

OMA Network APIs at a glance

Presented to SDP Global Summit

Liliana Dinale, Chairman of the Architecture Group, OMA

Agenda

OMA Overview

OMA Recent Work

OMA Network APIs brief

Network APIs for 2011 Pipeline

Summary



OMA – Overview

More than 150 members from across the mobile value chain

- Founded June 2002
- Operators, terminal and software vendors, content and entertainment providers

Interoperable service enablers across multiple domains

- Architecture, Security, Charging and Network APIs
- Person-to-Person Communications
- Device Capabilities
- Access to Content
- Services Access Interface
- Service Customization

Current and Ongoing Technical Deliverables – more detail in presentation

- 44 service enablers delivered in 2010 with 80 planned for 2011
- Ongoing refinement of interoperability testing program with Test on Demand in Q3 2011
- API Framework—building on success of GSMA OneAPI and Parlay affiliation
- M2M Communications—enabling terminals as gateways and converged personal networks

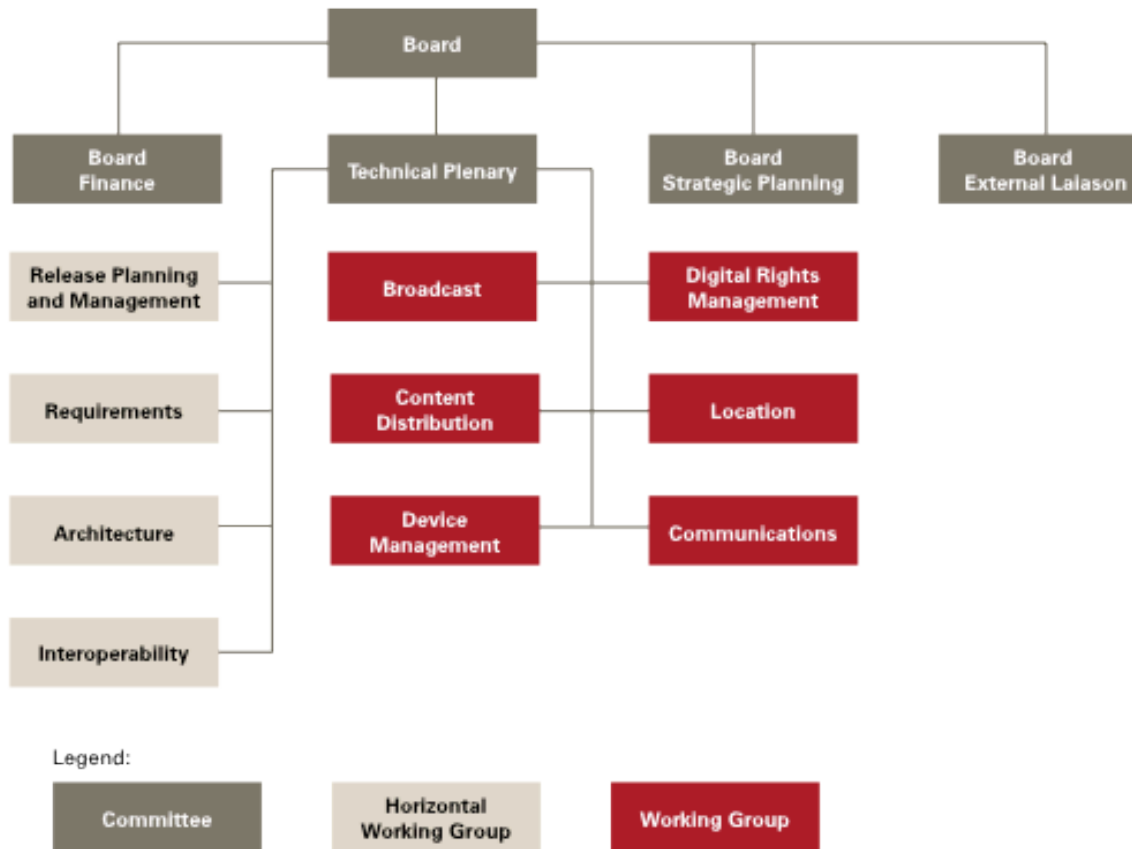
New and improved organizational structures and efficiencies

- Fast track process for omitting or combining steps and deliverables in OMA Process
- Min Max procedure for an alternative path to traditional testing of every OMA enabler

Collaboration with other bodies—including WAC, GSMA, W3C & ETSI

- Reduce duplication and fragmentation
- New strategic program of liaisons with appointed Board level champions to other bodies
- OMA maintains formal cooperation agreements or frameworks with nearly 50 industry bodies

OMA – Organizational Structure



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Highlights of OMA Service Enablers

Over 50 Candidate and Approved Enablers Published in the Last 18 Months

Candidate Enabler Releases

- OMA Device Management Smart Card V1_0
- OMA Lock and Wipe Management Object V1_0
- OMA Converged Address Book V1_0
- OMA XML Document Management V2_1
- OMA Secure Content Identification Mechanism V1_0
- OMA SIP Push V1_0
- OMA Location in SIP/IP Core V1_0
- OMA Secure User Plane Location V2_0
- OMA Mobile Search Framework V1_0
- OMA Mobile Codes V1_0
- OMA Mobile Advertising V1_0
- OMA Mobile Spam Reporting V1_0
- OMA Customized Multimedia Ringing 1.0
- OMA Presence Access Layer V 1.0
- OMA Mobile Spam Reporting V1.0
- OMA Application Layer Security Common Functions V1.1
- OMA Next Generation Service Interfaces V1.0
- OMA Digital Rights Management V2.2
- OMA Key Performance Indicators in OMA V1.0
- OMA Smart Card Web Server V1_2
- OMA Mobile SMIL V 1.0 (Reference Release)

A Candidate Enabler Release (CER) delivers an approved set of open technical specifications that can be implemented in products and solutions, and then tested for interoperability.

An Approved Enabler Release (AER) represents Candidate Enabler Releases that have gone through the Interoperability Program (IOP) of OMA. The IOP tests interoperability between different member company's implementations—either within the OMA or through other means.

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OMA Network API Key Messages

OMA APIs Standardize Access to Unique Resources within Operator Networks

The OMA API program provides standardized interfaces to the service infrastructure residing within communication networks and on devices. Focused primarily between the service access layer and generic network capabilities, OMA API specifications allow operators and other service providers to expose device capabilities and network resources in an open and programmable way -- *to any developer community independent of the development platform.*

By deploying OMA APIs, fundamental capabilities such as SMS, MMS, Location Services, Payment and other core network assets are now exposed in a standardized way. This reduces development cost and time-to-market for new applications and services, as well as simplifying wider deployment of existing applications and services.

OMA Network API Key Messages (Continued)

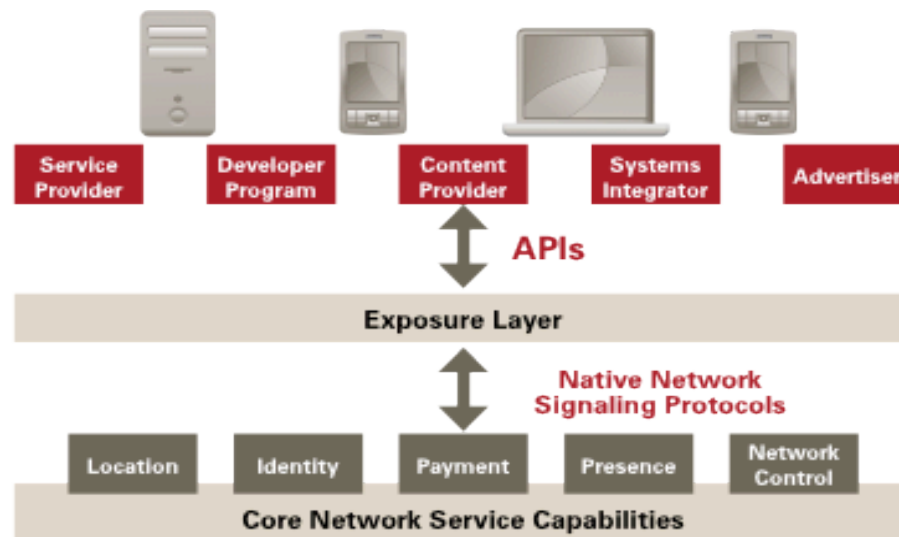
- OMA APIs expose the network assets that developers need - no matter what protocols, platforms or other APIs they use.
- Core network assets must be made available in order to deploy the wide variety of new applications and services that enter the market every day.
- The OMA set of APIs increases the portability of applications and services in order to reach the subscriber base of operators and service providers that deploy OMA APIs.
- As the number of APIs that perform the same functionality proliferate, fragmentation occurs. This limits developer access to subscribers, and operator and service providers' choices of development platforms and communities. The OMA API Program, through standardization, solves this problem.

Network APIs: What, Why, Who, Where?

Use Application Programming Interfaces (APIs) to open up service capabilities and assets in the core network to application developers

OMA Network APIs provide an abstracted view of these capabilities

- Application developers do not require comprehensive knowledge of arcane telecommunication signaling protocols and call state models
- Applications built towards the API can be ported across network types and access technologies



Network API Dimensions in OMA

Abstract APIs

- Focus on functional aspects
- Protocol independent

API Binding Technologies

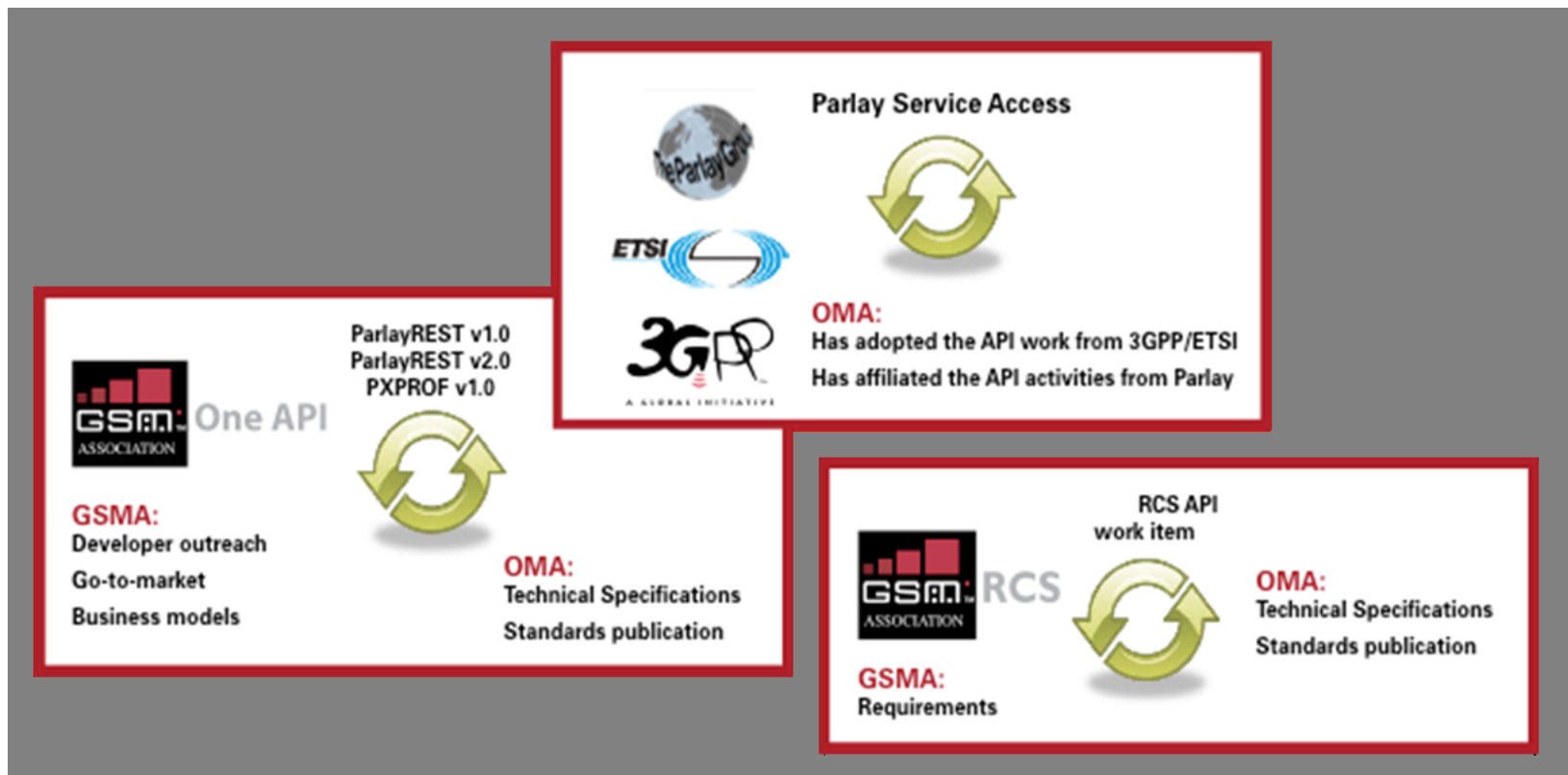
- SOAP/WSDL Web Services
- HTTP protocol binding using REST architectural style

Note:

Network APIs

- Network API—exposed by a resource residing in the Network

OMA Network APIs and the Rest of the Industry



OMA Current and Future Network API Work

Ratified APIs

1. Next Generation Service Interfaces
2. SOAP for Next Generation Service Interfaces
3. RESTful Bindings for Web Services
4. Parlay Service Access
5. ParlayREST (OMA PXPREF) and its GSMA OneAPI Profile

Pipeline APIs

1. APIs for Rich Communications
2. Converged Address Book APIs
3. Restful Network APIs (19 unique standalone distinct APIs exposing services (inheritance and evolution of the RESTful Bindings for Web Services))

Others under consideration...

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What's in the Pipeline for 2011? (Network APIs 1/2)

- OneAPI Profile of RESTful Network APIs
 - RESTful Network API for Short Messaging
 - RESTful Network API for Messaging
 - RESTful Network API for Payment
 - RESTful Network API for Terminal Location
 - RESTful Network API for Device Capabilities
 - RESTful Network API for Terminal Status
 - RESTful Network API for Third Party Call
 - RESTful Network API for Call Notification
 - RESTful Network API for Audio Call
- APIs for Rich Communications
 - RESTful Network API for Chat
 - RESTful Network API for Notification Channel
 - RESTful Network API for File Transfer
 - RESTful Network API for Image Share
 - RESTful Network API for Video Share
 - RESTful Network API for Presence
 - RESTful Network API for Address List Management
- Converged Address Book APIs

Note: The OneAPI Profile and APIs for Rich Communications play a central role in the cooperation with GSMA

What's in the Pipeline for 2011? (Network APIs-2/2)

OMA ARC WG is working on specifications to ensure consistent support for RESTful Network APIs:

- Common Definitions and Specifications for RESTful Network APIs
- Whitepaper on Guidelines for RESTful Network APIs
- Authorization Framework for Network APIs (OAuth 2.0 support)

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OMA continues a robust yearly release of technical work

- 44 service enablers delivered in 2010
- 80 releases in 2011
- Maintenance of existing specifications with new work in APIs, M2M communications and Mobile Search and other areas of industry interest

OMA membership is smaller, more agile and focused on time to market; the core founders of the organization are still in place

- New work continues to come in
- Improved process and efficiencies

Collaboration with other bodies is strong—including GSMA

More Information

- OMA Communications Contact
Bobby Fraher, External Communications Manager
bobby@agilis-communications.com
- 2011 Q2 OMA Quarterly Newsletter
http://www.openmobilealliance.org/comms/pages/OMA_quarterly_2011_vol_2.htm
- Full list of OMA Mobile Service Enablers
<http://www.openmobilealliance.org/Technical/releaseprogram.aspx>
- Interested in joining the OMA
<http://www.openmobilealliance.org/Membership/default.aspx>