3GPP TSG SA WG5 Meeting 135-e S5-211270

electronic meeting, online, 25 January - 3 February 2021

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.298** | **CR** | **0861** | **rev** | **-** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *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 backwards compatibility for OriginatorInfo and RecipientInfo | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | S5 | | | | | | | | | |
| ***Source to TSG:*** | Ericsson LM | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2021-01-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The change in CR#0841 of OriginatorInfo and RecipientInfo to sequences have made the specification non-backwards compatible. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Removing the sequence for the OriginatorInfo and RecipientInfo and adding to new parameters for the sequences. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The specification is not backwards compatible which may lead to interoperability issues. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.4.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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** |

#### 5.2.4.6 SMS CDRs

This subclause contains the abstract syntax definitions that are specific to the CDR types defined in TS 32.274 [34].

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

DEFINITIONS IMPLICIT TAGS ::=

BEGIN

-- EXPORTS everything

IMPORTS

DataVolume

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

DiameterIdentity,

LocalSequenceNumber,

ManagementExtensions,

MessageClass,

MessageReference,

MSISDN,

MSTimeZone,

NodeAddress,

PDPAddress,

PLMN-Id,

PriorityType,

RATType,

RecordType,

Session-Id,

SMSResult,

SubscriberEquipmentNumber,

SubscriptionID,

TimeStamp

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

AddressString,

IMEI,

IMSI,

ISDN-AddressString

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

-- from TS 29.002 [214]

CarrierSelectRouting,

NumberPortabilityRouting

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

;

--

-- SMS RECORDS

--

SMSRecordType ::= CHOICE

--

-- Record values 93,94, 110 to 113 are SMS specific.

--

{

sCSMORecord [93] SCSMORecord,

sCSMTRecord [94] SCSMTRecord,

sCDVTT4Record [110] SCDVTT4Record,

sCSMOT4Record [111] SCSMTRecord,

iSMSMORecord [112] ISMSMORecord,

iSMSMTRecord [113] ISMSMTRecord

}

SCSMORecord ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] AddressString,

originatorInfo [2] OriginatorInfo OPTIONAL,

recipientInfo [3] SEQUENCE OF RecipientInfo OPTIONAL,

servedIMEI [4] IMEI OPTIONAL,

eventtimestamp [5] TimeStamp,

messageReference [6] MessageReference,

sMTotalNumber [7] INTEGER OPTIONAL,

sMSequenceNumber [8] INTEGER OPTIONAL,

messageSize [9] DataVolume OPTIONAL,

messageClass [10] MessageClass OPTIONAL,

sMdeliveryReportRequested [11] BOOLEAN OPTIONAL,

sMDataCodingScheme [12] INTEGER OPTIONAL,

sMMessageType [13] SMMessageType OPTIONAL,

sMReplyPathRequested [14] NULL OPTIONAL,

sMUserDataHeader [15] OCTET STRING OPTIONAL,

userLocationInfo [16] OCTET STRING OPTIONAL,

rATType [17] RATType OPTIONAL,

uETimeZone [18] MSTimeZone OPTIONAL,

sMSResult [19] SMSResult OPTIONAL,

localSequenceNumber [22] LocalSequenceNumber OPTIONAL,

recordExtensions [23] ManagementExtensions OPTIONAL

}

SCSMOT4Record ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] AddressString,

originatorInfo [2] OriginatorInfo OPTIONAL,

recipientInfo [3] RecipientInfo OPTIONAL,

servedIMEI [4] IMEI OPTIONAL,

eventtimestamp [5] TimeStamp,

messageReference [6] MessageReference,

messageSize [9] DataVolume OPTIONAL,

messageClass [10] MessageClass OPTIONAL,

sMdeliveryReportRequested [11] BOOLEAN OPTIONAL,

sMDataCodingScheme [12] INTEGER OPTIONAL,

sMMessageType [13] SMMessageType OPTIONAL,

sMReplyPathRequested [14] NULL OPTIONAL,

sMUserDataHeader [15] OCTET STRING OPTIONAL,

userLocationInfo [16] OCTET STRING OPTIONAL,

rATType [17] RATType OPTIONAL,

uETimeZone [18] MSTimeZone OPTIONAL,

sMSResult [19] SMSResult OPTIONAL,

mTCIWFAddress [20] NodeAddress OPTIONAL,

sMSApplicationPortID [21] INTEGER OPTIONAL,

externalIdentifier [22] SubscriptionID OPTIONAL,

localSequenceNumber [23] LocalSequenceNumber OPTIONAL,

recordExtensions [24] ManagementExtensions OPTIONAL

}

SCSMTRecord ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] AddressString,

recipientInfo [2] RecipientInfo OPTIONAL,

originatorInfo [3] OriginatorInfo OPTIONAL,

servedIMEI [4] IMEI OPTIONAL,

submissionTime [5] TimeStamp OPTIONAL,

eventtimestamp [6] TimeStamp,

sMPriority [7] PriorityType OPTIONAL,

messageReference [8] MessageReference OPTIONAL,

sMTotalNumber [9] INTEGER OPTIONAL,

sMSequenceNumber [10] INTEGER OPTIONAL,

messageSize [11] DataVolume OPTIONAL,

messageClass [12] MessageClass OPTIONAL,

sMdeliveryReportRequested [13] BOOLEAN OPTIONAL,

sMDataCodingScheme [14] INTEGER OPTIONAL,

sMMessageType [15] SMMessageType OPTIONAL,

sMReplyPathRequested [16] NULL OPTIONAL,

sMUserDataHeader [17] OCTET STRING OPTIONAL,

sMSStatus [18] SMSStatus OPTIONAL,

sMDischargeTime [19] TimeStamp OPTIONAL,

userLocationInfo [20] OCTET STRING OPTIONAL,

rATType [21] RATType OPTIONAL,

uETimeZone [22] MSTimeZone OPTIONAL,

sMSResult [23] SMSResult OPTIONAL,

sMDeviceTriggerInformation [25] SMDeviceTriggerInformation OPTIONAL,

localSequenceNumber [26] LocalSequenceNumber OPTIONAL,

recordExtensions [27] ManagementExtensions OPTIONAL

}

SCDVTT4Record ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] AddressString,

eventtimestamp [2] TimeStamp,

originatorInfo [3] OriginatorInfo OPTIONAL,

recipientInfo [4] RecipientInfo OPTIONAL,

sMDeviceTriggerIndicator [5] SMDeviceTriggerIndicator OPTIONAL,

sMDeviceTriggerInformation [6] SMDeviceTriggerInformation OPTIONAL,

sMSResult [7] SMSResult OPTIONAL,

localSequenceNumber [9] LocalSequenceNumber OPTIONAL,

recordExtensions [10] ManagementExtensions OPTIONAL

}

ISMSMORecord ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] NodeAddress,

originatorInfo [2] OriginatorInfo OPTIONAL,

recipientInfo [3] SEQUENCE OF RecipientInfo OPTIONAL,

subscriberEquipmentNumber [4] SubscriberEquipmentNumber OPTIONAL,

eventtimestamp [5] TimeStamp,

messageReference [6] MessageReference,

sMTotalNumber [7] INTEGER OPTIONAL,

sMSequenceNumber [8] INTEGER OPTIONAL,

messageSize [9] DataVolume OPTIONAL,

messageClass [10] MessageClass OPTIONAL,

sMdeliveryReportRequested [11] BOOLEAN OPTIONAL,

sMDataCodingScheme [12] INTEGER OPTIONAL,

sMMessageType [13] SMMessageType OPTIONAL,

sMReplyPathRequested [14] NULL OPTIONAL,

sMUserDataHeader [15] OCTET STRING OPTIONAL,

sMSResult [16] SMSResult OPTIONAL,

userLocationInfo [17] OCTET STRING OPTIONAL,

rATType [18] RATType OPTIONAL,

uETimeZone [19] MSTimeZone OPTIONAL,

pDPAddress [20] PDPAddress OPTIONAL,

session-Id [21] Session-Id OPTIONAL,

numberPortabilityRouting [22] NumberPortabilityRouting OPTIONAL,

carrierSelectRouting [23] CarrierSelectRouting OPTIONAL,

localSequenceNumber [24] LocalSequenceNumber OPTIONAL,

recordExtensions [25] ManagementExtensions OPTIONAL

}

ISMSMTRecord ::= SET

{

recordType [0] RecordType,

sMSNodeAddress [1] NodeAddress,

recipientInfo [2] RecipientInfo OPTIONAL,

originatorInfo [3] OriginatorInfo OPTIONAL,

subscriberEquipmentNumber [4] SubscriberEquipmentNumber OPTIONAL,

submissionTime [5] TimeStamp OPTIONAL,

eventtimestamp [6] TimeStamp,

sMPriority [7] PriorityType OPTIONAL,

messageReference [8] MessageReference,

sMTotalNumber [9] INTEGER OPTIONAL,

sMSequenceNumber [10] INTEGER OPTIONAL,

messageSize [11] DataVolume OPTIONAL,

messageClass [12] MessageClass OPTIONAL,

sMdeliveryReportRequested [13] BOOLEAN OPTIONAL,

sMDataCodingScheme [14] INTEGER OPTIONAL,

sMMessageType [15] SMMessageType OPTIONAL,

sMReplyPathRequested [16] NULL OPTIONAL,

sMUserDataHeader [17] OCTET STRING OPTIONAL,

sMSStatus [18] SMSStatus OPTIONAL,

sMDischargeTime [19] TimeStamp OPTIONAL,

userLocationInfo [20] OCTET STRING OPTIONAL,

rATType [21] RATType OPTIONAL,

uETimeZone [22] MSTimeZone OPTIONAL,

sMSResult [23] SMSResult OPTIONAL,

pDPAddress [24] PDPAddress OPTIONAL,

session-Id [25] Session-Id OPTIONAL,

numberPortabilityRouting [26] NumberPortabilityRouting OPTIONAL,

carrierSelectRouting [27] CarrierSelectRouting OPTIONAL,

localSequenceNumber [28] LocalSequenceNumber OPTIONAL,

recordExtensions [29] ManagementExtensions OPTIONAL

}

--

-- SMS DATA TYPES

--

OriginatorInfo ::= SEQUENCE

--

-- OriginatorInfo is used for information about Originator of a Short Message

--

{

originatorIMSI [0] IMSI OPTIONAL,

originatorMSISDN [1] MSISDN OPTIONAL,

originatorOtherAddress [2] SMAddressInfo OPTIONAL,

-- included for backwards compatibility

originatorSCCPAddress [3] AddressString OPTIONAL,

originatorReceivedAddress [4] SMAddressInfo OPTIONAL,

sMOriginatorInterface [5] SMInterface OPTIONAL,

sMOriginatorProtocolID [6] OCTET STRING OPTIONAL

originatorOtherAddresses [7] SEQUENCE OF SMAddressInfo OPTIONAL,

-- used if type different from IMSI and MSISDN

}

RecipientInfo ::= SEQUENCE

--

-- RecipientInfo is used for information about Recipient of a Short Message

--

{

recipientIMSI [0] IMSI OPTIONAL,

recipientMSISDN [1] MSISDN OPTIONAL,

recipientOtherAddress [2] SMAddressInfo OPTIONAL,

-- included for backwards compatibility

recipientSCCPAddress [3] AddressString OPTIONAL,

recipientReceivedAddress [4] SMAddressInfo OPTIONAL,

sMDestinationInterface [5] SMInterface OPTIONAL,

sMRecipientProtocolID [6] OCTET STRING OPTIONAL

recipientOtherAddresses [7] SEQUENCE OF SMAddressInfo OPTIONAL,

-- used if type different from IMSI and MSISDN

}

SMAddressDomain ::= SEQUENCE  
{

sMDomainName [0] GraphicString OPTIONAL,

threeGPPIMSI-MCC-MNC [1] PLMN-Id OPTIONAL

}

SMAddressInfo ::= SEQUENCE  
{

sMAddressType [0] SMAddressType OPTIONAL,

sMAddressData [1] GraphicString OPTIONAL,

sMAddressDomain [2] SMAddressDomain OPTIONAL

}

SMAddressType ::= ENUMERATED

{

emailAddress (0),

mSISDN (1),

iPv4Address (2),

iPv6Address (3),

numericShortCode (4),

alphanumericShortCode (5),

other (6),

iMSI (7),

nAI (8),

externalId (9)

}

SMDeviceTriggerIndicator ::= ENUMERATED

{

notDeviceTrigger (0),

deviceTriggerRequest (1),

deviceTriggerReplace (2),

deviceTriggerRecall (3)

}

SMDeviceTriggerInformation ::= SEQUENCE

--

-- SMDeviceTriggerInformation is used for information on device triggering from T4

-- as specified in TS 29.337[231]

--

{

mTCIWFAddress [0] NodeAddress OPTIONAL,

sMDTReferenceNumber [1] INTEGER OPTIONAL,

sMServingNode [2] SMServingNode OPTIONAL,

sMDTValidityPeriod [3] INTEGER OPTIONAL,

sMDTPriorityIndication [4] SMDTPriorityIndication OPTIONAL,

sMSApplicationPortID [5] INTEGER OPTIONAL

}

SMDTPriorityIndication ::= ENUMERATED

{

nonpriority (0),

priority (1)

}

SMInterface ::= SEQUENCE  
{

interfaceId [0] GraphicString OPTIONAL,

interfaceText [1] GraphicString OPTIONAL,

interfacePort [2] GraphicString OPTIONAL,

interfaceType [3] SMInterfaceType OPTIONAL

}

SMInterfaceType ::= ENUMERATED

{

unkown (0),

mobileOriginating (1),

mobileTerminating (2),

applicationOriginating (3),

applicationTerminating (4),

deviceTrigger (5)

}

SMMessageType ::= ENUMERATED

{

submission (0),

deliveryReport (1),

sMServiceRequest (2),

delivery (3),

t4DeviceTrigger (4),

sMDeviceTrigger (5)

}

SMServingNode ::= SEQUENCE  
{

sGSNName [0] DiameterIdentity OPTIONAL,

sGSNRealm [1] DiameterIdentity OPTIONAL,

sGSNNumber [2] AddressString OPTIONAL,

mMEName [3] DiameterIdentity OPTIONAL,

mMERealm [4] DiameterIdentity OPTIONAL,

mMENumberForMTSMS [5] AddressString OPTIONAL,

mSCNumber [6] AddressString OPTIONAL,

iPSMGWNumber [7] AddressString OPTIONAL,

iPSMGWName [8] DiameterIdentity OPTIONAL

}

SMSStatus ::= OCTET STRING (SIZE(1))

.#END

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