



# Nchf-Converged-Charging

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## OpenAPI

OpenAPI Version: 3.0.0

## Info

**Description:** ConvergedCharging Service

**Version:** 1.R15.0.0

**Title:** Nchf\_ConvergedCharging

## 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':

**Description:** Created

**Content:**

**Application/JSON:**

**Schema:**

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

'400':

**Description:** Bad request

**Content:**

**Application/JSON:**

**Schema:**

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

'403':

**Description:** Forbidden

**Content:**

**Application/JSON:**

**Schema:**

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

'404':

**Description:** 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':
      Description: 'No Content, Notification was succesfull'
    '400':
      Description: Bad request
      Content:
        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':
      Description: OK. Updated Charging Data resource is returned
      Content:
        Application/JSON:
          Schema:
            Reference: '#/components/schemas/ChargingDataResponse'
    '400':
      Description: Bad request
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'
    '403':
      Description: Forbidden
      Content:
        Application/JSON:
          Schema:
            Reference: 'TS29571_CommonData.yaml#/components/schemas/ProblemDetails'

```

```

'404':
  Description: 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':
  Description: No Content.
'404':
  Description: 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
pDUSessionChargingInformation:
  Reference: '#/components/schemas/PDUSessionChargingInformation'
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/ScsMode'
      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/SMMMessageType'
  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/SMSServiceType'
  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
SMSServiceType:
  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

```

## External Docs

### 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/'