**3GPP TSG-SA5 Meeting #133e *S5-205175***

**e-meeting 12th - 21st October 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.298** | **CR** | **0844** | **rev** | **1** | **Current version:** | **15.11.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correcting for unknown triggers in CHF CDR | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI15 | | | | |  | ***Date:*** | | | 2020-10-02 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) Rel-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The triggers are optional in TS 32.291. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding a value for unknown if no trigger is set by SMF | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Having a mandatory parameter that cannot be mapped to any real value may case interoperability issues. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.5.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | First revision of S5-205175. | | | | | | | | |

|  |
| --- |
| **First change** |

#### 5.2.5.2 CHF CDRs

This subclause contains the abstract syntax definitions that are specific to the CHF CDR types defined in this document.

.$CHFChargingDataTypes {itu-t (0) identified-organization (4) etsi (0) mobileDomain (0) charging (5) chfChargingDataTypes (15) asn1Module (0) version1 (0)}

DEFINITIONS IMPLICIT TAGS ::=

BEGIN

-- EXPORTS everything

IMPORTS

CallDuration,

CauseForRecClosing,

ChargingID,

DataVolumeOctets,

Diagnostics,

DynamicAddressFlag,

InvolvedParty,

IPAddress,

LocalSequenceNumber,

ManagementExtensions,

MessageClass,

MessageReference,

MSTimeZone,

NodeAddress,

PLMN-Id,

PriorityType,

RATType,

RecordType,

ServiceSpecificInfo,

Session-Id,

SubscriberEquipmentNumber,

SubscriptionID,

ThreeGPPPSDataOffStatus,

TimeStamp

FROM GenericChargingDataTypes {itu-t (0) identified-organization (4) etsi(0) mobileDomain (0) charging (5) genericChargingDataTypes (0) asn1Module (0) version2 (1)}

AddressString

FROM MAP-CommonDataTypes {itu-t identified-organization (4) etsi (0) mobileDomain (0) gsm-Network (1) modules (3) map-CommonDataTypes (18) version18 (18) }

ChargingCharacteristics,

ChargingRuleBaseName,

ChChSelectionMode,

EventBasedChargingInformation,

PresenceReportingAreaInfo,

RatingGroupId,

ServiceIdentifier

FROM GPRSChargingDataTypes {itu-t (0) identified-organization (4) etsi (0) mobileDomain (0) charging (5) gprsChargingDataTypes (2) asn1Module (0) version2 (1)}

OriginatorInfo,

RecipientInfo,

SMMessageType,

SMSResult,

SMSStatus

FROM SMSChargingDataTypes {itu-t (0) identified-organization (4) etsi(0) mobileDomain (0) charging (5) smsChargingDataTypes (10) asn1Module (0) version2 (1)}

;

--

-- CHF RECORDS

--

CHFRecord ::= CHOICE

--

-- Record values 200..201 are specific

--

{

chargingFunctionRecord [200] ChargingRecord

}

ChargingRecord ::= SET

{

recordType [0] RecordType,

recordingNetworkFunctionID [1] NetworkFunctionName,

subscriberIdentifier [2] SubscriptionID OPTIONAL,

nFunctionConsumerInformation [3] NetworkFunctionInformation,

triggers [4] SEQUENCE OF Trigger OPTIONAL,

listOfMultipleUnitUsage [5] SEQUENCE OF MultipleUnitUsage OPTIONAL,

recordOpeningTime [6] TimeStamp,

duration [7] CallDuration,

recordSequenceNumber [8] INTEGER OPTIONAL,

causeForRecClosing [9] CauseForRecClosing,

diagnostics [10] Diagnostics OPTIONAL,

localRecordSequenceNumber [11] LocalSequenceNumber OPTIONAL,

recordExtensions [12] ManagementExtensions OPTIONAL,

pDUSessionChargingInformation [13] PDUSessionChargingInformation OPTIONAL,

roamingQBCInformation [14] RoamingQBCInformation OPTIONAL,

sMSChargingInformation [15] SMSChargingInformation OPTIONAL,

chargingSessionIdentifier [16] ChargingSessionIdentifier OPTIONAL,

serviceSpecificationInformation [17] OCTET STRING OPTIONAL

}

--

-- PDU Session Charging Information

--

PDUSessionChargingInformation ::= SET

{

pDUSessionChargingID [0] ChargingID,

userIdentifier [1] InvolvedParty OPTIONAL,

userEquipmentInfo [2] SubscriberEquipmentNumber OPTIONAL,

userLocationInformation [3] UserLocationInformation OPTIONAL,

userRoamerInOut [4] RoamerInOut OPTIONAL,

presenceReportingAreaInfo [5] PresenceReportingAreaInfo OPTIONAL,

pDUSessionId [6] PDUSessionId,

networkSliceInstanceID [7] NetworkSliceInstanceID OPTIONAL,

pDUType [8] PDUSessionType OPTIONAL,

sSCMode [9] SSCMode OPTIONAL,

sUPIPLMNIdentifier [10] PLMN-Id OPTIONAL,

servingNetworkFunctionID [11] SEQUENCE OF ServingNetworkFunctionID OPTIONAL,

rATType [12] RATType OPTIONAL,

dataNetworkNameIdentifier [13] DataNetworkNameIdentifier OPTIONAL,

pDUAddress [14] PDUAddress OPTIONAL,

authorizedQoSInformation [15] AuthorizedQoSInformation OPTIONAL,

uETimeZone [16] MSTimeZone OPTIONAL,

pDUSessionstartTime [17] TimeStamp OPTIONAL,

pDUSessionstopTime [18] TimeStamp OPTIONAL,

diagnostics [19] Diagnostics OPTIONAL,

chargingCharacteristics [20] ChargingCharacteristics,

-- if chargingCharacteristics is not available a CHF configured value shall be used.

chChSelectionMode [21] ChChSelectionMode OPTIONAL,

threeGPPPSDataOffStatus [22] ThreeGPPPSDataOffStatus OPTIONAL,

rANSecondaryRATUsageReport [23] SEQUENCE OF NGRANSecondaryRATUsageReport OPTIONAL,

subscribedQoSInformation [24] SubscribedQoSInformation OPTIONAL,

authorizedSessionAMBR [25] SessionAMBR OPTIONAL,

subscribedSessionAMBR [26] SessionAMBR OPTIONAL,

servingCNPLMNID [27] PLMN-Id OPTIONAL,

sUPIunauthenticatedFlag [28] NULL OPTIONAL,

dNNSelectionMode [29] DNNSelectionMode OPTIONAL

}

--

-- Roaming QBC Information

--

RoamingQBCInformation ::= SET

{

multipleQFIcontainer [0] SEQUENCE OF MultipleQFIContainer OPTIONAL,

uPFID [1] NetworkFunctionName OPTIONAL,

roamingChargingProfile [2] RoamingChargingProfile OPTIONAL

}

--

-- SMS Charging Information

--

SMSChargingInformation ::= SET

{

sMSNodeAddress [0] AddressString,

originatorInfo [1] OriginatorInfo OPTIONAL,

recipientInfos [2] SEQUENCE OF RecipientInfo OPTIONAL,

userEquipmentInfo [3] SubscriberEquipmentNumber OPTIONAL,

userLocationInformation [4] UserLocationInformation OPTIONAL,

uETimeZone [5] MSTimeZone OPTIONAL,

rATType [6] RATType OPTIONAL,

sMSCAddress [7] AddressString OPTIONAL,

eventtimestamp [8] TimeStamp,

-- 9 to 19 is for future use

sMDataCodingScheme [20] INTEGER OPTIONAL,

sMMessageType [21] SMMessageType OPTIONAL,

sMReplyPathRequested [22] SMReplyPathRequested OPTIONAL,

sMUserDataHeader [23] OCTET STRING OPTIONAL,

sMSStatus [24] SMSStatus OPTIONAL,

sMDischargeTime [25] TimeStamp OPTIONAL,

sMTotalNumber [26] INTEGER OPTIONAL,

sMServiceType [27] SMServiceType OPTIONAL,

sMSequenceNumber [28] INTEGER OPTIONAL,

sMSResult [29] SMSResult OPTIONAL,

submissionTime [30] TimeStamp OPTIONAL,

sMPriority [31] PriorityType OPTIONAL,

messageReference [32] MessageReference,

messageSize [33] INTEGER OPTIONAL,

messageClass [34] MessageClass OPTIONAL,

sMdeliveryReportRequested [35] SMdeliveryReportRequested OPTIONAL

}

--

-- PDU Container Information

--

PDUContainerInformation ::= SEQUENCE

{

chargingRuleBaseName [0] ChargingRuleBaseName OPTIONAL,

aFCorrelationInformation [1] OCTET STRING OPTIONAL,

timeOfFirstUsage [2] TimeStamp OPTIONAL,

timeOfLastUsage [3] TimeStamp OPTIONAL,

qoSInformation [4] FiveGQoSInformation OPTIONAL,

userLocationInformation [5] UserLocationInformation OPTIONAL,

presenceReportingAreaInfo [6] PresenceReportingAreaInfo OPTIONAL,

rATType [7] RATType OPTIONAL,

sponsorIdentity [8] OCTET STRING OPTIONAL,

applicationServiceProviderIdentity [9] OCTET STRING OPTIONAL,

servingNetworkFunctionID [10] SEQUENCE OF ServingNetworkFunctionID OPTIONAL,

uETimeZone [11] MSTimeZone OPTIONAL,

threeGPPPSDataOffStatus [12] ThreeGPPPSDataOffStatus OPTIONAL

}

--

-- QFI Container Information

--

MultipleQFIContainer ::= SEQUENCE

{

qosFlowId [0] QoSFlowId OPTIONAL,

triggers [1] SEQUENCE OF Trigger,

triggerTimeStamp [2] TimeStamp OPTIONAL,

dataTotalVolume [3] DataVolumeOctets OPTIONAL,

dataVolumeUplink [4] DataVolumeOctets OPTIONAL,

dataVolumeDownlink [5] DataVolumeOctets OPTIONAL,

localSequenceNumber [6] LocalSequenceNumber OPTIONAL,

timeOfFirstUsage [8] TimeStamp OPTIONAL,

timeOfLastUsage [9] TimeStamp OPTIONAL,

qoSInformation [10] FiveGQoSInformation OPTIONAL,

userLocationInformation [11] UserLocationInformation OPTIONAL,

uETimeZone [12] MSTimeZone OPTIONAL,

presenceReportingAreaInfo [13] PresenceReportingAreaInfo OPTIONAL,

rATType [14] RATType OPTIONAL,

reportTime [15] TimeStamp,

-- if reportTime is not available a CHF configured value shall be used.

servingNetworkFunctionID [16] SEQUENCE OF ServingNetworkFunctionID OPTIONAL,

threeGPPPSDataOffStatus [17] ThreeGPPPSDataOffStatus OPTIONAL

}

--

-- CHF CHARGING TYPES

--

--

-- A

--

AllocationRetentionPriority ::= SEQUENCE

{

priorityLevel [1] INTEGER,

preemptionCapability [2] PreemptionCapability,

preemptionVulnerability [3] PreemptionVulnerability

}

AMFID ::= OCTET STRING (SIZE(6))

-- See subclause 2.10.1 of 3GPP TS 23.003 [7] for encoding.

-- AMFID is defined as an OCTET STRING with 3 bytes length, and is presented in first 3 bytes of this form, the last 3 bytes shall be padded with “FFF”

AuthorizedQoSInformation ::= SEQUENCE

--

-- See TS 32.291 [58] for more information

--

{

fiveQi [1] INTEGER,

-- if fiveQi is not available a CHF configured value shall be used.

aRP [2] AllocationRetentionPriority,

-- if aRPs not available a CHF configured value shall be used.

priorityLevel [3] INTEGER OPTIONAL,

averWindow [4] INTEGER OPTIONAL,

maxDataBurstVol [5] INTEGER OPTIONAL

}

--

-- B

--

Bitrate ::= OCTET STRING

--

-- See 3GPP TS 29.571 [249] Bitrate data type.

--

--

-- C

--

ChargingSessionIdentifier ::= OCTET STRING

-- See 3GPP TS 32.290 [57] for details.

--

-- D

--

DataNetworkNameIdentifier ::= IA5String (SIZE(1..63))

--

-- Network Identifier part of DNN in dot representation.

-- For example, if the complete DNN is 'apn1a.apn1b.apn1c.mnc022.mcc111.gprs'

-- The Identifier is 'apn1a.apn1b.apn1c' and is presented in this form in the CDR.

--

DNNSelectionMode ::= ENUMERATED

--

-- See Information Elements TS 29.502 [250] for more information

--

{

uEorNetworkProvidedSubscriptionVerified (0),

uEProvidedSubscriptionNotVerified (1),

networkProvidedSubscriptionNotVerified (2)

}

--

-- F

--

FiveGQoSInformation ::= SEQUENCE

--

-- See TS 32.291 [58] for more information

--

{

fiveQi [1] INTEGER,

-- if fiveQi is not available a CHF configured value shall be used.

aRP [2] AllocationRetentionPriority,

-- if aRP is not available a CHF configured value shall be used.

qoSNotificationControl [3] BOOLEAN OPTIONAL,

reflectiveQos [4] BOOLEAN OPTIONAL,

maxbitrateUL [5] Bitrate OPTIONAL,

maxbitrateDL [6] Bitrate OPTIONAL,

guaranteedbitrateUL [7] Bitrate OPTIONAL,

guaranteedbitrateDL [8] Bitrate OPTIONAL,

priorityLevel [9] INTEGER OPTIONAL,

averWindow [10] INTEGER OPTIONAL,

maxDataBurstVol [11] INTEGER OPTIONAL,

maxPacketLossRateDL [12] INTEGER OPTIONAL,

maxPacketLossRateUL [13] INTEGER OPTIONAL

}

--

-- M

--

MultipleUnitUsage ::= SEQUENCE

{

ratingGroup [0] RatingGroupId,

usedUnitContainers [1] SEQUENCE OF UsedUnitContainer OPTIONAL,

uPFID [2] NetworkFunctionName OPTIONAL

}

--

-- N

--

NetworkFunctionality ::= ENUMERATED

{

cHF (0), -- this value is not used

sMF (1),

aMF (2),

sMSF (3)

}

NetworkFunctionInformation ::= SEQUENCE

{

networkFunctionality [0] NetworkFunctionality,

networkFunctionName [1] NetworkFunctionName OPTIONAL,

networkFunctionIPv4Address [2] IPAddress OPTIONAL,

networkFunctionPLMNIdentifier [3] PLMN-Id OPTIONAL,

networkFunctionIPv6Address [4] IPAddress,

-- if networkFunctionIPv6Address is not available a CHF configured value shall be used.

networkFunctionFQDN [5] NodeAddress

-- if networkFunctionFQDN is not available a CHF configured value shall be used.

}

NetworkFunctionName ::= IA5String (SIZE(1.. 36))

-- Shall be a Universally Unique Identifier (UUID) version 4, as described in IETF RFC 4122 [410]

NetworkSliceInstanceID ::= SEQUENCE

-- See S-NSSAI subclause 28.4.2 of TS 23.003 [200] for encoding.

{

sST [0] SliceServiceType,

sD [1] SliceDifferentiator OPTIONAL

}

NGRANSecondaryRATType ::= OCTET STRING

--

-- "NR" or "EUTRA"

--

NGRANSecondaryRATUsageReport ::= SEQUENCE

{

nGRANSecondaryRATType [0] NGRANSecondaryRATType OPTIONAL,

qosFlowsUsageReports [1] SEQUENCE OF QosFlowsUsageReport OPTIONAL

}

--

-- Q

--

QoSFlowId ::= INTEGER

QosFlowsUsageReport ::= SEQUENCE

{

qosFlowId [0] QoSFlowId OPTIONAL,

startTime [1] TimeStamp,

endTime [2] TimeStamp,

dataVolumeDownlink [3] DataVolumeOctets,

dataVolumeUplink [4] DataVolumeOctets

}

--

-- P

--

PartialRecordMethod ::= ENUMERATED

{

default (0),

individual (1)

}

PDUAddress ::= SEQUENCE

{

pDUIPv4Address [0] IPAddress OPTIONAL,

pDUIPv6AddresswithPrefix [1] IPAddress OPTIONAL,

iPV4dynamicAddressFlag [2] DynamicAddressFlag OPTIONAL,

iPV6dynamicPrefixFlag [3] DynamicAddressFlag OPTIONAL

}

PDUSessionId ::= INTEGER (0..255)

--

-- See 3GPP TS 29.571 [249] for details

--

PDUSessionType ::= ENUMERATED

{

iPv4v6 (0),

iPv4 (1),

iPv6 (2),

unstructured (3),

ethernet (4)

}

-- See 3GPP TS 29.571 [249] for details.

PreemptionCapability ::= ENUMERATED

{

nOT-PREEMPT (0),

mAY-PREEMPT (1)

}

PreemptionVulnerability ::= ENUMERATED

{

nOT-PREEMPTABLE (0),

pREEMPTABLE (1)

}

--

-- R

--

RatingIndicator ::= BOOLEAN

-- Included if the units have been rated.

RoamingChargingProfile ::= SEQUENCE

{

roamingTriggers [0] SEQUENCE OF RoamingTrigger OPTIONAL,

partialRecordMethod [1] PartialRecordMethod OPTIONAL

}

RoamerInOut ::= ENUMERATED

{

roamerInBound (0),

roamerOutBound (1)

}

RoamingTrigger ::= SEQUENCE

{

trigger [0] SMFTrigger OPTIONAL,

triggerCategory [1] TriggerCategory OPTIONAL,

timeLimit [2] CallDuration OPTIONAL,

volumeLimit [3] DataVolumeOctets OPTIONAL,

maxNbChargingConditions [4] INTEGER OPTIONAL

}

--

-- S

--

ServingNetworkFunctionID ::= SEQUENCE

{

servingNetworkFunctionInformation [0] NetworkFunctionInformation,

aMFIdentifier [1] AMFID OPTIONAL

}

SessionAMBR ::= SEQUENCE

{

ambrUL [1] Bitrate,

ambrDL [2] Bitrate

}

SliceDifferentiator ::= OCTET STRING (SIZE(3))

--

-- See subclause 28.4.2 TS 23.003 [200]

--

SliceServiceType ::= INTEGER (0..255)

--

-- See subclause 28.4.2 TS 23.003 [200]

--

SMdeliveryReportRequested ::= ENUMERATED

{

yes (0),

no (1)

}

SMFTrigger ::= INTEGER

{

startOfPDUSession (1),

startOfServiceDataFlowNoSession (2),

-- Change of Charging conditions

qoSChange (100),

userLocationChange (101),

servingNodeChange (102),

presenceReportingAreaChange (103),

threeGPPPSDataOffStatusChange (104),

tariffTimeChange (105),

uETimeZoneChange (106),

pLMNChange (107),

rATTypeChange (108),

sessionAMBRChange (109),

additionOfUPF (110),

removalOfUPF (111),

gFBRGuaranteedStatusChange (115),

-- Limit per PDU session

pDUSessionExpiryDataTimeLimit (200),

pDUSessionExpiryDataVolumeLimit (201),

pDUSessionExpiryDataEventLimit (202),

pDUSessionExpiryChargingConditionChanges (203),

-- Limit per Rating group

ratingGroupDataTimeLimit (300),

ratingGroupDataVolumeLimit (301),

ratingGroupDataEventLimit (302),

-- Quota management

timeThresholdReached (400),

volumeThresholdReached (401),

unitThresholdReached (402),

timeQuotaExhausted (403),

volumeQuotaExhausted (404),

unitQuotaExhausted (405),

expiryOfQuotaValidityTime (406),

reAuthorizationRequest (407),

startOfServiceDataFlowNoValidQuota (408),

otherQuotaType (409),

-- Others

terminationOfServiceDataFlow (500),

managementIntervention (501),

unitCountInactivityTimer (502),

endOfPDUSession (503),

cHFResponseWithSessionTermination (504),

cHFAbortRequest (505),

abnormalRelease (506),

unknown (507), -- used if not provided by SMF

-- Limit per QoS Flow

qoSFlowExpiryDataTimeLimit (600),

qoSFlowExpiryDataVolumeLimit (601)

}

-- See TS 32.255 [15] for details.

SMReplyPathRequested ::= ENUMERATED

{

noReplyPathSet (0),

replyPathSet (1)

}

SMServiceType ::= INTEGER

{

-- 0 to 10 VAS4SMS Short Message, see TS TS 22.142 [x] for details

contentProcessing (0),

forwarding (1),

forwardingMultipleSubscriptions (2),

filtering (3),

receipt (4),

networkStorage (5),

toMultipleDestinations (6),

virtualPrivateNetwork (7),

autoreply (8),

personalSignature (9),

deferredDelivery (10)

-- 11 to 99 Reserved for 3GPP defined SM services

-- 100 to 199 Vendor specific SM services

}

SSCMode ::= INTEGER

{

sSCMode1 (1),

sSCMode2 (2),

sSCMode3 (3)

}

-- See 3GPP TS 29.501 [248] for details.

SubscribedQoSInformation ::= SEQUENCE

--

-- See TS 32.291 [58] for more information

--

{

fiveQi [1] INTEGER,

-- if fiveQi is not available a CHF configured value shall be used.

aRP [2] AllocationRetentionPriority OPTIONAL,

priorityLevel [3] INTEGER OPTIONAL

}

--

-- T

--

Trigger ::= CHOICE

{

sMFTrigger [0] SMFTrigger

}

TriggerCategory ::= ENUMERATED

{

immediateReport (0),

deferredReport (1)

}

--

-- U

--

UsedUnitContainer ::= SEQUENCE

{

serviceIdentifier [0] ServiceIdentifier OPTIONAL,

time [1] CallDuration OPTIONAL,

triggers [2] SEQUENCE OF Trigger,

triggerTimeStamp [3] TimeStamp OPTIONAL,

dataTotalVolume [4] DataVolumeOctets OPTIONAL,

dataVolumeUplink [5] DataVolumeOctets OPTIONAL,

dataVolumeDownlink [6] DataVolumeOctets OPTIONAL,

serviceSpecificUnits [7] INTEGER OPTIONAL,

eventTimeStamp [8] TimeStamp OPTIONAL,

localSequenceNumber [9] LocalSequenceNumber OPTIONAL,

ratingIndicator [10] RatingIndicator OPTIONAL,

pDUContainerInformation [11] PDUContainerInformation OPTIONAL,

quotaManagementIndicator [12] BOOLEAN OPTIONAL

}

UserLocationInformation ::= OCTET STRING

--

-- This data is converted from JSON format of the User Location as described in TS 29.571 [249].

--

.#END

|  |
| --- |
| **End of changes** |