Enabler Release Definition for Billing Version 1.0

Historic Version 16-Dec-2002

Open Mobile Alliance
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Document History	
OMA-ERELD-WBF-v1_0-20021216-H	Current
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Contents

1. Scope

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

The scope of Billing includes the ability to generate Charging Detail Records (CDR) for transactions taking place on either the proxy or the content server. Records can be generated for pulling content from a content server and for events related to push services. These recordings (charging) can be event based or, in the case of pulling content, can also be session based. In case of charging on the proxy it is possible for the content server to forward pricing details to the proxy for inclusion in the charging recording.

The charging detail records are send to the billing environment (e.g. mediation system) for further processing. The latter is out of scope for this enabler release though.

2. References

2.1. Normative References

[CREQ]	"Specification of WAP Conformance Requirements". WAP Forum™. WAP-221-CREQ. http://www.openmobilealliance.org
[RFC2119]	"Key words for use in RFCs to Indicate Requirement Levels". S. Bradner. March 1997. http://www.ietf.org/rfc/rfc2119.txt
[WBF]	"WAP Billing Framework", Open Mobile Alliance™, OMA-WBF-v1_0, http://www.openmobilealliance.org/

2.2. Informative References

None.

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" and "Introduction", 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 [CREQ].

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.

3.3. Abbreviations

CDR	Charging Detail Record
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance
WBF	WAP Billing Framework

4. Introduction

This document outlines the Enabler Release Definition for Billing and the respective conformance requirements for clients and servers implementing claiming compliance to it as defined by Open Mobile Alliance across the specification baseline.

The WBF defines the means to charge for transactions taking place in either the proxy or the content server as they relate to pulling content from a content server or to various push services. These transactions are defined as chargeable operations.

In case of pulling content following chargeable operations are defined:

- **Content Pull**: charging is performed on the proxy for content being pulled from a content server.

- **Recording of tag-based information**: charging is performed on the proxy for content being pulled from a content server. The content server provides the proxy with charging information (pricing details) as part of the header in the content being downloaded.

- **Content Provider Recording**: charging is performed on the content server for content being pulled from a content server.

Charging in these cases can be event based (event based single recording) where only 1 CDR is used to record the chargeable operation or it can be session based (session based multiple recording) where more then one CDR is being used to record the chargeable operation.

In case of push services following chargeable operations are defined. Charging for these chargeable operations is only defined as event based:

- **Push Submission:** charging is performed on either the proxy or the push initiator for submitting or replacing a push message.

- **Push Message Delivery**: charging is performed for the notification of a successful delivery of a push message

- **Push Cancellation**: charging is performed for cancelling a submitted push message.

- **Push Query**: charging is performed for querying the status of a submitted push message.

The charging data required for the recording of these chargeable operations are formatted into an XML message and send to the billing environment (e.g. mediation system) for further processing.

5. Enabler Release Specification Baseline

This section is normative.

The following specification comprises the Billing enabler release:

"WAP Billing Framework Version 1.0"   [WBF]

6. Minimum Functionality Description

This section is informative.

See chapter 4 for a high level overview of the supported functionality. Charging is defined towards a logical entity called Usage Recording [WBF] which physically can be a separate system serving both the proxy and/or the content server or which physically can be part of the proxy or content server.

In a given network either the proxy, the content server or both can perform charging for the defined chargeable operations using a Usage Recording function. In principle, all of the chargeable operations are optional but if supported the CDR's generated by Usage Recording must be according the specified XML message [WBF].

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 [CREQ].

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

Status:
Entry in this column MUST accurately reflect the architectural status of the **Item** in question.
- M means the **Item** is mandatory for the class
- O means the **Item** is optional for the class
- NA means the **Item** is not applicable for the class

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

8. ERDEF for Billing - Client Requirements

This section is normative.

The Billing Enable Release does not specify client requirements.

9. ERDEF for Billing - Server Requirements

This section is normative.

Table 1 ERDEF for Billing Server-side Requirements

Item	Feature / Application	Status	Requirement
OMA-ERDEF-WBF-S-001	Billing	M	WBF:MSF

Appendix A.   Change History   (Informative)

Type of Change	Date	Section	Description
Class 0	16-Dec-2002		The initial version of this document.
	31 Mar 2008	All	Status changed to Historic by TP: OMA-TP-2007-0474- INP_Closing_WID_0036_WAP_Billing_Framework