



# **Enabler Release Definition for Lock and Wipe Management Object**

## **Candidate Version 1.0 – 30 Nov 2010**

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**Open Mobile Alliance**  
OMA-ERELD-LAWMO-V1\_0-20101130-C

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# 1. Scope

The scope of this document is limited to the Enabler Release Definition of LAWMO 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/>

### 2.2 Informative References

- [OMADICT] “Dictionary for OMA Specifications”, Version 2.7, Open Mobile Alliance™,  
OMA-ORG-Dictionary-V2\_7,  
URL: <http://www.openmobilealliance.org/>

## 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 8 and 9 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

### 3.2 Definitions

<b>Enabler Release</b>	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.
<b>Minimum Functionality Description</b>	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.
<b>Device</b>	see [OMADICT]
<b>Factory Reset</b>	The act to reset the device to its initial factory state.
<b>Fully Lock Device</b>	To render the device fully inoperable from unauthorised usage except for functions mandated by law (e.g. emergency calls) and participating LAWMO sessions as well as other data sessions that aid in the recovery of the device.
<b>LAWMO Operations</b>	Lock Device, Unlock Device, Wipe Device’s Data and Factory Reset operations which may be invoked on a Lock and Wipe MO.
<b>Lock Device</b>	To render the device fully or partially inoperable from unauthorised usage according to which lock level is chosen.  Two lock levels are defined: Partially Lock Device and Fully Lock Device.
<b>Partially Lock Device</b>	To render the device inoperable from unauthorised usage except for receiving incoming calls, functions mandated by law (e.g. emergency calls), and participating in LAWMO sessions as well as other data sessions that aid in the recovery of the device.
<b>Unlock Device</b>	To re-enable all Device functionalities previously locked by Lock Device operation.
<b>Wipe Device’s Data</b>	The act to permanently erase personal and/or enterprise-related data from the device.

### 3.3 Abbreviations

<b>DM</b>	Device Management
<b>ERDEF</b>	Enabler Requirement Definition
<b>ERELED</b>	Enabler Release Definition
<b>LAWMO</b>	Lock and Wipe Management Object
<b>OMA</b>	Open Mobile Alliance

## 4. Release Version Overview

The mobile device is becoming a pocketable private information database which contains various user data and enterprise-related data. There are several scenarios user may need to remotely lock and/or wipe the device as follows:

- If the device was lost or stolen, there is a risk of data being compromised either maliciously or by accident. User may request to lock the device and wipe all the data from the device. If the device is returned, the user can also request to unlock the device.
- If the device was hand over or sold to other users, the owner may request to clean all user and enterprise-related data in the device or reset it to factory state.

There are more use cases and scenarios that may require LAWMO Operations, such as Lock/Unlock Device, Wipe Device's Data and Factory Reset.

This specification collects the use cases and corresponding requirements to develop a standardized approach to fulfil the above market needs.

### 4.1 Version 1.0 Functionality

The LAWMO Enabler V1.0 introduced following functionalities:

- Support a mechanism to Fully Lock the Device
- Support a mechanism to Partially Lock the Device
- Support a mechanism to Unlock the Device
- Support a mechanism to Wipe data from the Device
- Support a mechanism to Factory Reset the Device
- Support a mechanism to specify whether the user is to be informed of LAWMO operations performed in the Device
- Support a mechanism to notify the result of LAWMO Operations except Factory Reset to DM Server.

## 5. Document Listing for LAWMO

This section is normative.

Doc Ref	Permanent Document Reference	Description
<b>Requirement Document</b>		
[LAWMO_RD]	OMA-RD-LAWMO-V1_0-20080610-C	Requirement Document for LAWMO Enabler
<b>Architecture Document</b>		
[LAWMO_AD]	OMA-AD-LAWMO-V1_0-20090127-C	Architecture Document for LAWMO Enabler
<b>Technical Specifications</b>		
[LAWMO_TS]	OMA-TS-LAWMO-V1_0- 20101130-C	Technical Specification for LAWMO Enabler
<b>Supporting Files</b>		
[LAWMO_DDF]	OMA-SUP-MO_LAWMO-V1_0- 20101130-C	DDF parameters for the LAWMO Enabler Working file in DDF directory: file: mo_lawmo-v1_0.ddf path: <a href="http://www.openmobilealliance.org/tech/ddf/">http://www.openmobilealliance.org/tech/ddf/</a>

**Table 1: Listing of Documents in LAWMO Enabler**



## 6. OMNA Considerations

The OMNA portal needs to add and maintain the following MO into MO registry:

MO Identifier	Description	Owner	Version	MO DDF	MO Spec
urn:oma:mo:oma-lawmo:1.0	Lock and Wipe MO	DM WG	1.0	OMA-SUP-MO_LAWMO-V1_0-20080708-D	OMA-TS-LAWMO-V1_0-20090225-D

The OMNA portal needs to add and maintain the following alert type into Alert Type registry:

Alert Root	Alert Code	Alert Type Description	Owner	Version	Spec	MO Identifier (Optional)
urn:oma:at:lawmo:1.0	OperationComplete	Used to claim that the alert message conveys the result of LAWMO operation	DM WG	1.0	OMA-TS-LAWMO-V1_0-20090225-D	urn:oma:mo:oma-lawmo:1.0

## 7. 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.

## 8. ERDEF for LAWMO – Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-LAWMO-C-001-<<M/O>>	LAWMO Client	

**Table 2: ERDEF for LAWMO Client-side Requirements**

## 9. ERDEF for LAWMO – Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-LAWMO-S-001-<<M/O>>	LAWMO Server	

**Table 3: ERDEF for LAWMO Server-side Requirements**

## Appendix A. Change History

(Informative)

### A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version

### A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ERELED-LAWMO-V1_0	09 Apr 2008	All	Initial baseline draft
	25 Nov 2008	5	Document list updated
	11 Jan 2008	All	Editorial clean up prior to Candidate Approval Incorporated agreed CRs: OMA-DM-LAWMO-2008-0027 OMA-DM-LAWMO-2008-0028R02
Candidate Version OMA-ERELED-LAWMO-V1_0	27 Jan 2009	n/a	Status changed to Candidate by TP TP ref# OMA-TP-2009-0010- INP_LAWMO_V1_0_ERP_for_Candidate_Approval
Draft Versions OMA-ERELED-LAWMO-V1_0	25 Feb 2009	5 6	Document list updated Updated with agreed CR: OMA-DM-LAWMO-2009-0002
	09 Mar 2009	5	Document list updated
	11 Mar 2009	5	Document list updated
Candidate Version OMA-ERELED-LAWMO-V1_0	17 Mar 2009	n/a	Status changed to Candidate by TP TP ref# OMA-TP-2009-0118- INP_LAWMO_V1_0_ERP_for_notification
Draft Version OMA-ERELED-LAWMO-V1_0	03 Jul 2009	5	Document list updated
Candidate Version OMA-ERELED-LAWMO-V1_0	09 Jul 2009	n/a	Status changed to Candidate by TP TP Ref# OMA-TP-2009-0314R01- INP_LAWMO_V1_0_ERP_for_Candidate_Re_Approval
Draft Version OMA-ERELED-LAWMO-V1_0	31 Mar 2010	5	Changes to OMA-TS-LAWMO-V1_0 OMA-SUP-MO_LAWMO-V1_0 Document list updated accordingly.
Candidate Version OMA-ERELED-LAWMO-V1_0	26 Apr 2010	n/a	Status changed to Candidate by TP TP Ref# OMA-TP-2010-0201- INP_LAWMO_V1_0_ERP_for_Notification
Draft Versions OMA-ERELED-LAWMO-V1_0	12 Oct 2010	5	Changes to OMA-TS-LAWMO-V1_0 Document list updated accordingly.
	25 Nov 2010	5	Changes to OMA-SUP-MO_LAWMO-V1_0 OMA-TS-LAWMO-V1_0 Document list updated accordingly.
Candidate Version OMA-ERELED-LAWMO-V1_0	30 Nov 2010	n/a	Status changed to Candidate by TP TP ref# OMA-TP-2010-0511- INP_LAWMO_V1.0_ERP_and_ETR_for_notification