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

electronic meeting, online, 25 January - 3 February 2021

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| --- |
| *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)*.* |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***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 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-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** |