**3GPP TSG-SA3 Meeting #95-LI *s3i240739***

**Las Vegas, United States, 29th Oct 2024 - 1st Nov 2024**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.128** | **CR** | **0684** | **rev** | **1** | **Current version:** | **16.17.0** |  |
|  | | | | | | | | |
| *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** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Solution for email target identifier in MMS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (OTD\_US) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI16 | | | | |  | ***Date:*** | | | 2024-10-21 |
|  |  | | | |  | |  | | |  |
| ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Current version of MMS solution is failing to intercept some messages with an email target identifier. This CR adds a solution to capture the missing messages for email target identifiers in the MMS Proxy-Relay. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adds a new trigger for xIRI and adds two additional xIRI messages in the event of a translation between Email and MMS messages. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The current solution will remain incomplete and be unable to intercept messages which are translated for the external interface (MM3) in the MMS Proxy-Relay. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.4.2.4, 7.4.3.2a(new), 7.4.3.4a(new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 has the following changes in the forge:  Merge Request: [!287](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/287)  Commit Hash: [ae23dca9c70400e159aa146d96c693796a2c9089](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/287/diffs?commit_id=ae23dca9c70400e159aa146d96c693796a2c9089) | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | s3i240662 | | | | | | | | |

## \*\*\*\* START OF FIRST CHANGE (MAIN DOCUMENT) \*\*\*\*

#### 7.4.2.4 MMS Record Generation Cases

The triggers for MMS record generation are detailed in each of the clauses 7.4.3.1 through 7.4.3.20. All triggers are defined by the detection of messages at the local MMS Proxy-Relay. They belong to one of the following high-level categories:

- at the local MMS Proxy-Relay, the sending or arrival of a message, either to or from the local target UE, using OMA-TS-MMS\_ENC [39] definitions, or

- at the local MMS Proxy-Relay, the sending or arrival of a message to or from a non-local MMS Proxy-Relay, pertaining to messages either to or from a non-local target UE served by that non-local MMS Proxy-Relay, using the inter-proxy MM4 reference point, 3GPP TS 23.140 [40] clause 8.4 definitions, or

- at the local MMS Proxy-Relay, the sending or arrival of a message to or from an external server (e.g. MM3 interface), pertaining to messages to or from a non-local target UE, using TS 23.140 [40] Annex D and Annex D1 for transformed message definitions.

NOTE: A clear mapping of OMA WAP PDUs to 3GPP Abstract Messages is defined in OMA-TS-MMS\_ENC [39] Appendix C.

The present document assumes that the intercepted MMS complies with version 1.3 of OMA-TS-MMS\_ENC [39]. If the intercepted messages do not comply fully, or the version is other than 1.3, parameters are required to be provided only if available.

In the following tables, the acronym Multimedia Message (MM) refers to a message in particular, while Multimedia Message Service (MMS) refers to the service in general.

## \*\*\*\* END OF FIRST CHANGE (MAIN DOCUMENT) \*\*\*\*

## \*\*\*\* START OF SECOND CHANGE (MAIN DOCUMENT) \*\*\*\*

#### 7.4.3.2a MMSConvertedFromEmail

The IRI-POI in the MMS Proxy-Relay shall generate an xIRI containing an MMSConvertedFromEmail record when the MMS Proxy-Relay transforms an email from an external server (as defined in 23.140 [40] Annex D and Annex D1) that contains a non-local target ID.

Table 7.4.3-2a contains parameters generated by the IRI-POI, along with parameters derived from the transformed message.

Table 7.4.3-2a: Payload for MMSConvertedFromEmail

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| version | The version of MM, to include major and minor version. Generated by the Proxy-Relay at the time of conversion. | M |
| transactionID | An ID used to correlate an MMS request and response between the target and the MMS Proxy-Relay. Generated by MMS Proxy-Relay at the time of conversion. As defined in OMA-TS-MMS\_ENC [39] clause 7.3.63. | M |
| terminatingMMSParty | ID(s) of the terminating party in one or more of the formats described in 7.4.2.1 (see NOTE). | M |
| contentType | The content type of the transformed message (see NOTE). | M |
| originatingMMSParty | ID of the originating party in one or more of the formats described in 7.4.2.1 (see NOTE). | M |
| messageClass | Class of the MM. For example, a value of "auto" is automatically generated by the UE.  Should be created by the MMS Proxy-Relay at the time of conversion and set to "personal". Include when created by the MMS Proxy-Relay at the time of transformation. | C |
| dateTime | Date and Time when the message was last handled (either originated or forwarded) (see NOTE). | M |
| expiry | Length of time in seconds the MM will be stored in MMS Proxy-Relay or time to delete the MM Include when sent to the MMS Proxy-Relay (see NOTE). | C |
| deliveryReport | Specifies whether the originator email requests a delivery report from each recipient. Sent by the target to indicate the desired delivery report. Shall be encoded as follows: "Yes" = True, "No" = False. Include if sent to the MMS Proxy-Relay (see NOTE). | C |
| priority | Priority of the email assigned by the originator. Include if sent to the MMS Proxy-Relay (see NOTE). | C |
| readReport | Specifies whether the originator requests a read reply report from each recipient. Sent by the target to indicate the desired read reply report (see NOTE). Shall be encoded as follows: "Yes" = True, "No" = False. Include if sent to the MMS Proxy-Relay. | C |
| subject | The subject of the email. Include if sent to the MMS Proxy-Relay. | C |
| messageID | An ID assigned by the MMS Proxy-Relay to uniquely identify an MM. Include if sent to the MMS Proxy-Relay (see NOTE). | C |
| NOTE: The transformation of these fields from an email header to an MMS information element is defined in TS 23.140 [40] Table D1.3. | | |

## \*\*\*\* END OF SECOND CHANGE (MAIN DOCUMENT) \*\*\*\*

## \*\*\*\* START OF THRID CHANGE (MAIN DOCUMENT) \*\*\*\*

#### 7.4.3.4a MMSConvertedToEmail

The IRI-POI in the MMS Proxy-Relay shall generate an xIRI containing an MMSConvertedToEmail record when the MMS Proxy-Relay transforms a submitted MM into an email format (as defined in TS 23.140 [40] Table D1.1) to a non-local target ID.

Table 7.4.3-4a contains parameters generated by the IRI-POI, along with parameters derived from the submitted MM message being transformed into an external format.

Table 7.4.3-4a: Payload for MMSConvertedToEmail

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| version | The version of MM, to include major and minor version. Retreaved from the submitted MM being transformed into external format. | M |
| transactionID | An ID used to correlate an MMS request and response between the sender and the MMS Proxy-Relay. Retreaved from the submitted MM. As defined in OMA-TS-MMS\_ENC [39] clause 7.3.63. | M |
| terminatingMMSParty | ID(s) of the terminating party in one or more of the formats described in 7.4.2.1. | M |
| contentType | The content type of the MM. As defined in TS 23.140 [40] clause D1.1. | M |
| originatingMMSParty | ID of the originating party in one or more of the formats described in 7.4.2.1. | M |
| messageClass | Class of the MM. For example, a value of "auto" is automatically generated by the UE. If the field is not present, the class should be interpreted as "personal". Retreaved from the submitted MM being transformed into external format. Include if sent to the MMS Proxy-Relay. | C |
| dateTime | Date and Time when the MM was last handled (either originated or forwarded). For origination, included by the sending MMS client or the originating MMS Proxy-Relay. | M |
| expiry | Length of time in seconds the MM will be stored in MMS Proxy-Relay or time to delete the MM. The field has two formats, either absolute or relative. Include if sent to the MMS Proxy-Relay. | C |
| desiredDeliveryTime | Date and Time of desired delivery. Indicates the earliest possible delivery of the MM to the recipient. Include if sent to the MMS Proxy-Relay. Retrieved from the submitted MM1 "Earliest Delivery Time" information element. | C |
| deliveryReport | Specifies whether the originator MM UE requests a delivery report from each recipient. Sent by the sender to indicate the desired delivery report. Shall be encoded as follows: "Yes" = True, "No" = False. Include if sent to the MMS Proxy-Relay. | C |
| priority | Priority of the MM assigned by the originator MMS Client. Include if sent to the MMS Proxy-Relay. | C |
| senderVisibility | An indication that the sender's address should not be delivered to the recipient. Sent by the sender to indicate the sender’s visibility to the other party or if not signalled by the sender and the default is to not make sender visible to the other party. Shall be encoded as follows: "Show" = True, "Hide" = False. Include if sent to the MMS Proxy-Relay. | C |
| store | Specifies whether the originator MM UE wants the submitted MM to be saved in the user's MMBox, in addition to sending it. Shall be encoded as follows: "Yes" = True, "No" = False. Include if sent to the MMS Proxy-Relay. | C |
| state | Identifies the value of the MM State associated with a to be stored or stored MM. Include if sent to the MMS Proxy-Relay. | C |
| flags | Identifies a keyword to add or remove from the list of keywords associated with a stored MM. Include if sent to the MMS Proxy-Relay. | C |
| readReport | Specifies whether the originator MM UE requests a read reply report from each recipient. Sent by the sender to indicate the desired read reply report. Shall be encoded as follows: "Yes" = True, "No" = False. Include if sent to the MMS Proxy-Relay. | C |
| subject | The subject of the MM. Include if sent to the MMS Proxy-Relay. | C |
| messageID | An ID assigned by the MMS Proxy-Relay to uniquely identify an MM. As defined in TS 23.140 [40] clause D1.1. Shall be included when it is generated by the MMS Proxy-Relay. | C |

## \*\*\*\* END OF THRID CHANGE (MAIN DOCUMENT) \*\*\*\*

## \*\*\*\* START OF ATTACHMENT CHANGES (ATTACHMENT TS33128Payloads.asn) \*\*\*\*

START OF CHANGE 1

---a/33128/r16/TS33128Payloads.asn  
+++b/33128/r16/TS33128Payloads.asn

@@ -58,7 +58,7 @@ XIRIEvent ::= CHOICE

58 58

59 59 -- tag 16 is reserved because there is no equivalent mDFCellSiteReport in XIRIEvent

60 60

61 - -- MMS-related events, see clause 7.4.2

61 + -- MMS-related events, see clause 7.4.2 see also MMSConverted events ([65-66] below)

62 62 mMSSend [17] MMSSend,

63 63 mMSSendByNonLocalTarget [18] MMSSendByNonLocalTarget,

64 64 mMSNotification [19] MMSNotification,

@@ -118,7 +118,11 @@ XIRIEvent ::= CHOICE

118 118 mMEIdentifierAssocation [63] MMEIdentifierAssocation,

119 119

120 120 -- PDU to MA PDU session-related events, see clause 6.2.3.2.8

121 - sMFPDUtoMAPDUSessionModification [64] SMFPDUtoMAPDUSessionModification

121 + sMFPDUtoMAPDUSessionModification [64] SMFPDUtoMAPDUSessionModification,

122 +

123 + -- MMS-related events continued from choice 35

124 + mMSConvertedFromEmail [65] MMSConvertedFromEmail,

125 + mMSConvertedToEmail [66] MMSConvertedToEmail

122 126 }

123 127

124 128 -- ==============

@@ -171,7 +175,7 @@ IRIEvent ::= CHOICE

171 175 -- MDF-related events, see clause 7.3.2

172 176 mDFCellSiteReport [16] MDFCellSiteReport,

173 177

174 - -- MMS-related events, see clause 7.4.2

178 + -- MMS-related events, see clause 7.4.2 see also MMSConverted events ([65-66] below)

175 179 mMSSend [17] MMSSend,

176 180 mMSSendByNonLocalTarget [18] MMSSendByNonLocalTarget,

177 181 mMSNotification [19] MMSNotification,

@@ -231,7 +235,11 @@ IRIEvent ::= CHOICE

231 235 mMEIdentifierAssocation [63] MMEIdentifierAssocation,

232 236

233 237 -- PDU to MA PDU session-related events, see clause 6.2.3.2.8

234 - sMFPDUtoMAPDUSessionModification [64] SMFPDUtoMAPDUSessionModification

238 + sMFPDUtoMAPDUSessionModification [64] SMFPDUtoMAPDUSessionModification,

239 +

240 + -- MMS-related events continued from choice 35

241 + mMSConvertedFromEmail [65] MMSConvertedFromEmail,

242 + mMSConvertedToEmail [66] MMSConvertedToEmail

235 243 }

236 244

237 245 IRITargetIdentifier ::= SEQUENCE

@@ -1258,6 +1266,45 @@ MMBoxDescription ::= SEQUENCE

1258 1266 contentType [19] UTF8String OPTIONAL

1259 1267 }

1260 1268

1269 + MMSConvertedFromEmail ::= SEQUENCE

1270 + {

1271 + version [1] MMSVersion,

1272 + transactionID [2] UTF8String,

1273 + terminatingMMSParty [3] SEQUENCE OF MMSParty,

1274 + contentType [4] MMSContentType,

1275 + originatingMMSParty [5] MMSParty,

1276 + messageClass [6] MMSMessageClass OPTIONAL,

1277 + dateTime [7] Timestamp,

1278 + expiry [8] MMSExpiry OPTIONAL,

1279 + deliveryReport [9] BOOLEAN OPTIONAL,

1280 + priority [10] MMSPriority OPTIONAL,

1281 + readReport [11] BOOLEAN OPTIONAL,

1282 + subject [12] MMSSubject OPTIONAL,

1283 + messageID [13] UTF8String OPTIONAL

1284 + }

1285 +

1286 + MMSConvertedToEmail ::= SEQUENCE

1287 + {

1288 + version [1] MMSVersion,

1289 + transactionID [2] UTF8String,

1290 + terminatingMMSParty [3] SEQUENCE OF MMSParty,

1291 + contentType [4] MMSContentType,

1292 + originatingMMSParty [5] MMSParty,

1293 + messageClass [6] MMSMessageClass OPTIONAL,

1294 + dateTime [7] Timestamp,

1295 + expiry [8] MMSExpiry OPTIONAL,

1296 + desiredDeliveryTime [9] Timestamp OPTIONAL,

1297 + deliveryReport [10] BOOLEAN OPTIONAL,

1298 + priority [11] MMSPriority OPTIONAL,

1299 + senderVisibility [12] BOOLEAN OPTIONAL,

1300 + store [13] BOOLEAN OPTIONAL,

1301 + state [14] MMState OPTIONAL,

1302 + flags [15] MMFlags OPTIONAL,

1303 + readReport [16] BOOLEAN OPTIONAL,

1304 + subject [17] MMSSubject OPTIONAL,

1305 + messageID [18] UTF8String OPTIONAL

1306 + }

1307 +

1261 1308 -- =========

1262 1309 -- MMS CCPDU

1263 1310 -- =========

END OF CHANGE 1

## \*\*\*\* END OF ATTACHMENT CHANGES (ATTACHMENT TS33128Payloads.asn) \*\*\*\*

## \*\*\*\* END OF ALL CHANGES \*\*\*\*