Enabler Test Report MMS v1.1

OMA Test Fest (March 2004)
Version 23-Mar-2004

Open Mobile Alliance
OMA-Enabler_Test_Report-MMS-v11-2004-03-23

Contents

1. Scope

This report describes the results from the testing carried out at OMA Test Fest (March 2004) concerning MMS enabler version 1.1.

2. References

2.1 Normative References

[OMAIOPPROC] OMA Interoperability Policy and Process, http://www.openmobilealliance.org/

[MMSEICS] MMM version 1.1 Enabler Implementation Conformance Statement (EICS), http://www.openmobilealliance.org/

[ERELD] "Enabler Release Definition for MMS Version 1.1" Open Mobile Alliance™. OMA-ERELD-MMS-v1_1. URL:http://www.openmobilealliance.org/

[MMS_SPEC] OMA MMS 1.1 specifications

[EPTR] Enabler Product Test Report

[ETP] Enabler Test Plan

[ETS] Enabler Test Specification for MMS 1.1
Approved Version 1.1.1, 10-Oct-2003

2.2 Informative References

3. Terminology and Conventions

3.1 Conventions

This is an informative document, i.e. the document does not intend to contain normative statements.

3.2 Definitions

None.

3.3 Abbreviations

EICS	Enabler Implementation Conformance Statement
EPTR	Enabler Product Test Report
ETP	Enabler Test Plan
ETS	Enabler Test Specification
MM	Multimedia Message
MMS	Multimedia Messaging Service
MMSC	MMS Proxy/Server
OMA	Open Mobile Alliance
PR	Problem Report

4. Summary

This report gives details of the testing carried out during the OMA Test Fest (March 2004) for MMS version 1.1.

The report is compiled on behalf of OMA by NCC Group.

The work and reporting has followed the OMA IOP processes and policies [OMAIOPPROC].

5. Test Details

5.1 Documentation

This chapter lists the details of the enabler and any documentation, tools or test suites used to prove the enabler.

Date:	March 2004
Location:	Seattle, USA
Enabler:	MMS v1.1
Process:	OMA Interoperability Policy and Process [OMAIOPPROC]
Type of Testing	Interoperability Testing
Products tested:	Client-to-server, Client-to-Client
Test Plan:	MMS Enabler Test Plan [ETP]
Test Specification:	MMS Enabler Test Specification [ETS]
Test Tool:	None
Test Code:	MMS v1.1 Reference Content
Type of Test event:	Test Fest
Participants:	Boompoint Inc., MediaTek Inc., Motorola, Nokia, Openwave Systems, Inc., Oracle Corporation, Siemens, SonyEricsson, SK Telecom & Locus, TTPCom Ltd, *2 additional vendors*
Number of Client Products:	9
Participating Technology Providers for clients:	Boompoint Inc., MediaTek Inc., Nokia, Motorola, Openwave Systems, Inc., Siemens, SonyEricsson, TTPCom Ltd, *1 additional client*
Number of Server Products:	4
Participating Technology Providers for servers:	Openwave Systems, Inc., Oracle Corporation, SK Telecom & Locus *1 additonal server*
Number of test sessions completed:	59

5.2 Test Case Statistics

5.2.1 Test Case Summary

This chapter gives an overview of the result for all test cases included in [ETS].

The following status is used in the tables below:

- Total number of TCs: Used in the summary to indicate how many test cases there are in total.
- Number of passed: Used in the summary to indicate how many of the total test cases that successfully has been passed.
- Number of failed: Used in the summary to indicate how many of the total test cases that has failed.
- Number of N/A: Used in the summary to indicate how many of the total test cases that has not be run due to that the implementation(s) do not support the functionality required to run this test case.
- Number of OT: Used in the summary to indicate how many of the total test cases that has not be run due to no time to run the test case.
- Number of INC: Used in the summary to indicate how many of the total test cases that has not been run due to that the functionality could not be tested due to an error in the implementation in another functionality that is required to run this test case.

Test Section:	**Total number of TCs:**	**Number of Passed:**	**Number of Failed:**	**Number of N/A:**	**Number of OT:**	**Number of INC:**
Client to Client TCs	20	690	98	162	64	106
Client to Server Protocol TCs	33	1086	54	299	403	9
Client to Server Content TCs	13	514	5	60	149	0
Client to Server Email TCs	9	289	19	83	109	4
Total	75	2579	176	604	725	119

Test Case List

This chapter lists the statistics for all test cases included in [ETS].

The following status is used in the tables below:

- **No. of runs(R):** Used to indicate how many times the test cases have been run in total.
- **No. of passed(P):** Used to indicate how many times the specific test case has been successfully passed.
- **No. of failed(F):** Used to indicate how many times the specific test case has failed.
- **No. of OT(O):** Used in the summary to indicate how many of the total test cases that has not be run due to no time to run the test case.
- **No. of INC(I):** Used in the summary to indicate how many of the total test cases that has not been run due to that the functionality could not be tested due to an error in the implementation in another functionality that is required to run this test case.
- **PR:** Used to indicate if any PRs (Problem Reports) have been issued during testing.
- If the specific implementation due to e.g. no support for an optional feature has not run a specific test case the test case should be marked with N/A in the "No. of runs" column.

Test Case:	Test Case Description:	R	P	F	O	I	PR:	Note:
MMS-1.1-int-101	Objects – Text	55	49	1	1	4		
MMS-1.1-int-102	Objects – Text with US-ASCII encoding	48	42	1	1	4		
MMS-1.1-int-103	Objects – Text with UTF-8 encoding	53	43	3	2	5		
MMS-1.1-int-104	Objects – Text with UTF-16 encoding	19	11	3	1	4		
MMS-1.1-int-105	Objects – JPG Images	55	44	4	1	6		
MMS-1.1-int-106	Objects – GIF Images	55	45	4	1	5		
MMS-1.1-int-107	Objects – Animated GIF Images	55	45	4	1	5		
MMS-1.1-int-108	Objects –WBMP Images	55	42	7	1	5		
MMS-1.1-int-109	Objects – AMR audio	53	40	5	3	5		
MMS-1.1-int-110	Attachment – vCard	22	15	3	0	4		
MMS-1.1-int-111	Attachment – vCal	22	11	6	1	4		

MMS-1.1-int-112	Layouts	55	37	7	5	6		
MMS-1.1-int-113	Page Timing	48	31	7	4	6		
MMS-1.1-int-114	Multiple objects	55	37	7	5	6		
MMS-1.1-int-115	Multiple pages	55	37	6	6	6		
MMS-1.1-int-116	Multiple pages and objects with page timing	49	31	7	5	6		
MMS-1.1-int-117	Subject	53	33	6	7	7		
MMS-1.1-int-118	Long file names	41	21	9	7	4		
MMS-1.1-int-119	Empty message	55	38	5	6	6		
MMS-1.1-int-120	Message size 30kb	55	38	3	6	8		
MMS-1.1-int-201	Send and receive messages to one MSISDN recipient (to)	56	49	0	7	0		
MMS-1.1-int-202	Send and receive messages to one MSISDN recipient (cc)	56	39	8	8	1		
MMS-1.1-int-203	Send and receive messages to one MSISDN recipient (bcc)	38	29	2	7	0		
MMS-1.1-int-204	Send messages to one email recipient (to)	56	48	0	8	0		
MMS-1.1-int-205	Send messages to one email recipient (cc)	56	39	9	8	0		
MMS-1.1-int-206	Send messages to one email recipient (bcc)	41	31	2	8	0		
MMS-1.1-int-207	Send and receive messages to multiple MSISDN and email recipients (to)	53	43	0	10	0		
MMS-1.1-int-208	Send and receive messages to multiple MSISDN and email recipients (cc)	53	34	9	10	0		
MMS-1.1-int-209	Send and receive messages to multiple MSISDN and email recipients (bcc)	35	25	2	8	0		
MMS-1.1-int-210	Subject field with 40 Chars	57	45	2	10	0		

MMS-1.1-int-211	Subject field with US-ASCII encoding	49	40	0	9	0		
MMS-1.1-int-212	Subject field with UTF8 encoding	53	43	0	10	0		
MMS-1.1-int-213	Address field with US-ASCII encoding	56	45	0	11	0		
MMS-1.1-int-214	Address field with UTF-8 encoding	48	33	1	14	0		
MMS-1.1-int-215	Insert Address Token	51	40	1	10	0		
MMS-1.1-int-216	Download options – Immediate retrieval	55	44	0	11	0		
MMS-1.1-int-217	Download options – delayed retrieval	47	37	0	10	0		
MMS-1.1-int-218	Download options – rejected	34	23	0	11	0		
MMS-1.1-int-219	Priority – Normal	56	46	0	10	0		
MMS-1.1-int-220	Priority – Low	48	37	1	10	0		
MMS-1.1-int-221	Priority –High	48	37	1	10	0		
MMS-1.1-int-222	Delivery report – Retrieved message	46	32	0	14	0		
MMS-1.1-int-223	Delivery report – Rejected message	45	28	0	15	2		
MMS-1.1-int-224	Delivery report – Expired message	46	29	0	17	0		
MMS-1.1-int-225	Delivery report – Multiple recipients	43	21	0	21	1		
MMS-1.1-int-226	Read report when sending to single recipient	32	16	3	13	0		
MMS-1.1-int-227	Read report when sending to multiple recipients	29	7	3	18	1		
MMS-1.1-int-228	Validity Period (Expiry Time) set by Client	41	19	0	22	0		
MMS-1.1-int-229	Validity Period (Expiry Time) set by MMSC	49	25	0	24	0		
MMS-1.1-int-230	Message classes – Personal	56	38	6	12	0		

MMS-1.1-int-231	Forward without prior retrieval	28	12	1	15	0		
MMS-1.1-int-232	Time Stamp set by Client	45	26	2	17	0		
MMS-1.1-int-233	Time Stamp set by MMSC	46	26	1	15	4		
MMS-1.1-int-301	Text Object	56	45	0	11	0		
MMS-1.1-int-302	Text object with US-ASCII encoding	49	38	0	11	0		
MMS-1.1-int-303	Text object with UTF-8 encoding	56	44	0	12	0		
MMS-1.1-int-304	Text object with UTF-16 encoding	33	21	0	12	0		
MMS-1.1-int-305	Images – JPG	56	45	0	11	0		
MMS-1.1-int-306	Images – GIF	56	44	0	12	0		
MMS-1.1-int-307	Images – WBMP	56	44	0	12	0		
MMS-1.1-int-308	Audio- AMR Object	56	44	0	12	0		
MMS-1.1-int-309	Attachment- vCard	42	30	2	10	0		See Observation 004
MMS-1.1-int-310	Attachment - vCal	42	30	2	10	0		See Observation 004
MMS-1.1-int-311	Multiple pages and objects with page timing	54	42	0	12	0		
MMS-1.1-int-312	Empty message	56	44	0	12	0		
MMS-1.1-int-313	Message size 30kB	56	43	1	12	0		
MMS-1.1-int-401	Send text object to email recipient	56	44	0	12	0		
MMS-1.1-int-402	Send image object to email recipient	56	44	0	12	0		
MMS-1.1-int-403	Send audio object to email recipient	53	43	0	10	0		
MMS-1.1-int-404	Send text, image and audio objects to email recipient	56	44	0	12	0		

MMS-1.1-int-405	Send vCard object to email recipient	39	26	1	10	2		
MMS-1.1-int-406	Send vCal object to email recipient	39	28	1	8	2		
MMS-1.1-int-407	Receive text, image and audio objects from email	48	27	4	17	0		
MMS-1.1-int-408	Receive vCard object from email	37	19	4	14	0		See Observation 004
MMS-1.1-int-409	Receive vCal object from email	37	14	9	14	0		See Observation 004

5.2.2 Observations

The following issues were captured by the Trusted Zone during the OMA Test Fest.

5.2.2.1 EICS issues

This section details issues with the MMS v1.1 Enabler Implementation Conformance Statement (EICS) [MMSEICS].

Observation: 001	
Document:	MMS v1.1 Enabler Implementation Conformance Statement (EICS)
Section	5
Comment:	Some SCR items have "sending" and "receiving" categories. When the item is marked "Mandatory" it is not clear whether it is sufficient to support just one of these.
Recommendation:	The requirements for these items should be reviewed.

5.2.2.2 Enabler Test Suite (ETS) issues

This section details issues with the Enabler Test Specification for OMA MMS v1.1.

Observation: 002	
Document:	Enabler Test Specification for MMS 1.1 [ETS]
Section:	General Comment
Comment:	There was some confusion amongst testers about how to assign verdicts to the tests and the roles of the Client A and Client B devices. In previous Fests devices have filled in their test reports from the perspective of Client A devices. The latest ETS only has verdict assignment criteria for the Client B device. Two test reports are distributed for each session, one to each of the Client devices.
Recommendation:	It should be made clear that the intention of the Client-to-Client tests is to verify the Client A behaviour and therefore testers should fill in their test reports based on how their device performs as Client A (i.e. their ability to send, not receive). Similar clarification should be given throughout the ETS.

Observation: 003	
Document:	Enabler Test Specification for MMS 1.1 [ETS]
Section:	Section 5.2
Comment:	There appears to be an error in section 5.2: "In testing client acts as a Client A and another identical Client as Client B.". This is not how the testing is traditionally carried out at a Fest – a second Client device is scheduled during the test session to act as Client B. Testers who were purely trying to follow the documentation only were therefore at a disadvantage.
Recommendation:	This section of the ETS document should be updated to clarify how the testing should be carried out.

Observation: 004	
Document:	Enabler Test Specification for MMS 1.1 [ETS]
Section:	MMS-1.1-int-309, MMS-1.1-int-310, MMS-1.1-int-408, MMS-1.1-int-409
Comment:	These test cases relate to the use of vCal and vCard objects, however the relevant SCR items for support of these types are not referenced.
Recommendation:	The requirements for each of these tests should be reviewed.

MMS General Feedback	
Support of Mandatory EICS items.	The IOP Policy document states the following: "All items that are mandated by the EICS needs to be supported, by the implementation, as a minimum before entering the operational testing phase." Some confusion was caused by the exact interpretation of this statement. All devices attending the Fest claimed all Mandatory items on their EICS documents, but due to network limitations, some were unable to support various Mandatory items during testing. It is not clear whether the above statement requires the device simply to be able to support the required items or whether it must be able to support these items during testing at the Fest. It is clear that devices which do not support all Mandatory items should be excluded from testing, but currently the only method to determine this is by consulting the submitted EICS document. As there is no test tool to verify usage of these items, it is possible that participants can claim items which they do not support in order to meet the attendance criteria. Guidance is required from OMA-IOP as to how this situation should be handled. There are a number of difficulties that need to be explored. The key issue is how to assess whether a device does or does not support particular items. Currently this is done by analysis of the EICS document, but there are cases where the results of the Fest appear to contradict the submitted EICS. These cases are highlighted in the issued Product Test Report, but no further action is taken. If such cases are found, how should they be dealt with? Should their results be excluded from the overall results of the Fest? If this is discovered during testing, should the participant be excluded from continuing to test? How do we distinguish between cases where genuine errors have been discovered in implementations, and where no intention to support the required items has been made? If participation can be blocked after testing has started, another potential issue arises – exclusion of a device may take the numbers participating below the required threshold for valid testing to take place. Currently there are three options available to determine whether a participant supports the required mandatory items: 1) The item is claimed within the EICS. This is the current policy and most easy to implement. However, the EICS document may not reflect a product's true capabilities. 2) The item can be supported at the Test Fest (decision prior to Fest)

	This would require the participant to examine the available set-up at a particular Fest and decide whether or not they will be able to support the required items, and would work on a Fest by Fest basis. As with 1) this relies on the goodwill of participants as this information would not be verified. 3) The item can be supported at the Test Fest (decision during/after Fest) this would prevent unnecessary testing from taking pace. Difficulties arrive when exclusions cause participant numbers to drop below the allowed threshold, and in setting the criteria for deciding whether a particular device has demonstrated sufficient support. The only possible criteria at present is the analysis of test report results. Should we mandate that no Fail verdicts are allowed against Mandatory test cases? Guidance is needed from OMA to resolve this issue.
Engineering event suggestion	One participant withdrew from the Fest as they did not support all the required Mandatory items in the EICS. However, they did support a large number of the Mandatory items and were disappointed that they would not be able to participate in testing in any way. It was suggested that some consideration should be given to the inclusion of devices which are still at the development stage, e.g. an Engineering event where no requirements were made upon the participants. Whilst results from such an event would not count towards the development of an Enabler Specification, useful feedback and information could be gained from such an event and may also help participants to progress their products such that they were able to participate in a full Fest event.

6. Confirmation

This signature states that the included information is true and valid.

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Stephen Higgins - MMS Trusted Zone

Appendix A. Change History (Informative)

Type of Change	Date	Section	Description