Source: **SA5 (Telecom Management)**

Title: **Rel-5 CR 32.235 (Charging data description for application services) : Correction of content adaptation indication in the MMS Retrieval CDR**

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Doc-2nd-Level	Workitem
SP-030408	32.235	017	-	Rel-5	Correction of content adaptation indication in the MMS Retrieval CDR - Alignement with T2's 23.140	F	5.3.0	S5-034556	OAM-CH

CR-Form-v7

CHANGE REQUEST

⌘	**32.235** **CR** **017**	⌘**rev**	**-**	⌘	Current version:	**5.3.0**	⌘		

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘	Correction of content adaptation indication in the MMS Retrieval CDR - Alignement with T2's 23.140	
Source: ⌘	SA5 (alain.bibas@francetelecom.com)	
Work item code:⌘	OAM-CH	**Date:** ⌘ 05/09/2003
Category: ⌘ **F**		**Release:** ⌘ Rel-5

Use one of the following categories:
F (correction)
A (corresponds to a correction 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.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘	TS 23.140 specifies requirements to capture the adaptation of the MM content to the capabilities of the user agent in the CDRs generated by the Receipient MMS Relay/Server. However, this is not currently included in MMS Charging specifications.
Summary of change:⌘	Parameters are added to the Recipient MM1 Retrieve CDR that capture information about MM Content adaptation
Consequences if not approved: ⌘	Misalignement between TS 32.235 and TS 23.140 No possibility to charge the recipient user for performing content adaptation

Clauses affected: ⌘	4.2.2.4, 5 and 6

	Y	**N**	
Other specs ⌘		**X**	Other core specifications ⌘
affected:		**X**	Test specifications
		X	O&M Specifications

Other comments: ⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

KEEP the History box of the TS to be changed (see end of the present document)

Change in Clause 4.2.2.4

4.2.2.4 Recipient MM1 Retrieve CDR (R1Rt-CDR)

If enabled, a Recipient MM1 Retrieve Response Charging Data Record (R1Rt-CDR) shall be produced in the recipient MMS Relay/Server if and when the recipient MMS Relay/Server has sent a MM1_retrieve.RES to the recipient MMS User Agent. That is, the CDR is created upon completion of transmission of the MM1_retrieve.RES.

Table 4.15: Recipient MM1 Retrieve ~~Response~~ record (R1Rt-CDR)

Field	Category	Description
Record Type	M	Recipient MM1 Retrieve record.
Recipient MMS Relay/Server Address	M	IP address or domain name of the recipient MMS Relay/Server.
Message ID	M	The MM identification provided by the originator MMS Relay/Server.
Reply Charging ID	C	This field is present in the CDR only if the MM is a reply-MM to an original MM. The Reply-Charging ID is the Message ID of the original MM.
Sender address	C	The address of the MMS User Agent as used in the MM1_retrieve.RES. This parameter is present in the CDR regardless of address hiding.
Recipient address	M	The address of the recipient MM User Agent of the MM.
Access Correlation	M_o	A unique identifier delivered by the used access network domain of the originator MMS User Agent.
Message Reference	M	Location of the content of the MM to be retrieved as specified in the MM1_retrieve.REQ.
Original MM Content	M	This parameter contains a set of information elements related to the original MM
Content type	M	The content type of the MM content.
Message size	M_o	The total size of the original MM content.
MM component list	M_o	The list of media components with volume size.
Adapted MM Content	C	If the MM content is adapted prior to its retrieval, this parameter is present and contains the resulting set of information elements related to the adapted MM
Content type	C	The content type of the adapted MM content.
Message size	C_o	The total size of the adapted MM content.
MM component list	C_o	The list of media components with volume size of the adapted MM
Message class	C_o	The class of the message (e.g., personal, advertisement, information service) if specified in the MM1_retrieve.RES.
Submission Time	M	The time at which the MM was submitted or forwarded as specified in the MM1_retrieve.RES.
~~Message size~~	~~M_o~~	~~The total size of the MM content.~~
Delivery report Requested	M_o	A request for delivery report as specified in the Delivery Report information element in the MM1_retrieve.RES.
Priority	C_o	The priority (importance) of the message if specified in the MM1_retrieve.RES.
Read reply Requested	C_o	A request for read-reply report if specified in the Read Reply information element in the MM1_retrieve.RES.
MM Status Code	M_o	The status code of the MM at the time when the CDR is generated.
Status Text	M_o	This field includes a more detailed technical status of the message at the point in time when the CDR is generated.
Reply Deadline	C_o	In case of reply-charging the latest time of submission of a reply granted to the recipient as specified in the MM1_retrieve.RES.
Reply Charging-Size	C_o	In case of reply-charging the maximum size of a reply-MM granted to the recipient as specified in the MM1_retrieve.RES.
Duration Of Transmission	M_o	The time used for transmission of the MM between the User Agent and the MMS Relay/Server.
Record Time Stamp	M_o	Time of generation of the CDR
Local Record Sequence Number	M_o	Consecutive record number created by this node. The number is allocated sequentially including all CDR types.
Serving network identity	M_o	SGSN PLMN Identifier (MCC and MNC) used during this record.
Record extensions	C_o	A set of network/manufacturer specific extensions to the record. Conditioned upon the existence of an extension.

End of Change in Clause 4.2.2.4

Change in Clause 5

…

<unmodified text>

…

5.4 Adapted MM Content

This field contains a set of parameters including the Content type, the Message size and the MM component list of the adapted MM i.e. after the MM Content was adapted to the recipient terminal capabilities.

…

<unmodified text>

…

5.254 MM component list

The MM component list is a set of subject and media components from type of media formats including the size of all elements in octets. For a complete description of media formats that may be supported by MMS, refer to IANA [13].

The MM Component list of a submitted MM might differ from the MM Component list of a retrieved MM if content adaptation is performed prior to its retrieval.

…

<unmodified text>

…

5.29 Original MM Content

This field contains a set of parameters including the Content type, the Message size and the MM component list of the original MM.

…

<unmodified text>

…

Change in Clause 6

6 Charging Data Record Structure

6.1 ASN.1 definitions for CDR information

…

<unmodified text>

…

```
MMR1RtRecord          ::= SET
{
    recordType              [0] CallEventRecordType,
    recipientMmsRSAddress   [1] MMSRSAddress,
    messageID               [2] OCTET STRING,
    replyChargingID         [3] OCTET STRING OPTIONAL,
    senderAddress           [4] MMSAgentAddress OPTIONAL,
    recipientAddress        [5] MMSAgentAddress,
    accessCorrelation       [6] AccessCorrelation OPTIONAL,
    contentType             [7] ContentType,
    mmComponentType         [8] MMComponentType OPTIONAL,
    messageClass            [9] MessageClass OPTIONAL,
    submissionTime          [10] TimeStamp,
    messageSize             [11] DataVolume OPTIONAL,
    deliveryReportRequested [12] BOOLEAN OPTIONAL,
    priority                [13] PriorityType OPTIONAL,
    readReplyRequested      [14] BOOLEAN OPTIONAL,
    mmStatusCode            [15] MMStatusCodeType OPTIONAL,
    statusText              [16] StatusTextType OPTIONAL,
    replyDeadline           [17] WaitTime OPTIONAL,
    replyChargingSize       [18] DataVolume OPTIONAL,
    durationOfTransmission  [19] INTEGER OPTIONAL,
    timeOfExpiry            [20] WaitTime OPTIONAL,
    recordTimeStamp         [21] TimeStamp OPTIONAL,
    localSequenceNumber     [22] LocalSequenceNumber OPTIONAL,
    recordExtensions        [23] ManagementExtensions OPTIONAL,
    messageReference        [24] OCTET STRING,
    servingNetworkIdentity  [25] PLMN-Id,
    originalMmContent       [26] OriginalMmContent,
    adaptedMmContent        [27] AdaptedMmContent OPTIONAL
}
```

…

<unmodified text>

…

```
--------------------------------------------------------------------------
--
-- COMMON DATA TYPES
--
--------------------------------------------------------------------------
```

```
AccessCorrelation ::= CHOICE
{
        circuitSwitched         [0]     CircuitSwitchedAccess,
        packetSwitched          [1]     PacketSwitchedAccess
}

AdaptedMmContent    ::= SET
{
        contentType         [0] ContentType,
        messageSize         [1] DataVolume,
        mmComponentType     [2] MMComponentType
}


AttributesList                  ::= SEQUENCE
{       --
        -- Note: the values below are subject to WAP Forum ongoing standardization
        --
        messageID               [0] OCTET STRING,
        DateAndTime             [1] TimeStamp,
        senderAddress           [2] MMSRSAddress,
        subject                 [3] OCTET STRING,
        messageSize             [4] DataVolume ,
        mmFlags                 [5] OCTET STRING,
        mmState                 [6] MMState
 }

ChargeInformation       ::= SEQUENCE
{       --
        -- one of the two following parameters must be present
        --
        chargedparty            [0] ChargedParty OPTIONAL,
        chargetype              [1] ChargeType OPTIONAL
}

ChargedParty        ::= ENUMERATED
{
        sender                      (0),
        recipient                   (1),
        both                        (2),
        neither                     (3),
        notspecifiedbyVASP          (99)
}

ChargeType                      ::= ENUMERATED
{
        postpaid                    (0),
        pre-paid                    (1)
}

CircuitSwitchedAccess ::= SEQUENCE
{
        mSCIdentifier           [0] MscNo,
        callReferenceNumber     [1] CallReference
}

ContentType                     ::= OCTET STRING

DataVolume                      ::= INTEGER
        --
        -- The volume of data transfered in octets.
        --

DeltaSeconds            ::= OCTET STRING (SIZE(8))

MediaComponent          ::= SEQUENCE
{
        mediaType       [0] OCTET STRING,
        mediaSize       [1] DataVolume
}

MediaComponents         = SET OF MediaComponent

MessageClass            ::= ENUMERATED
{
        personal                (0),
```

```
        advertisement        (1),
        information-service  (2),
        auto                 (3)
}

MMBoxStorageInformation    ::= SET
{
        mmState                   [0] MMState,
        mmFlag                    [1] OCTET STRING,
        storeStatus               [2] StoreStatus,
        storeStatusText           [3] StatusTextType,
        storedMessageReference    [4] OCTET STRING
}

MMComponentType            ::= SEQUENCE
{
        subject          [0] SubjectComponent,
        media            [1] MediaComponents
}

MMSAgentAddress            ::= SEQUENCE
{       --
        -- usage of SEQUENCE instead of CHOICE allows several address types to be present at the same time
        --
        eMail-address    [0] OCTET STRING,
        mSISDN           [1] MSISDN OPTIONAL,
        shortCode        [2] OCTET STRING OPTIONAL
}

MMSAgentAddresses  ::= SET OF MMSAgentAddress

MMSRSAddress       ::= SEQUENCE
{       --
        -- usage of SEQUENCE instead of CHOICE allows both address types to be present at the same time
        --
        domainName       [0] OCTET STRING OPTIONAL,
        iPAddress        [2] IPAddress OPTIONAL
}

MMState          ::= ENUMERATED
{       --
        -- Note: the values below are subject to WAP Forum ongoing standardization
        --
        draft            (0),
        sent             (1),
        new              (2),
        retrieved        (3),
        forwarded        (4)
}

MMStatusCodeType             ::= ENUMERATED
{
        retrieved                  (0),
        forwarded                  (1),
        expired                    (2),
        rejected                   (3),
        deferred                   (4),
        unrecognised               (5),
        read                       (6),
        deletedWithoutBeingRead    (7)
}

OriginalMmContent      ::= SET
{
        contentType       [0] ContentType,
        messageSize       [1] DataVolume OPTIONAL,
        mmComponentType   [2] MMComponentType OPTIONAL
}

PacketSwitchedAccess ::= SEQUENCE
{
        gSNAddress       [0] GSNAddress,
        chargingID       [1] ChargingID
}

PriorityType        ::= ENUMERATED
{
```

```
        low             (0),
        normal          (1),
        high            (2)
}

Quotas      ::= SEQUENCE
{
        numberOfMessages    [0] INTEGER OPTIONAL,
        numberOfOctets      [1] INTEGER OPTIONAL
}

RequestStatusCodeType       ::= INTEGER
{   --
        -- cause codes 0 to 15 are defined in TS 32.205[8] as 'CauseForTerm'
        -- (cause for termination) and cause code 16 to 20 are defined
        -- in TS 32.215 [9] as 'CauseForRecClosing'
        --
        normalRelease               (0),    -- ok
        abnormalRelease             (4),    -- error unspecified
        serviceDenied               (30),
        messageFormatCorrupt        (31),
        sendingAddressUnresolved    (32),
        messageNotFound             (33),
        networkProblem              (34),
        contentNotAccepted          (35),
        unsupportedMessage          (36)
}

StatusTextType      ::= OCTET STRING

StoreStatus ::= INTEGER
{   --
        -- Note: the values below are subject to WAP Forum ongoing standardization
        --
        stored                      (0),
        errorTransientFailure       (1),
        errorTransientMailboxFull   (2),
        errorTransientNetworkProblems (3),
        errorPermanentFailure       (4),
        errorPermanentPermissionDenied (5),
        errorPermanentMessageFormat (6),
        errorPermanentMessageNotFound (7)
}

SubjectComponent        ::= SEQUENCE
{
        subjectType  [0] OCTET STRING,
        subjectSize  [1] DataVolume
}

Totals      ::= SEQUENCE
{
        numberOfMessages            [0] INTEGER OPTIONAL,
        numberOfOctets              [1] INTEGER OPTIONAL
}

WaitTime        ::= CHOICE
{
        http-date       [0]   TimeStamp,
        delta-seconds   [1]   DeltaSeconds
}

END
```

<div style="text-align:center">

End of Change in Clause 6

</div>