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**Source:** SA1  
**Title:** CRs to 22.140 for MMS (Rel-6)  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Current	Vers New	SA1 Doc
SP-23	SP-040093	22.140	041	-	Rel-6	B	MMS targetting UE elements	6.4.0	6.5.0	S1-040233
SP-23	SP-040093	22.140	042	-	Rel-6	C	Prepaid – lack of credit error in MMS	6.4.0	6.5.0	S1-040234
SP-23	SP-040093	22.140	043	-	Rel-6	B	Handling of private addressing schemes	6.4.0	6.5.0	S1-040254

CR-Form-v7	
<b>CHANGE REQUEST</b>	
⌘ <b>22.140 CR 041</b> ⌘ rev <b>-</b> ⌘ Current version: <b>6.4.0</b> ⌘	

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

<b>Title:</b>	⌘ MMS targetting UE elements ⌘		
<b>Source:</b>	⌘ SA1 (T-Mobile) ⌘		
<b>Work item code:</b>	⌘ MMS ⌘	<b>Date:</b>	⌘ 14/01/2004 ⌘
<b>Category:</b>	⌘ <b>B</b> ⌘	<b>Release:</b>	⌘ REL-6 ⌘
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)	2	(GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96	(Release 1996)
	<b>B</b> (addition of feature),	R97	(Release 1997)
	<b>C</b> (functional modification of feature)	R98	(Release 1998)
	<b>D</b> (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="http://www.3gpp.org/Specs/tr21/900">TR 21.900</a> .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ The heading of the section, i.e., "MM not intended for presentation", in clause 5.2 is unclear. ⌘
<b>Summary of change:</b>	⌘ In clause 5.2 the section is titled "MM intended for applications on the UE". Furthermore it is noted that the intended application may present the MM contents. ⌘
<b>Consequences if not approved:</b>	⌘ The requirement within this section is unclear and could lead to misinterpretation. ⌘

<b>Clauses affected:</b>	⌘ 5.2 ⌘						
<b>Other specs Affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<input checked="" type="checkbox"/>	Test specifications	⌘				
	<input checked="" type="checkbox"/>	O&M Specifications	⌘				
<b>Other comments:</b>	⌘						

**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.

## 5.2 Multimedia message delivery and submission

### - **Submission mechanism**

The MMS shall support multimedia messages or messages elements to be submitted from the sender's UE.

### - **Push Mechanism**

The MMS shall be able to support a request for multimedia messages or messages elements to be automatically delivered to the recipient's UE.

### - **Pull Mechanism**

The MMS shall be able to support a request for multimedia messages or messages elements to be delivered to the recipient's UE on request by the recipient.

Note: Push and pull delivery mechanisms could be identical; the criteria which decide on the type of mechanism (push / pull) are either described in the User Services Profile or out of the scope of this specification.

### - **Concurrency**

The MMS shall be able to support MM delivery to and from the user's terminal not be restricted during other active services (subject to the capabilities of the terminal and the network).

### - **Streaming**

The MMS shall be able to support streaming for MM delivery from the MMS system to the terminal.

Support for streaming for MM upload from the terminal to the MMS system will be considered for future releases.

### - **Preferred Bearer**

It shall be possible to define a list of precedence for bearers in the configuration information sets for delivery and submission of MM (e.g. GPRS, CSD). By default, the terminal shall be able to support automatic bearer selection (i.e. without user intervention) based on the order of precedence defined in the configuration information sets on the USIM[7] or SIM [8]. The user shall be able to enable or disable automatic bearer selection. When disabled, manual bearer selection shall be available from the list of bearers.

### - **Conditional delivery mechanism**

It shall be possible for the user to define in the User Profile a set of conditions that determine which delivery mechanism should be used for the delivery of a MM.

Such conditions should include:

- Roaming status of the recipient (e.g. inside or outside the home network)
- Identity of the MM originator
- Time of day (of the recipient's home network)
- Upper limit to the MM size

The notification message indicating an MMS awaiting delivery shall relay the information of the user's preferred delivery mechanism, if such information is made available by the user profile in the network, to the UE. If a mismatch is identified between the delivery mechanism configured in the UE and the delivery mechanism indicated in the notification message, it shall be possible for the user to select either the delivery mechanism configured in the UE or the delivery mechanism indicated in the notification message.

Furthermore, the terminal may also display a warning prior to the download of a message depending on some terminal parameters such as:

- Available storage capacity
- Remaining battery life

- Available bearers

For example, the user may elect to have all MMs downloaded automatically when in the home network, be able to manually select whether to download a MM or not when roaming.

It shall be possible for the network operator to program a default set of rules for the delivery mechanism in the User profile. Such rules can be overridden by the user.

Note: The way the user profile is accessed and modified is not subject of standardisation.

- [MM intended for applications on the UE](#)~~MM not intended for presentation~~

The MMS shall support MMs that are not intended for presentation but used to originate and deliver information to applications residing on the UE.

Note: the intended application may present the MM contents.

When an application sends a MM not intended for presentation, it shall be possible to uniquely identify that originating application and the target application on the recipient UE as well as the instance of the application if more than one instance can be active. The originating application may reside on a UE or within the network.

The message payload shall not be modified by the MMS.

If the MM is originated by the subscriber's home environment, it shall be possible to protect the MM from accidental deletion by the user.

## 5.2.1 MM delivery to and submission from a VASP

- **VASP submission mechanism**

The MMS shall support multimedia messages or messages elements to be submitted from a VASP.

- **VASP delivery mechanism**

The MMS shall be able to support multimedia messages or messages elements to be delivered to a VASP.

- **VASP mass distribution**

The MMS shall be able to support a request from a VASP for mass distribution of MMs to recipients.

- **Additional VASP data**

The MMS shall be able to convey additional data associated with an MM from a VASP to the MMS service provider and vice versa.

Note: A possible use case for this could be the option to sent additional charging information from the VASP to the MMS service provider. However the data itself is not specified for this release.

CR-Form-v7

## CHANGE REQUEST

⌘ **22.140 CR 042** ⌘ rev **-** ⌘ Current version: **6.4.0** ⌘

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

<b>Title:</b>	⌘ Prepaid – lack of credit error in MMS		
<b>Source:</b>	⌘ SA1 (Comverse)		
<b>Work item code:</b>	⌘ MESS6	<b>Date:</b>	⌘ 14/01/2004
<b>Category:</b>	⌘ <b>C</b>	<b>Release:</b>	⌘ Rel-6
	<i>Use one of the following categories:</i> <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="http://www.3gpp.org/Specs/tr21/900">TR 21.900</a> .		<i>Use one of the following releases:</i> <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘ There is a need for prepaid users that are using MMS to send and receive MM be notified that the reason that a service (either submission or delivery of MM) was not completed is due to restrictions on the prepaid service. The situation that needs to be addressed is when the originator of the MM lacks funds in his prepaid account.
<b>Summary of change:</b>	⌘ Addition of a new subsection to the Error Messages section
<b>Consequences if not approved:</b>	⌘ It may be unclear to a prepaid user why he is incapable of completing his message submission, causing frustration and possible confusion.

<b>Clauses affected:</b>	⌘ New section 5.6.1										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">N</td> </tr> <tr> <td style="padding: 2px;">X</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">X</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 23.140
	Y	N									
	X										
	X										
	X										
		Test specifications									
		O&M Specifications									
<b>Other comments:</b>	⌘										

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## 5.6 Error Messages

It shall be possible for the operator to configure the content of the error message delivered to the MMS client

### 5.6.1 Prepaid Errors

The MMS shall notify a prepaid user when message submission was unsuccessful due to lack of credit in the prepaid account, explicitly stating this situation.



CR-Form-v7
<b>CHANGE REQUEST</b>
⌘ <b>22.140 CR 043</b> ⌘ rev <b>-</b> ⌘ Current version: <b>6.4.0</b> ⌘

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

<b>Title:</b>	⌘ Handling of private addressing schemes		
<b>Source:</b>	⌘ SA1 (T-Mobile)		
<b>Work item code:</b>	⌘ MMS6-SR	<b>Date:</b>	⌘ 16/01/2004
<b>Category:</b>	⌘ <b>B</b> Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	<b>Release:</b>	⌘ <b>Rel-6</b> Use <u>one</u> 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)

<b>Reason for change:</b>	⌘ Following the approval of the work item "Handling of private addressing schemes in MMS" at T#22, this CR introduces the service requirement. Such services can use all the available MMS capabilities and can perform one or more of the following actions on MMs for which these services are invoked: - advanced address resolution - control the submission/delivery - apply service specific charging. Examples of operator specific services include address hunting and VPN (private addressing).  The definition of the service requirements will enable the start of the stage 2 work.
<b>Summary of change:</b>	⌘ Service Requirements for handling of private addressing schemes in MMS have been introduced.
<b>Consequences if not approved:</b>	⌘ It will not be possible to start the stage 2 work on handling of private addressing schemes in MMS.

<b>Clauses affected:</b>	⌘ new section 12
<input type="checkbox"/> Y <input type="checkbox"/> N	

<b>Other specs affected:</b>	⌘	<input checked="" type="checkbox"/>	Other core specifications	⌘	23.140, 32.235
		<input checked="" type="checkbox"/>	Test specifications		
		<input checked="" type="checkbox"/>	O&M Specifications		
<b>Other comments:</b>	⌘				

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**New Section**

## 12. Handling of private addressing schemes in MMS

The network operator shall have the mechanisms to perform address resolution to handle private addressing schemes in MMS and shall be able to manage the usage of private addressing schemes.

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