CR-Form-v7.1

CHANGE REQUEST

⌘ **23.140** CR **CRNum** ⌘rev **-** ⌘ Current version: **6.8.0** ⌘

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

2005 02 03 annotated michel

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

Title: ⌘	Correcting Extended Canceling and Replacing	
Source: ⌘		
Work item code: ⌘		***Date:*** ⌘ dd/mm/yyyy

Category: ⌘ **F**	***Release:*** ⌘ Rel-6

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:
Ph2 (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)
Rel-7 (Release 7)

Reason for change: ⌘	There are few inconsistencies in the TS 23.140 about the extended cancel and replace feature. Moreover, there are few editorial mistakes.
Summary of change: ⌘	Makes the Request Status information element optional in the MM1_cancel.RES abstract message in section 8.1.13, as MMS Server/Relay is not required to convey the status to the VASP, Corrects the figure in section 8.7.5A to allow the MM7_extended_cancel.RES before the associated MM1 transactions. Adds a statement in section 8.7.5A.1 and also corrects couple other statements.
Consequences if not approved: ⌘	The extended cancel and replace feature remains inconsistent and erronous.

Clauses affected: ⌘	8.1.13 and 8.7.5A

	Y	N		
Other specs affected: ⌘	Y		Other core specifications ⌘	OMA MMS Specificaiton
			Test specifications	
			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:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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.

8.1.13   Cancelling a Multimedia Message

This part of the MMS service describes the mechanism by which an MMS Relay/Server may request an MMS User Agent, that an MM which the MMS User Agent has already retrieved be cancelled.

For cancelling purposes an MM cancel request shall always be requested by an MMS Relay/Server to an MMS User Agent. Request from a VASP to cancel an MM (in terms of MM7_extended_cancel.REQ) invokes the cancel request in the MMS Relay/Server. Involved abstract messages are outlined in the table below from type and direction points of view.

Table 1: Abstract messages for cancelling an MM

Abstract messages	Type	Direction
MM1_cancel.REQ	Request	MMS Relay/Server -> MMS UA
MM1_cancel.RES	Response	MMS UA -> MMS Relay/Server

8.1.13.1   Normal operation

The MMS Relay/Server shall issue an MM1_cancel.REQ to the MMS User Agent, which contains the identification of the message to be cancelled. The MMS User Agent shall respond with an MM1_cancel.RES, which provides the status of the request.

The MM1_cancel.RES shall unambiguously refer to the corresponding MM1_cancel.REQ.

Support for MM1_cancel.REQ and MM1_cancel.RES is optional for both MMS User Agent and MMS Relay/Server.

8.1.13.2   Abnormal Operation

In this case the MMS User Agent shall respond with an MM1_cancel.RES encapsulating a status which indicates the reason the request for cancelling was not accepted, e.g. the MM is not available, denied by a user.

If the MMS User Agent does not provide the MM1_cancel.RES, the MMS Relay/Server should be able to recover. In this case, the MMS Relay/Server may retransmit the MM1_cancel.REQ to the MMS User Agent.

8.1.13.3   Features

Transaction Identification: The MMS Relay/Server shall provide an unambiguous transaction identification within a request. The response shall unambiguously refer to the corresponding request using the same transaction identification.

Version: The MMS protocol shall provide unique means to identify the current version of the particular protocol environment.

Message Type: The type of the message used on the reference point MM1 indicating MM1_cancel.REQ and MM1_cancel.RES as such.

Cancel ID: The MMS Relay/Server shall provide the identification of the original MM to be cancelled in the cancel request.

Request Status: The MMS User Agent shallmay provide the status ofif the request was successfully received to the MMS Relay/Server in the MM1_cancel.RES.

8.1.13.4   Information Elements

Table 2: Information elements in the MM1_cancel.REQ.

Information element	Presence	Description
Message Type	Mandatory	Identifies this message as MM1_cancel.REQ.
Transaction ID	Mandatory	The identification of the MM1_cancel.REQ/MM1_cancel.RES pair.
MMS Version	Mandatory	Identifies the version of the interface supported by the forwarding MMS Relay/Server.
Cancel ID	Mandatory	Identifies the MM to be cancelled.

Table 3: Information elements in the MM1_cancel.RES.

Information element	Presence	Description
Message Type	Mandatory	Identifies this message as MM1_cancel.RES.
Transaction ID	Mandatory	The identification of the MM1_cancel.REQ/MM1_cancel.RES pair.
MMS Version	Mandatory	Identifies the version of the interface supported by the MMS User Agent.
Request Status	~~Mandatory~~Optional	The status ~~of~~if the MM cancel request was received.

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8.7.5A   Extended Cancel and Extended Replace of MM

This section details the requests that should be supported in MM7 to allow a VASP to control or change the distribution of a MM, down to the MMS User Agent. These operations will allow the VASP to cancel a submitted MM or replace a submitted MM with a new MM.

The involved abstract messages are outlined in Table ~~*~~75 from type and direction points of view.

Table 4: Abstract messages for controlling Distribution MM

Abstract messages	Type	Direction
MM7_extended_cancel.REQ	Request	VASP -> MMS Relay/Server
MM7_extended_cancel.RES	Response	MMS Relay/Server -> VASP
MM7_extended_replace.REQ	Request	VASP -> MMS Relay/Server
MM7_extended_replace.RES	Response	MMS Relay/Server -> VASP

The following figure illustrates the interaction between the different MMS entities in cancelling a VASP message.
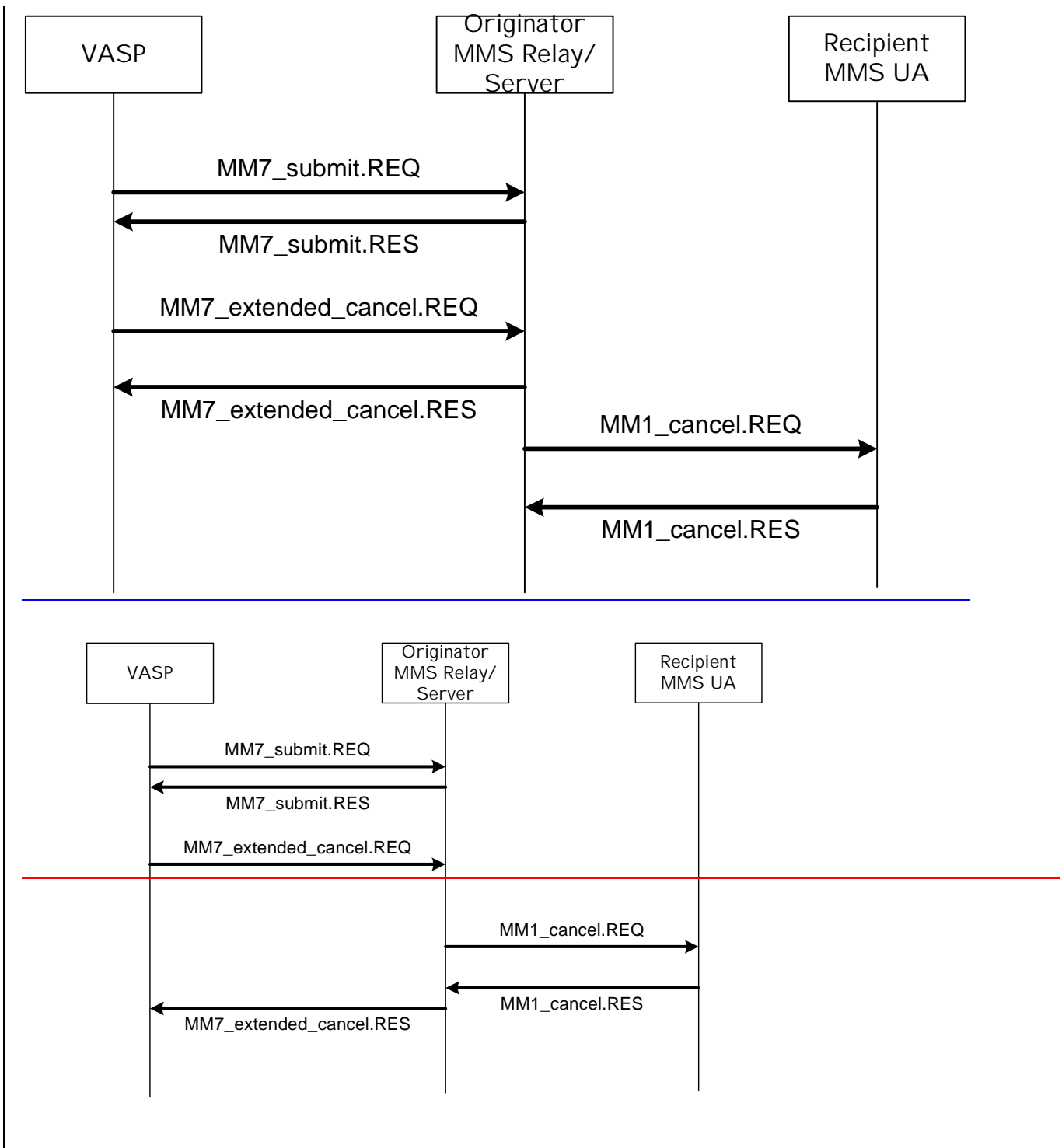
Figure 11: Data flow of VASP cancelling a submitted message down to the MMS User Agent

8.7.5A.1   Normal Operation

If the VASP has decided to cancel the delivery of a MM that it has already submitted, and wants to extend the cancellation to be effective also on an MM already downloaded by the terminal, then the VASP should indicate this by sending the MM7_extended_cancel.REQ message to the MMS Relay/Server. The MMS Relay/Server should check the status of the message indicated by the Cancel ID and:

1)   locally cancel delivery, at the MMS Relay/Server level, to all destinations for which the MMS Relay/Server has not sent out a notification;

2) locally cancel the MM at the MMS Relay/Server level and indicate appropriate error code in MM1_retrieve.RES as "Request Status" and "Request Status", to all destinations for which the MMS Relay/Server has sent out a notification but the MM has not yet been retrieved, and

3) extend that cancellation down to the MMS User Agent using MM1_cancel.REQ, to all destinations for which the MM has already been retrieved. The MMS Relay/Server should use the destination list from the original MM7_submit.REQ in MM1_cancel.REQ.

The MMS Relay/Server should respond to the request with a MM7_extended_cancel.RES indicating that the request was processed.

If the VASP has new content that it wishes to submit in place of the content that was originally submitted, and wants to extend the replacement to be effective also on an MM already downloaded by the MMS User Agent, it should submit the new replacement content using the MM7_extended_replace.REQ message. The MMS Relay/Server should:

1) check the status of the message indicated by the Replace ID and replace the message content for all destinations that have not retrieved or forwarded the message as yet; and

2) extend that replacement down to the MMS User Agent, to all destinations that have ~~not~~ retrieved but not ~~or~~ forwarded the message; via sending an additional notification to the MMS User Agent. The MMS Relay/Server should redistribute the new content to the destination list from the original MM7_submit.REQ. Optional information elements that appear in the MM7_extended_replace.REQ message shall replace the corresponding information elements of the original submission (the VASP should not replace any information elements that were already provided in the previously sent notification), information elements that do not appear in the MM7_extended_replace.REQ message shall retain the original submission values.

The MMS Relay/Server should respond to the request with a MM7_extended_replace.RES indicating if the request was processed.

Support for MM7_extended_cancel.REQ, MM7_extended_cancel.RES, MM7_extended_replace.REQ, and MM7_extended_replace.RES is optional for all MMS Relay/Server that support MM7.

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