



## Nchf\_ConvergedCharging

The ConvergedCharging service provides charging for session and event based NF services. This ConvergedCharging service offers charging:

- With quota management (online; this includes support for both blocking mode and non-blocking mode)
- Without quota management (offline)
- Charging information record generation

The following table shows the CHF Services and CHF Service Operations:

**Table 1: NF services provided by the CHF**

Service Name	Service Operations	Operation Semantics	Example
Nchf_ConvergedCharging	Create	Request/Response	SMF
	Update	Request/Response	SMF
	Release	Request/Response	SMF
	Notify	Notify	SMF

**Reference:** 3GPP TS 32.290 v15.1.0

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## OpenAPI

OpenAPI Version: 3.0.0

## info

**Description:** ConvergedCharging Service

**Version:** 1.R15.0.0

**Title:** Nchf\_ConvergedCharging

## externalDocs

**Description:-**

3GPP TS 32.291 Telecommunication management; Charging management;  
5G system, charging service; Stage 3.

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

## servers

**URL:** '{apiRoot}/nchf-convergedcharging/v1'

**Variables:**

**API Root:**

**Default:** https://example.com

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

## paths

### /chargingdata

**Method:** Post

**Request Body:**

**Required/Optional:** true

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/ChargingDataRequest'

**Responses:**

**'201'** Created

**Content:**

**Application/JSON:****Schema:****Reference:** '#/components/schemas/ChargingDataResponse'

'400' Bad request

**Content:****Application/JSON:****Schema:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

'403' Forbidden

**Content:****Application/JSON:****Schema:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

'404' Not Found

**Content:****Application/JSON:****Schema:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'**'410':** Reference 'TS29571\_CommonData.yaml#/components/responses/410'**default:** Reference 'TS29571\_CommonData.yaml#/components/responses/default'**Callbacks:****myNotification:**

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

**Method:** Post**Request Body:****Required/Optional:** true**Content:****Application/JSON:****Schema:****Reference:** '#/components/schemas/ChargingNotifyRequest'**Responses:**

'204' No Content, Notification was succesfull'

'400' Bad request

**Content:**

'/chargingdata/{ChargingDataRef}/update'

**Application/JSON:**

**Schema:**

**Reference:** >-

TS29571\_CommonData.yaml#/components/schemas/ProblemDetails

**default:** Reference 'TS29571\_CommonData.yaml#/components/responses/default'

## '/chargingdata/{ChargingDataRef}/update'

**Method:** Post

**Request Body:**

**Required/Optional:** true

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/ChargingDataRequest'

**Parameters:**

- name: ChargingDataRef

**In:** path

**Description:** a unique identifier for a charging data resource in a PLMN

**Required/Optional:** true

**Schema:**

**Type:** string

**Responses:**

'200' OK. Updated Charging Data resource is returned

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/ChargingDataResponse'

'400' Bad request

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

'403' Forbidden

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

**'404'** Not Found

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

**'410':** Reference 'TS29571\_CommonData.yaml#/components/responses/410'

**default:** Reference 'TS29571\_CommonData.yaml#/components/responses/default'

## '/chargingdata/{ChargingDataRef}/release'

**Method:** Post

**Request Body:**

**Required/Optional:** true

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** '#/components/schemas/ChargingDataRequest'

**Parameters:**

- name: ChargingDataRef

**In:** path

**Description:** a unique identifier for a charging data resource in a PLMN

**Required/Optional:** true

**Schema:**

**Type:** string

**Responses:**

**'204'** No Content.

**'404'** Not Found

**Content:**

**Application/JSON:**

**Schema:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'

**'410':** Reference 'TS29571\_CommonData.yaml#/components/responses/410'

**default:** Reference 'TS29571\_CommonData.yaml#/components/responses/default'

# components

## schemas

### ChargingDataRequest

**Type:** object

**Properties:**

**subscriberIdentifier:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Supi'

**nfConsumerIdentification:**

**Reference:** '#/components/schemas/NFConsumerIdentification'

**invocationTimeStamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**invocationSequenceNumber:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/UInt32'

**oneTimeEvent:**

**Type:** boolean

**notifyUri:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uri'

**multipleUnitUsage:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/MultipleUnitUsage'

**minItems:** 0

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**pDUSSessionChargingInformation:**

**Reference:** '#/components/schemas/PDUSSessionChargingInformation'

**roamingQBCInformation:**

**Reference:** '#/components/schemas/RoamingQBCInformation'

**sMSChargingInformation:**

**Reference:** '#/components/schemas/SMSChargingInformation'

**Required:**

- nfConsumerIdentification
- invocationTimeStamp
- invocationSequenceNumber

## ChargingDataResponse

**Type:** object

**Properties:**

**invocationTimeStamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**invocationSequenceNumber:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**invocationResult:**

**Reference:** '#/components/schemas/InvocationResult'

**sessionFailover:**

**Reference:** '#/components/schemas/SessionFailover'

**multipleUnitInformation:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/MultipleUnitInformation'

**minItems:** 0

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**pDUSessionChargingInformation:**

**Reference:** '#/components/schemas/PDUSessionChargingInformation'

**roamingQBCInformation:**

**Reference:** '#/components/schemas/RoamingQBCInformation'

**Required:**

- invocationTimeStamp

- invocationSequenceNumber

## ChargingNotifyRequest

**Type:** object

**Properties:**

**notificationType:**

**Reference:** '#/components/schemas/NotificationType'

**reauthorizationDetails:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/ReauthorizationDetails'

**minItems:** 0

**Required:**

- notificationType

## NFConsumerIdentification

**Type:** object

**Properties:**

**nFName:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

**nFIPv4Address:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

**nFIPv6Address:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

**nFPLMnid:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

**nodeFunctionality:**

**Reference:** '#/components/schemas/NodeFunctionality'

**Required:**

- nFName

- nFIPv4Address

- nFIPv6Address

- nodeFunctionality

## MultipleUnitUsage

**Type:** object



**Properties:****ratingGroup:****Reference:** '#/components/schemas/RatingGroup'**requestedUnit:****Reference:** '#/components/schemas/RequestedUnit'**UsedUnitContainer:****Type:** array**Items:****Reference:** '#/components/schemas/UsedUnitContainer'**minItems:** 0**uPFID:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'**Required:**

- ratingGroup

## InvocationResult

**Type:** object**Properties:****error:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/ProblemDetails'**failureHandling:****Reference:** '#/components/schemas/FailureHandling'

## Trigger

**Type:** object**Properties:****triggerType:****Reference:** '#/components/schemas/TriggerType'**triggerCategory:****Reference:** '#/components/schemas/TriggerCategory'**timeLimit:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'**volumeLimit:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'**maxNumberOfccc:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**Required:**

- triggerType
- triggerCategory

## MultipleUnitInformation

**Type:** object

**Properties:**

**resultCode:**

**Reference:** '#/components/schemas/ResultCode'

**ratingGroup:**

**Reference:** '#/components/schemas/RatingGroup'

**grantedUnit:**

**Reference:** '#/components/schemas/GrantedUnit'

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**validityTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**quotaHoldingTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'

**finalUnitIndication:**

**Reference:** '#/components/schemas/FinalUnitIndication'

**timeQuotaThreshold:**

**Type:** integer

**volumeQuotaThreshold:**

**Type:** integer

**unitQuotaThreshold:**

**Type:** integer

**uPFID:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

**Required:**

- ratingGroup

## RequestedUnit

**Type:** object

**Properties:**

**time:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**totalVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**uplinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**downlinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**serviceSpecificUnits:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

## UsedUnitContainer

**Type:** object

**Properties:**

**serviceId:**

**Reference:** '#/components/schemas/ServiceId'

**quotaManagementIndicator:**

**Reference:** '#/components/schemas/QuotaManagementIndicator'

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**triggerTimestamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**time:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**totalVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**uplinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**downlinkVolume:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**serviceSpecificUnits:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**eventTimeStamps:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'**localSequenceNumber:****Type:** integer**pDUContainerInformation:****Reference:** '#/components/schemas/PDUContainerInformation'**Required:**

- localSequenceNumber

**GrantedUnit****Type:** object**Properties:****tariffTimeChange:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'**time:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'**totalVolume:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**uplinkVolume:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**downlinkVolume:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**serviceSpecificUnits:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'**FinalUnitIndication****Type:** object**Properties:****finalUnitAction:****Reference:** '#/components/schemas/FinalUnitAction'**restrictionFilterRule:**

**Reference:** '#/components/schemas/IPFilterRule'

**filterId:**

**Type:** string

**redirectServer:**

**Reference:** '#/components/schemas/RedirectServer'

**Required:**

- finalUnitAction

## RedirectServer

**Type:** object

**Properties:**

**redirectAddressType:**

**Reference:** '#/components/schemas/RedirectAddressType'

**redirectServerAddress:**

**Type:** string

**Required:**

- redirectAddressType

- redirectServerAddress

## ReauthorizationDetails

**Type:** object

**Properties:**

**serviceId:**

**Reference:** '#/components/schemas/ServiceId'

**ratingGroup:**

**Reference:** '#/components/schemas/RatingGroup'

**quotaManagementIndicator:**

**Reference:** '#/components/schemas/QuotaManagementIndicator'

## PDUSessionChargingInformation

**Type:** object

**Properties:**

**chargingId:**

**Reference:** '#/components/schemas/ChargingId'

**userInformation:**

**Reference:** '#/components/schemas/UserInformation'

**userLocationInfo:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/UserLocation'**userLocationTime:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'**presenceReportingAreaInformation:****Type:** object**additionalProperties:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'**minProperties:** 0**uetimeZone:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/TimeZone'**pduSessionInformation:****Reference:** '#/components/schemas/PDUSessionInformation'**unitCountInactivityTimer:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DurationSec'**rANSecondaryRATUsageReport:****Reference:** '#/components/schemas/RANSecondaryRATUsageReport'**Required:**

- userInformation
- pduSessionInformation

## UserInformation

**Type:** object**Properties:****servedGPSI:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'**servedPEI:****Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Pei'**unauthenticatedFlag:****Type:** boolean**roamerInOut:****Reference:** '#/components/schemas/RoamerInOut'**Required:**

- servedGPSI

## PDUSessionInformation

**Type:** object

**Properties:**

**networkSlicingInfo:**

**Reference:** '#/components/schemas/NetworkSlicingInfo'

**pduSessionID:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PduSessionId'

**pduType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PduSessionType'

**sscMode:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/SscMode'

**hPlmnId:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

**servingNetworkFunctionID:**

**Reference:** '#/components/schemas/ServingNetworkFunctionID'

**ratType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**dnnId:**

**Type:** string

**chargingCharacteristics:**

**Type:** string

**chargingCharacteristicsSelectionMode:**

**Reference:** '#/components/schemas/ChargingCharacteristicsSelectionMode'

**startTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**stopTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**3gppPSDataOffStatus:**

**Reference:** '#/components/schemas/3GPPPSDataOffStatus'

**sessionStopIndicator:**

**Type:** boolean

**pduAddress:**

**Reference:** '#/components/schemas/PDUAddress'

**diagnostics:**

**Reference:** '#/components/schemas/Diagnostics'

**qoSInformation:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DefaultQoSInformation'

**servingCNPlmnId:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PlmnId'

**Required:**

- pduSessionID

- dnnId

## PDUContainerInformation

**Type:** object

**Properties:**

**timeofFirstUsage:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**timeofLastUsage:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**qoSInformation:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DefaultQoSInformation'

**aFCorrelationInformation:**

**Type:** string

**userLocationInformation:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/UserLocation'

**uetimeZone:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/TimeZone'

**rATType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**servingNodeID:**

**Type:** array

**Items:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Guami'

**minItems:** 0

**presenceReportingAreaInformation:**

**Type:** object

**additionalProperties:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'



**minProperties:** 0

**3gppPSDataOffStatus:**

**Reference:** '#/components/schemas/3GPPPSDataOffStatus'

**sponsorIdentity:**

**Type:** string

**applicationserviceProviderIdentity:**

**Type:** string

**chargingRuleBaseName:**

**Type:** string

## NetworkSlicingInfo

**Type:** object

**Properties:**

**sNSSAI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Snssai'

**Required:**

- sNSSAI

## PDUAddress

**Type:** object

**Properties:**

**pduIPv4Address:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv4Addr'

**pduIPv6Address:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Ipv6Addr'

**pduAddressprefixlength:**

**Type:** integer

**IPv4dynamicAddressFlag:**

**Type:** boolean

**IPv6dynamicAddressFlag:**

**Type:** boolean

## ServingNetworkFunctionID

**Type:** object

**Properties:**

**servingNetworkFunctionName:**

**Type:** string

**servingNetworkFunctionInstanceId:**

**Type:** string

**gUAMI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Guami'

## RoamingQBCInformation

**Type:** object

**Properties:**

**multipleQFIcontainer:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/MultipleQFIcontainer'

**minItems:** 0

**uPFID:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/NfInstanceId'

**roamingChargingProfile:**

**Reference:** '#/components/schemas/RoamingChargingProfile'

## MultipleQFIcontainer

**Type:** object

**Properties:**

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**triggerTimestamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**time:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**totalVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**uplinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**localSequenceNumber:**

**Type:** integer

**qFIContainerInformation:**

**Reference:** '#/components/schemas/QFIContainerInformation'

**Required:**

- localSequenceNumber

## QFIContainerInformation

**Type:** object

**Properties:**

**qFI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Qfi'

**timeofFirstUsage:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**timeofLastUsage:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**qoSInformation:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DefaultQoSInformation'

**userLocationInformation:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/UserLocation'

**uetimeZone:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/TimeZone'

**presenceReportingAreaInformation:**

**Type:** object

**additionalProperties:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/PresenceInfo'

**minProperties:** 0

**rATType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**servingNetworkFunctionID:**

**Type:** array

**Items:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Guami'

**minItems:** 0

**3gppPSDataOffStatus:**

**Reference:** '#/components/schemas/3GPPPSDataOffStatus'

## RoamingChargingProfile

**Type:** object

**Properties:**

**triggers:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/Trigger'

**minItems:** 0

**partialRecordMethod:**

**Reference:** '#/components/schemas/PartialRecordMethod'

## SMSChargingInformation

**Type:** object

**Properties:**

**originatorInfo:**

**Reference:** '#/components/schemas/OriginatorInfo'

**recipientInfo:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/RecipientInfo'

**minItems:** 0

**userEquipmentInfo:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Pei'

**userLocationinfo:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/UserLocation'

**uetimeZone:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/TimeZone'

**rATType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**sMSCAddress:**

**Type:** string

**sMDataCodingScheme:**

**Type:** integer

**sMMessageType:**

**Reference:** '#/components/schemas/SMMessageType'

**sMReplyPathRequested:**

**Reference:** '#/components/schemas/ReplyPathRequested'

**sMUserDataHeader:**

**Type:** string

**sMStatus:**

**Type:** string

**sMDischargeTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**numberOfMessagesSent:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**sMServiceType:**

**Reference:** '#/components/schemas/SMServiceType'

**sMSequenceNumber:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**sMResult:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**submissionTime:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**sMPriority:**

**Reference:** '#/components/schemas/SMPriority'

**messageReference:**

**Type:** string

**messageSize:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

**messageClass:**

**Reference:** '#/components/schemas/MessageClass'

**deliveryReportRequested:**

**Reference:** '#/components/schemas/DeliveryReportRequested'

## OriginatorInfo

**Type:** object

**Properties:**

**originatorSUPI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Supi'

**originatorGPSI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

**originatorOtherAddress:**

**Reference:** '#/components/schemas/SMAddressInfo'

**originatorReceivedAddress:**

**Reference:** '#/components/schemas/SMAddressInfo'

**originatorSCCPAddress:**

**Type:** string

**sMOriginatorInterface:**

**Reference:** '#/components/schemas/SMInterface'

**sMOriginatorProtocolId:**

**Type:** string

## RecipientInfo

**Type:** object

**Properties:**

**recipientSUPI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Supi'

**recipientGPSI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Gpsi'

**recipientOtherAddress:**

**Reference:** '#/components/schemas/SMAddressInfo'

**recipientReceivedAddress:**

**Reference:** '#/components/schemas/SMAddressInfo'

**recipientSCCPAddress:**

**Type:** string

**sMDestinationInterface:**

**Reference:** '#/components/schemas/SMInterface'

**sMrecipientProtocolId:**

**Type:** string

## SMAddressInfo

**Type:** object

**Properties:**

**sMaddressType:**

**Reference:** '#/components/schemas/SMAddressType'

**sMaddressData:**

**Type:** string

**sMaddressDomain:**

**Reference:** '#/components/schemas/SMAddressDomain'

## RecipientAddress

**Type:** object

**Properties:**

**recipientAddressInfo:**

**Reference:** '#/components/schemas/SMAddressInfo'

**sMaddresseeType:**

**Reference:** '#/components/schemas/SMAddresseeType'

## MessageClass

**Type:** object

**Properties:**

**classIdentifier:**

**Reference:** '#/components/schemas/ClassIdentifier'

**tokenText:**

**Type:** string

## SMAddressDomain

**Type:** object

**Properties:**

**domainName:**

**Type:** string

**3GPPIMSIMCCMNC:**

**Type:** string

## SMInterface

**Type:** object

**Properties:**

**interfaceId:**

**Type:** string

**interfaceText:**

**Type:** string

**interfacePort:**

**Type:** string

**interfaceType:**

**Reference:** '#/components/schemas/InterfaceType'

## RANSecondaryRATUsageReport

**Type:** object

**Properties:**

**rANSecondaryRATType:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/RatType'

**qosFlowsUsageReports:**

**Type:** array

**Items:**

**Reference:** '#/components/schemas/QosFlowsUsageReport'

## RatingGroup

**Type:** Uint32

## ServiceId

**Type:** Uint32

## Diagnostics

**Type:** integer

## IPFilterRule

**Type:** string

## ChargingId

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint32'

## QosFlowsUsageReport

**Type:** object

**Properties:**

**qFI:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Qfi'



**startTimestamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**endTimestamp:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/DateTime'

**uplinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

**downlinkVolume:**

**Reference:** 'TS29571\_CommonData.yaml#/components/schemas/Uint64'

## NotificationType

**anyOf:**

- type: string

**enum:**

- REAUTHORIZATION

- ABORT\_CHARGING

- type: string

## NodeFunctionality

**anyOf:**

- type: string

**enum:**

- SMF

- type: string

## ChargingCharacteristicsSelectionMode

**anyOf:**

- type: string

**enum:**

- HOME\_DEFAULT

- ROAMING\_DEFAULT

- VISITING\_DEFAULT

- type: string

## TriggerType

**anyOf:**

- type: string

**enum:**

- QUOTA\_THRESHOLD
- QHT
- FINAL
- QUOTA\_EXHAUSTED
- VALIDITY\_TIME
- OTHER\_QUOTA\_TYPE
- FORCED\_REAUTHORISATION
- UNUSED\_QUOTA\_TIMER
- ABNORMAL\_RELEASE
- QOS\_CHANGE
- VOLUME\_LIMIT
- TIME\_LIMIT
- PLMN\_CHANGE
- USER\_LOCATION\_CHANGE
- RAT\_CHANGE
- UE\_TIMEZONE\_CHANGE
- TARIFF\_TIME\_CHANGE
- MAX\_NUMBER\_OF\_CHANGES\_IN CHARGING\_CONDITIONS
- MANAGEMENT\_INTERVENTION
- CHANGE\_OF\_UE\_PRESENCE\_IN PRESENCE\_REPORTING\_AREA
- CHANGE\_OF\_3GPP\_PS\_DATA\_OFF\_STATUS
- SERVING\_NODE\_CHANGE
- REMOVAL\_OF\_UPF
- ADDITION\_OF\_UPF
- type: string

**FinalUnitAction****anyOf:**

- type: string

**enum:**

- TERMINATE
- REDIRECT
- RESTRICT\_ACCESS
- type: string

## RedirectAddressType

**anyOf:**

- type: string

**enum:**

- IPV4

- IPV6

- URL

- type: string

## TriggerCategory

**anyOf:**

- type: string

**enum:**

- IMMEDIATE\_REPORT

- DEFERRED\_REPORT

- type: string

## QuotaManagementIndicator

**anyOf:**

- type: string

**enum:**

- ONLINE\_CHARGING

- OFFLINE\_CHARGING

- type: string

## FailureHandling

**anyOf:**

- type: string

**enum:**

- TERMINATE

- CONTINUE

- RETRY\_AND\_TERMINATE

- type: string

## SessionFailover

**anyOf:**

- type: string

**enum:**

- FAILOVER\_NOT\_SUPPORTED

- FAILOVER\_SUPPORTED

- type: string

### 3GPPPSDataOffStatus

**anyOf:**

- type: string

**enum:**

- ACTIVE

- INACTIVE

- type: string

### ResultCode

**anyOf:**

- type: string

**enum:**

- SUCCESS

- END\_USER\_SERVICE\_DENIED

- QUOTA\_MANAGEMENT\_NOT\_APPLICABLE

- QUOTA\_LIMIT\_REACHED

- END\_USER\_SERVICE\_REJECTED

- USER\_UNKNOWN

- RATING\_FAILED

- type: string

### PartialRecordMethod

**anyOf:**

- type: string

**enum:**

- DEFAULT

- INDIVIDUAL

- type: string

## RoamerInOut

**anyOf:**

- type: string

**enum:**

- IN\_BOUND

- OUT\_BOUND

- type: string

## SMMessageType

**anyOf:**

- type: string

**enum:**

- SUBMISSION

- DELIVERY\_REPORT

- SM\_SERVICE\_REQUEST

- type: string

## SMPriority

**anyOf:**

- type: string

**enum:**

- LOW

- NORMAL

- HIGH

- type: string

## DeliveryReportRequested

**anyOf:**

- type: string

**enum:**

- YES

- NO

- type: string

## InterfaceType

**anyOf:**

- type: string
- enum:**
- UNKNOWN
- MOBILE\_ORIGINATING
- MOBILE\_TERMINATING
- APPLICATION\_ORIGINATING
- APPLICATION\_TERMINATING
- type: string

## ClassIdentifier

- anyOf:**
- type: string
- enum:**
- PERSONAL
- ADVERTISEMENT
- INFORMATIONAL
- AUTO
- type: string

## SMAddressType

- anyOf:**
- type: string
- enum:**
- EMAIL\_ADDRESS
- MSISDN
- IPV4\_ADDRESS
- IPV6\_ADDRESS
- NUMERIC\_SHORTCODE
- ALPHANUMERIC\_SHORTCODE
- OTHER
- IMSI
- type: string

## SMAddresseeType

- anyOf:**
- type: string

**enum:**

- TO
- CC
- BCC
- type: string

**SMSericeType****anyOf:**

- type: string

**enum:**

- VAS4SMS\_SHORT\_MESSAGE\_CONTENT\_PROCESSING
- VAS4SMS\_SHORT\_MESSAGE\_FORWARDING
- VAS4SMS\_SHORT\_MESSAGE\_FORWARDING\_MULTIPLE\_SUBSCRIPTIONS
- VAS4SMS\_SHORT\_MESSAGE\_FILTERING
- VAS4SMS\_SHORT\_MESSAGE\_RECEIPT
- VAS4SMS\_SHORT\_MESSAGE\_NETWORK\_STORAGE
- VAS4SMS\_SHORT\_MESSAGE\_TO\_MULTIPLE\_DESTINATIONS
- VAS4SMS\_SHORT\_MESSAGE\_VIRTUAL\_PRIVATE\_NETWORK(VPN)
- VAS4SMS\_SHORT\_MESSAGE\_AUTO\_REPLY
- VAS4SMS\_SHORT\_MESSAGE\_PERSONAL\_SIGNATURE
- VAS4SMS\_SHORT\_MESSAGE\_DEFERRED\_DELIVERY
- VAS4SMS\_SHORT\_MESSAGE\_CONTENT\_PROCESSING
- type: string

**ReplyPathRequested****anyOf:**

- type: string

**enum:**

- NO\_REPLY\_PATH\_SET
- REPLY\_PATH\_SET
- type: string

