**3GPP TSG-SA5 Meeting #130-e *S5-202120***

**Online, , 20th Apr 2020 - 28th Apr 2020**

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **32.298** | **CR** | **0806** | **rev** | **1** | **Current version:** | **15.10.1** |  |
|  |
| *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:***  | Correction of UserLocationInformation |
|  |  |
| ***Source to WG:*** | China Mobile Com. Corporation |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | 5GS\_Ph1-DCH |  | ***Date:*** | 2020-04-23 |
|  |  |  |  |  |
| ***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 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | UserLocationInformation is of type OCTET STRING in CHF CDR. However, Type: UserLocation defined in TS 29.571 is JSON format. How to convert from JSON format to OCTET STRING format is undefined, which leads to inconsistent implementation. |
|  |  |
| ***Summary of change:*** | Use TS 29.061 to define UserLocationInformation in CHF CDR. |
|  |  |
| ***Consequences if not approved:*** | Inconsistent implementation can cause billing error. |
|  |  |
| ***Clauses affected:*** | 5.1.5.1.15, 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 change** |

##### 5.1.5.1.15 User Location Information

This field contains the User Location Information as described in TS 29.061 [216]. Any value that cannot be encoded as a P-GW Geographic Location Type value received in the UserLocationinfo on Nchf shall be discarded, e.g. N3gaLocation and ueLocationTimestamp.

|  |
| --- |
| **Second 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),

 atartOfServiceDataFlowNoSession (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),

-- 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),

-- 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

--

-- See 3GPP TS 29.061 [216] for details.

--

.#END

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