ALL\_SDF\_DEACTIVATION

 - PDU\_SESSION\_TERMINATION

 - PS\_TO\_CS\_HO

 - INSUFFICIENT\_SERVER\_RESOURCES

 - INSUFFICIENT\_QOS\_FLOW\_RESOURCES

 - SPONSORED\_DATA\_CONNECTIVITY\_DISALLOWED

 - type: string

 description: >

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

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

 MediaComponentResourcesStatus:

 description: Indicates whether the media component is active or inactive.

 anyOf:

 - type: string

 enum:

 - ACTIVE

 - INACTIVE

 - type: string

 description: >

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

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

 FlowUsage:

 description: Describes the flow usage of the flows described by a media subcomponent.

 anyOf:

 - type: string

 enum:

 - NO\_INFO

 - RTCP

 - AF\_SIGNALLING

 - type: string

 description: >

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

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

 FlowStatus:

 description: Describes whether the IP flow(s) are enabled or disabled.

 anyOf:

 - type: string

 enum:

 - ENABLED-UPLINK

 - ENABLED-DOWNLINK

 - ENABLED

 - DISABLED

 - REMOVED

 - type: string

 description: >

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

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

 RequiredAccessInfo:

 description: Indicates the access network information required for an AF session.

 anyOf:

 - type: string

 enum:

 - USER\_LOCATION

 - UE\_TIME\_ZONE

 - type: string

 description: >

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

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

 SipForkingIndication:

 description: >

 Indicates whether several SIP dialogues are related to an "Individual Application Session

 Context" resource.

 anyOf:

 - type: string

 enum:

 - SINGLE\_DIALOGUE

 - SEVERAL\_DIALOGUES

 - type: string

 description: >

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

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

 AfRequestedData:

 description: Represents the information that the AF requested to be exposed.

 anyOf:

 - type: string

 enum:

 - UE\_IDENTITY

 - type: string

 description: >

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

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

 ServiceInfoStatus:

 description: Represents the preliminary or final service information status.

 anyOf:

 - type: string

 enum:

 - FINAL

 - PRELIMINARY

 - type: string

 description: >

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

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

 PreemptionControlInformation:

 description: Represents Pre-emption control information.

 anyOf:

 - type: string

 enum:

 - MOST\_RECENT

 - LEAST\_RECENT

 - HIGHEST\_BW

 - type: string

 description: >

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

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

 PrioritySharingIndicator:

 description: Represents the Priority sharing indicator.

 anyOf:

 - type: string

 enum:

 - ENABLED

 - DISABLED

 - type: string

 description: >

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

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

 PreemptionControlInformationRm:

 description: >

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

 with the OpenAPI nullable property set to true.

 anyOf:

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

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

 AppDetectionNotifType:

 description: Indicates the notification type for Application Detection Control.

 anyOf:

 - type: string

 enum:

 - APP\_START

 - APP\_STOP

 - type: string

 description: >

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

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

 PduSessionStatus:

 description: Indicates whether the PDU session is established or terminated.

 anyOf:

 - type: string

 enum:

 - ESTABLISHED

 - TERMINATED

 - type: string

 description: >

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

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

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