Enabler Release Definition for Mobile Location Service (MLS)

Candidate Version 1.2 – 31 Aug 2010

Open Mobile Alliance

OMA-ERELD-MLS-V1_2-20100831-C

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1. Scope

The scope of this document is limited to the Enabler Release Definition of MLS according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

[RFC2119]	"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt
[SCRRULES]	"SCR Rules and Procedures", Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures, URL:http://www.openmobilealliance.org/
[23.271]	"Functional stage 2 description of Location Services ", 3GPP TS 23.271 Release 6 URL:http://www.3gpp.org/ftp/Specs/latest/Rel-6/23_series/
[IOPPROC]	"OMA Interoperability Policy and Process", Version 1.10, Open Mobile Alliance™, OMA-ORG-IOP-Process-V1_10, URL:http://www.openmobilealliance.org/
[MLP 3.3]	"Mobile Location Protocol", Version 3.3, Open Mobile Alliance™, OMA-TS-MLP-V3_3 URL:http://www.openmobilealliance.org/
[MLP DTD]	"MLP DTDs", Version 3.3, Open Mobile Alliance™, OMA-SUP-DTD_MLP-V3_3 URL:http://www.openmobilealliance.org/
[MLP_COM DTD]	"MLP Common DTDs", Version 3.3, Open Mobile Alliance™, OMA-SUP-DTD_MLP_ID_QOP_RES_SHAPE-V3_3 URL:http://www.openmobilealliance.org/
[MLS AD]	"MLS Architecture Document", Version 1.0, Open Mobile Alliance™, OMA-AD-MLS-V1_0 URL:http://www.openmobilealliance.org/
[MLS RD]	"MLS Requirements Document", Version 1.0, Open Mobile Alliance™, OMA-RD-MLS-V1_0 URL:http://www.openmobilealliance.org/
[RFC2119]	"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt
[RLP 1.0]	"Roaming Location Protocol", Version 1.0, Open Mobile Alliance™, OMA-TS-RLP-V1_0 URL:http://www.openmobilealliance.org/
[RLP DTD]	"RLP DTDs", Version 1.1, Open Mobile Alliance™, OMA-SUP-DTD_RLP-V1_1 URL:http://www.openmobilealliance.org/
[SUPL AD]	"SUPL Architecture Document", Version 1.0, Open Mobile Alliance™, OMA-AD-SUPL-V1_0 URLhttp://www.openmobilealliance.org/
[SUPL RD]	"SUPL Requirements Document", Version 1.0, Open Mobile Alliance™, OMA-RD-SUPL-V1_0 URL:http://www.openmobilealliance.org/
[TIA-881]	3GPP2 X.S0002-0, Version 2.0, May 2006: "MAP Location Service Enhancements" URL: http://www.3gpp2.org/Public_html/specs/

2.2 Informative References

3. Terminology and Conventions

3.1 Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except "Scope", "Release Version Overview" and "Conformance Requirements Notation Details", are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 7 and 8 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

3.2 Definitions

Enabler Release	Collection of specifications that combined together form an enabler for a service area, e.g. a download enabler, a browsing enabler, a messaging enabler, a location enabler, etc. The specifications that are forming an enabler should combined fulfil a number of related market requirements.
Minimum Functionality Description	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.
MCF	Defined in [IOPPROC] as "All mandatory client features of the specification SCR"
MSF	Defined in [IOPPROC] as "All mandatory server features of the specification SCR"
SUPL Enabled Terminal (SET)	A device that is capable of communicating with a SUPL network. Examples of this could be a UE in UMTS, a MS in GSM or IS-95, or a PC over an IP-based transport.
SUPL Location Platform (SLP)	Entity responsible for SUPL Service Management and Position Determination. SLP contains the SLC and SPC Functions.

3.3 Abbreviations

ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance
MLP	Mobile Location Protocol
MLS	Mobile Location Service
OMA	Open Mobile Alliance
PCP	Privacy Checking Protocol
RLP	Roaming Location Protocol
SUPL	Secure User Plane Location

4. Release Version Overview

4.1 Version 1.0 Functionality

The OMA Mobile Location Service V1.0 (MLS V1.0) consists of a set of location specifications complying with 3GPP Release 6 LCS Specification. MLS 1.0 is primarily intended for use in a 3GPP environment. Compliance to other environments is not a requirement but the specification has in several cases been extended to not unnecessary prevent use in other environments. The set of specifications in MLS V1.0 consist of MLP V3.2 and RLP V1.0.

4.2 Version 1.1 Functionality

The OMA Mobile Location Service V1.1 (MLS V1.1) consists of a set of location specifications complying with 3GPP Release 6 LCS Specifications. In addition MLS V1.1 supports the functions in the OMA SUPL V1.0 enabler. MLS 1.1 is primarily intended for use in a 3GPP environment. Compliance to other environments is not a requirement but the specification has in several cases been extended to not unnecessary prevent use in other environments. The set of specifications in MLS V1.1 consist of MLP V3.2, RLP V1.0 and PCP V1.0.

4.3 Version 1.2 Functionality

The OMA Mobile Location Service V1.2 (MLS V1.2) consists of a set of location specifications:

- Supporting functions in MLS 1.1 except for Lid and Lpp reference points.

- Complying with 3GPP Release 7 LCS Specifications except for Lid and Lpp reference points that are no longer supported.

- Supporting the OMA SUPL V2.0 enabler, [SUPL AD].

- Supporting 3GPP2 "MAP Location Service Enhancements", [TIA-881].

The set of specifications in MLS V1.2 consist of MLP V3.3 and RLP V1.1.

5. Document Listing for MLS

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[MLS RD]	OMA-RD-MLS-V1_2-20080627-C	Requirement Document for MLS Enabler
Architecture Document		
[MLS AD]	OMA-AD-MLS-V1_2-20080627-C	Architecture Document for MLS Enabler
Technical Specifications		
[MLP 3.3]	OMA-TS-MLP-V3_3-20100831-C	Specification that defines the MLP 3.3 protocol
[RLP 1.1]	OMA-TS-RLP-V1_1-20100831-C	Specification that defines the RLP 1.1 protocol
Supporting Files		
[MLP_COM DTD]	OMA-SUP-DTD_MLP_ID_QOP_RES_SHAPE-V3_3-20091001-C	DTD for the messages and included elements common to MLP and RLP protocols. Working file in DTD directory: file: MLP_ID_QOP_RES_SHAPE_v3_3.dtd path: http://www.openmobilealliance.org/tech/dtd/
[MLP DTD]	OMA-SUP-DTD_MLP-V3_3-20100831-C	DTD for the messages and included elements of the MLP protocol. Working file in DTD directory: file: MLP_v3_3.dtd path: http://www.openmobilealliance.org/tech/dtd/
[RLP DTD]	OMA-SUP-DTD_RLP-V1_1-20100803-D	DTD for the messages and included elements of the RLP protocols. Working file in DTD directory: file: RLP_v1_1.dtd path: http://www.openmobilealliance.org/tech/dtd/

Table 1: Listing of Documents in MLS Enabler

6. Conformance Requirements Notation Details

This section is informative

The tables in following chapters use the following notation:

Item: Entry in this column MUST be a valid ScrItem according to [SCRRULES].

Feature/Application: Entry in this column SHOULD be a short descriptive label to the **Item** in question.

Requirement: Expression in the column MUST be a valid TerminalExpression according to [SCRRULES] and it MUST accurately reflect the architectural requirement of the **Item** in question.

7. ERDEF for MLS - Client Requirements

This section is normative.

Item	Feature / Application	Status	Requirement
OMA-ERDEF-MLS-C-001	MLS Enabler	M	OMA-ERDEF-MLS-C-002 OR OMA-ERDEF-MLS-C-003 OR OMA-ERDEF-MLS-C-004
OMA-ERDEF-MLS-C-002	MLS Client	O	MLP 3.2:MCF
OMA-ERDEF-MLS-C-003	Requesting Location Server	O	RLP 1.0: MCF AND NOT (RLP-D-C-003 OR RLP-V-C-010 OR RLP-V-C-012)
OMA-ERDEF-MLS-C-004	Home Location Server	O	RLP 1.0: MCF

Informative Note: The requirement for Item OMA-ERDEF-MLS-C-003 exempt three privacy related SCR Items in RLP from being mandatory as they are not applicable for the Requesting Location Server.

Table 2: ERDEF for MLS Client-side Requirements

8. ERDEF for MLS - Server Requirements

This section is normative.

Item	Feature / Application	Status	Requirement
OMA-ERDEF-MLS-S-001	MLS Enabler	M	OMA-ERDEF-MLS-S-002 OR OMA-ERDEF-MLS-S-003 OR OMA-ERDEF-MLS-S-004
OMA-ERDEF-MLS-S-002	Requesting Location Server	O	MLP 3.2:MSF
OMA-ERDEF-MLS-S-003	Home Location Server	O	RLP 1.0: MSF AND NOT (RLP-D-S-003 OR RLP-V-S-010 OR RLP-V-S-012)
OMA-ERDEF-MLS-S-004	Visited Location Server	O	RLP 1.0:MSF

Informative Note: The requirement for Item OMA-ERDEF-MLS-S-003 exempt three privacy related SCR Items in RLP from being mandatory as they are not applicable for the Home Location Server.

Table 3: ERDEF for MLS Server-side Requirements

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
n/a		No prior version

A.2   Draft/Candidate Version 1.2 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ERELD-MLS-V1.2	15 Oct 2007	n/a	Initial draft
	27 Dec 2007	5	List of docs updated to latest version. Decsription of RLP 1.1 corrected. List of supporting files updated to reflect restructuring of supporting files
	03 Mar 2008	4.3	Add clarification on removed support of Lpp and Lid reference points to resolve Consistency Review comment.
	08 May 2008	5	Document list updated
	15 May 2008	5	Document date updated
Candidate Version OMA-ERELD-MLS-V1.2	27 Jun 2008	n/a	Status changed to Candidate by TP TP ref#: OMA-TP-2008-0221-INP_LOC_MLS_V1.2_for_Candidate_Approval
Draft Versions OMA-ERELD-MLS-V1.2	04 Aug 2009	n/a	Document list updated
	28 Sep 2009	n/a	Document list updated
Candidate Version OMA-ERELD-MLS-V1.2	01 Oct 2009	n/a	Status changed to Candidate by TP TP ref#: OMA-TP-2009-0357-INP_MLS_1.2_ERP_for_Candidate_re_approval
Draft Versions OMA-ERELD-MLS-V1.2	02 Feb 2010	5	Document list updated
	17 Feb 2010	5	Document list updated
Candidate Version OMA-ERELD-MLS-V1.2	26 Feb 2010	n/a	Status changed to Candidate by TP OMA-TP-2010-0073R01-INP_MLS_1.2_ERP_for_notification
Draft Versions OMA-ERELD-MLS-V1.2	12 Aug 2010	5	Document list updated
Candidate Version OMA-ERELD-MLS-V1.2	31 Aug 2010	n/a	Status changed to Candidate by TP OMA-TP-2010-0377-INP_MLS_1.2_ERP_for_Candidate_re_approval