OMA-TP-2004-0353R01-OMA-Presentation-to-W3C-re-MWI

Invited Presentation OMA – W3C and the Mobile Web Initiative

Submitted To: W3C

Date: 2nd November 2004

Availability: [X] Public [ ] OMA Confidential

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Source: TP

Presentation Overview

- Introduction to OMA
- The evolution of OMAs work with reference to W3C
- Some views in the Mobile Web Initiative
- Standardisation ecology for the mobile web including an example
- OMA working practices and key policy areas
- Key technical areas for cooperation
- Most important messages
- Areas for immediate cooperation

Open Mobile Alliance

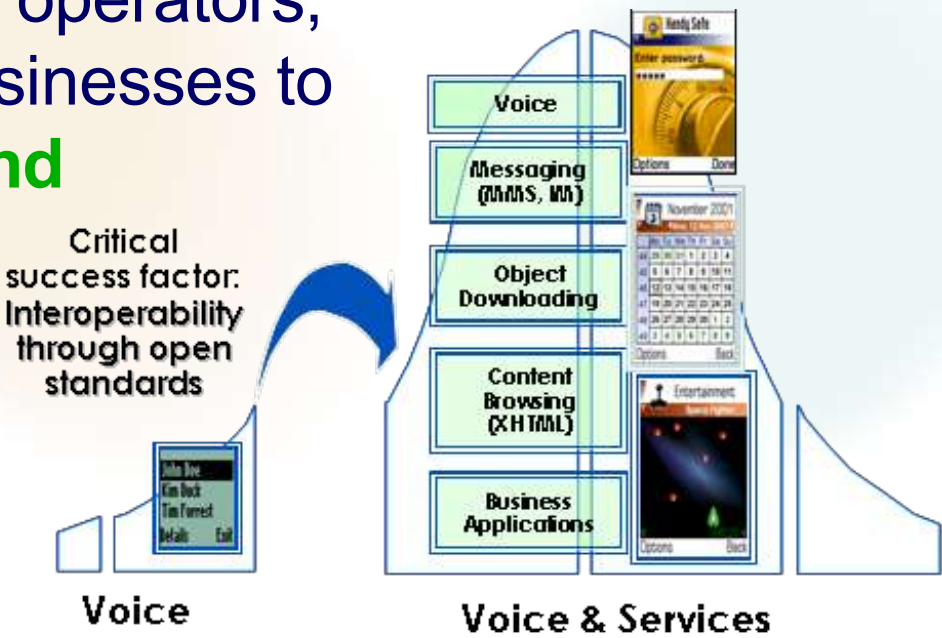
- In June 2002, the mobile industry set up a new, global organization called the Open Mobile Alliance (OMA)
  - The Open Mobile Architecture initiative and the WAP Forum formed the foundation for the Open Mobile Alliance
  - Since which time, several organizations have integrated into OMA
- OMA is different because it
  - Brings together all of the links in the value chain
    - Mobile Operators
    - Wireless Vendors
    - Information Technology Companies
    - Application & Content Providers
  - Incorporates companies of all sizes and across all geographic barriers
  - Delivers on end-to-end services and solutions in an open standards environment

OMA Vision

“**No matter what device I have,** no matter what service I want, no matter what carrier or network I’m using, I can **communicate, access** and **exchange** information.”

OMA Mission

The mission of the **Open Mobile Alliance** is to facilitate **global** user adoption of **mobile data services** by specifying market driven **mobile service enablers** that ensure service **interoperability** across devices, geographies, service providers, operators, and networks while allowing businesses to compete through **innovation and differentiation.**

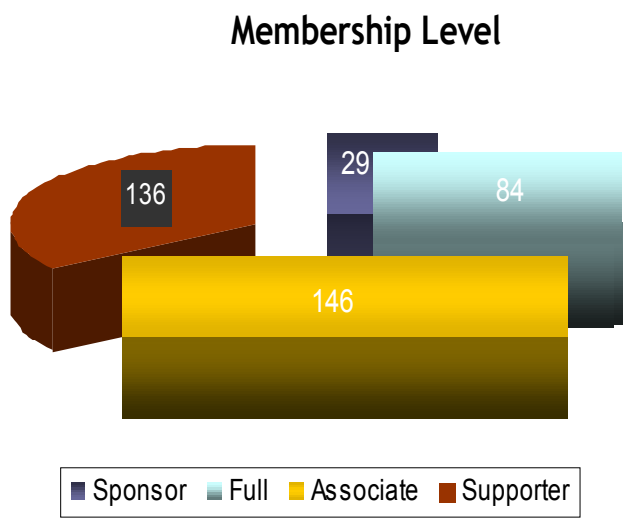


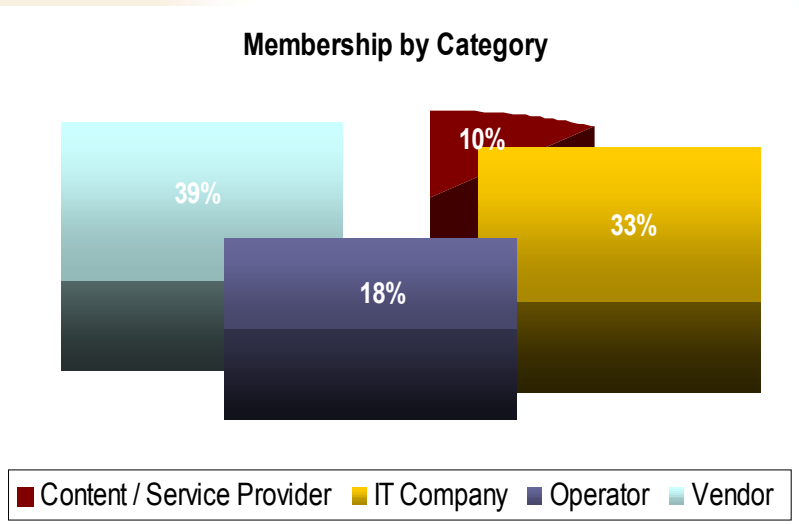
OMA Continues to Drive the Mobile Industry's Advancement Towards Interoperability

- A Catalyst for Collaboration by:
  - Elevating the significance of interoperability across the wireless value chain
  - A reduction in standards fragmentation
  - Facilitating interoperability between technology implementations from various vendors through testing

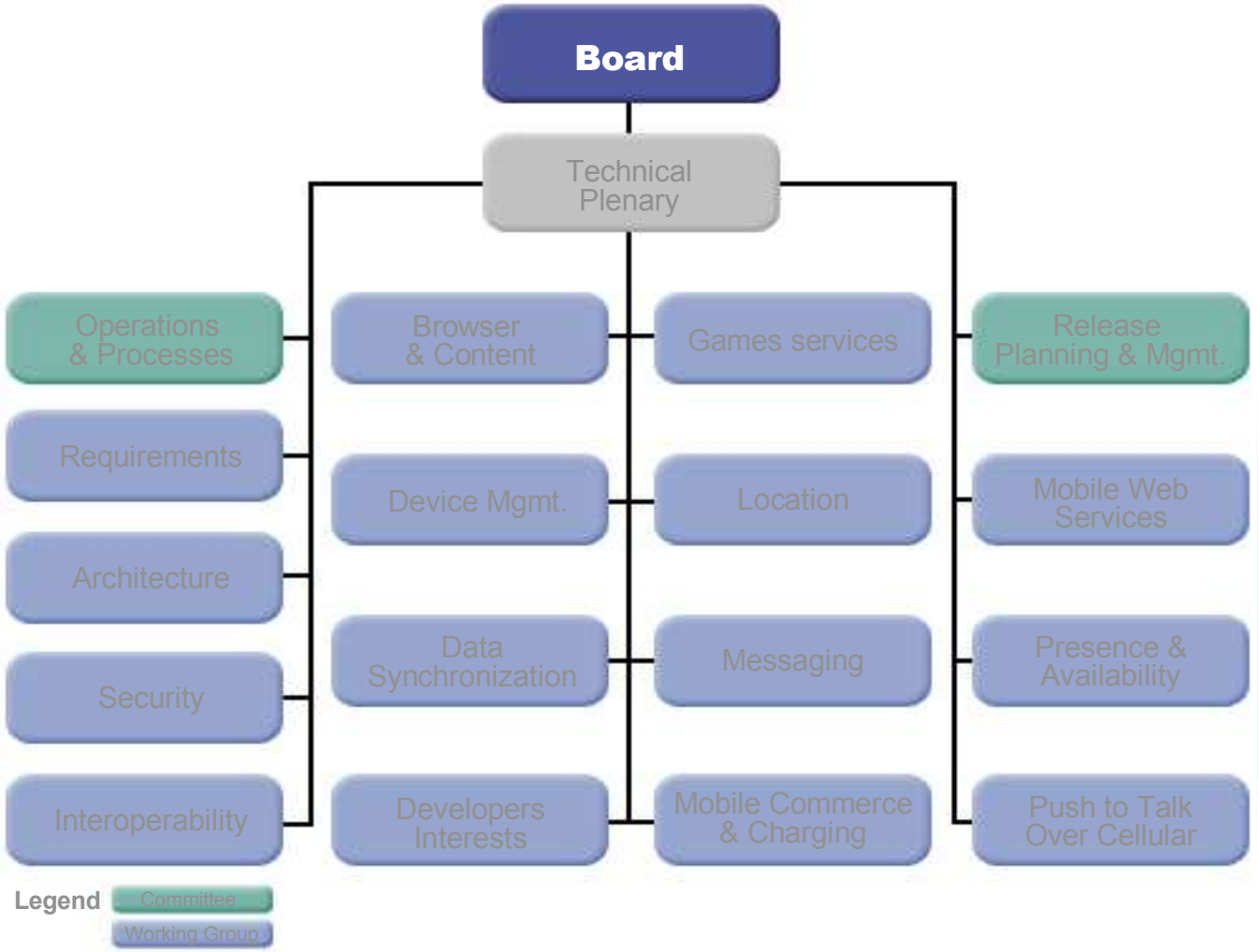
OMA Membership Expands…

Over 380 OMA member companies represent a truly global organization with members from all regions which…





OMA Technical Plenary Today…



What are the OMA Deliverables?

- OMA Generated Specifications
  - Based on market-driven requirements and use cases
- OMA Release Programme
  - Delivers complete specifications packaged into “Enabler Releases”
  - Enabler Releases may consist of one or more specifications
- OMA Testing
  - Verifies Enabler Releases in interoperability test events for products built using OMA technical specifications
  - Enabler Releases used by different organizations to develop differentiating interoperable products and services
- Enabler Test Specifications to be used in OMA interoperability test events or other interoperability testings
- Others
  - Reports, analyses, white papers, industry studies etc.

OMA Release Program Continues to Deliver Market Driven Specifications…

- 17 Phase 1: Candidate Enabler Release
  - An approved set of open technical specifications forming an enabler that can be implemented in products and solutions and which can be tested for interoperability
- 8 Phase 2: Approved Enabler Release
  - The enabler has successfully passed interoperability tests

OMA Achievements –Enabler Releases

Phase 1 – Candidate Enabler

- OMA Billing framework 1.0
- OMA Browsing 2.1
- OMA Browsing 2.2
- OMA Client provisioning 1.1
- OMA Data Synchronization 1.2
- OMA Digital Rights Management (DRM) 2.0
- OMA Domain Name Server (DNS) 1.0
- OMA Email Notification 1.0
- OMA External Functionality Interface 1.1
- OMA Game Services 1.0
- OMA Instant Messaging and Presence Services (IMPS) 1.2
- OMA Mobile Location Protocol 3.1
- OMA Multimedia Messaging (MMS) version 1.2
- OMA Online Certificate Status Protocol Mobile Profile 1.0
- OMA SyncML Common Enablers version 1.2
- OMA User Agent Profile version 1.1
- OMA User Agent Profile version 2.0

Phase 2 – Approved Enablers

- OMA Data Synchronization 1.1.2
- OMA Device Management 1.1.2
- OMA Digital Rights Management (DRM) 1.0
- OMA Download 1.0
- OMA Instant Messaging and Presence Services (IMPS) 1.1
- OMA Multimedia Messaging (MMS) 1.1
- OMA SyncML Common Enablers 1.1.2
- OMA Web Services 1.0

Liaisons with Other Organizations Continue to Grow…

- OMA has established cooperation agreements with many external organizations allowing for:
  - Closer cooperation and cross-participation between organizations
  - Document and information exchange
  - Other forms of cooperation as needed, including:
    - Joint MMS Workshop with 3GPP, 3GPP2, CDG, GSMA
- OMA has established relationships with 17 industry organizations and SDO's
  - Discussions underway with many more organizations

Current Cooperation Agreements and Frameworks in Place…

- 3GPP
- 3GPP2
- CDG
- ETSI
- GSMA
- IETF
- IFPI
- ITU-T
- Liberty Alliance
- MeT
- MOBEY Forum
- MPA
- MPF
- OASIS
- Parlay
- PayCircle
- RIAA
- WiFi Alliance
- W3C

OMA Timeline

- 1997 - Mid-2002: Pre-OMA – the "Affiliate" Era
  - *Initial "affiliates" were WAP Forum, Location Interoperability Forum, SyncML Initiative, Wireless Village. Subsequently MWIF affiliated*
  - WML(XML based abstract markup language) migrated to XHTML-MP (mobile profile); completed in 2001
  - WCSS created to suit mobile devices, essentially a profile of CSS2
  - UAProf – Application of CC/PP including a protocol
  - SMIL – SMIL profile for MMS
  - Use of XML for many purposes, e.g. provisioning, etc.

OMA Timeline

- Mid-2002 - 2004: becoming in step with current W3C initiatives
  - WCSS – generation of a minimum conformance profile when W-CSS is supported
  - SVG Work Item – OMA submits requirements to SVG Last Call for SVG-Tiny 1.2
  - SMIL Work Item – OMA collecting requirements and will submit to W3C
  - MMI Work Item – filling gaps and choosing technologies to realize the W3C's MM architecture

OMA Timeline

- 2005 and Beyond
  - Continue to meet the demands of the market while avoid duplication of effort with other bodies
    - Required cooperation / collaboration with other bodies
  - Providing requirements to W3C technology initiatives
  - Helping to drive selection of activities
  - Coordinating appropriate work splits, e.g. W3C producing core technologies, OMA producing domain expertise to bring to market.

Why OMA Considers the Mobile Web Initiative Important

- Analysts have predicted…
  - "…by 2004 there 70% of phones will use wireless to access the web and enterprise networks" - Gartner
  - "…there will be more phones with web capable browsers then PCs by 2004" - various
  - etc..
- Whatever the reality compared to the predictions the number of mobile devices, including phones, using web is a substantial.
- Recognising this opportunity the web needs to treat all devices and content as equal first class citizens.
  - Hence the value of MWI

Why OMA Considers the Mobile Web Initiative Important

- Challenges the MWI could tackle
  - Current W3C technologies do not adapt easily to the requirements of mobility.
  - Content Adaptation strategies are varied, overlapping and inconsistent.
- There is a need for all interested parties to create a functioning standardization ecology to deal with mobility issues.
  - W3C MWI is part of this

Standardization Ecology for the Mobile Web

Maintain the healthy differences in roles when approaching mobile standardization issues.

- W3C – creates specifications for XML-related technologies
  - Enabling devices of different capabilities, tooling, best practices, etc.
- OMA – determines mobile industry drivers and requirements for W3C technologies;
  - Currently selects appropriate technologies from W3C
  - In the future want W3C specification to directly reflect mobile requirements
- 3GPP/2 – responsible for wireless bearer-aware technologies
- Clear roles for all organizations must be defined and communicated (e.g. via liaisons). Overlapping work must be avoided

MMI as an Example of a Working Ecology

- W3C provides
  - Conceptual architecture;
  - Core languages for modalities,
  - etc.
- OMA provides
  - Realisation for the mobile domain
    - utilising W3C technologies and conceptual architectures
    - Utilising the appropriate bearers and codecs etc for the domain
    - Providing all the “glue” to realise the service enabler
- 3GPP/2 and related bodies provide
  - Appropriate codecs
  - Communication optimisation
  - Etc.

OMA Working Practices are Not an Inhibitor to Cooperation

- Process to develop Enabler Releases (specs or sets thereof)
  - Initiation of activity proposed by >4 members and agreed by the members
    - Stimulus may be members, groups, external groups through cooperation etc.
  - Requirements phase including use cases to scope the work
  - Architecture and detailed specification activity
  - Approval as “candidate” enabler (set of specifications)
  - Validation of the enabler through interoperability testing
  - Final approval

OMA Working Practices are Not an Inhibitor to Cooperation

- Transparency of work within OMA
  - Openness is key to giving external parties and public access to the work of OMA
  - Approved activities (work items) are publicly visible as is the organisational structure
  - Members are encouraged to make their contributions public (default)
  - Draft specifications (requirements, architecture, detailed specs) are made public as early as possible
- Net … OMA's work is visible to non members and the processes apply rigour

Key Policy Areas

- Conformance
  - OMA believes in well defined conformance definitions for the specifications it creates or are endorsed. We expect to work closely with W3C defining interoperable conformance tools that are consistent with the web as a whole
- Certification
  - OMA is not directly active in certification of implementations
  - OMA recognizes 3rd parties for the certification of mobile devices; GCF so far
  - OMA is *not* considering the certification of Web content and endorses the W3C developing rules and validation tools for mobile content
- IPR
  - OMA IPR policy is changing as of 1st January, 2005. All Essential IPR will be available to both members and non-members on a FRAND basis. Formerly IPR was guaranteed available on a RAND basis only to OMA members

Key Technical Areas for Cooperation

- W3C Language Technologies
  - XHTML 2.0
  - XForms/Web Forms
  - CSS
- Content Adaptation
  - UAProf, CC/PP next steps
  - Transcoding Interface
- Multi-modal Interaction
  - OMA realization of the W3C architecture
- Security and Privacy
  - P3P
- Compound Documents
  - Combination of XHTML, SVG and SMIL
- Web Applications – browsing environment that supports applications
  - Eventing, data binding, language extensions etc.

Most Important Messages

Web aware devices are tending toward greater diversity driven largely by mobility issues.

- Design for Interoperability
  - Already one of W3C's 7 key principles
- Design with Device Scaling in Mind
  - There will always be a range of functionality embodied in devices using Web technologies, not because of technology limitations, but because of market economics.
  - Should be one of W3C 7 key principles
- Respect the business models, requirements, constraints, etc. of the mobile industry

Areas for Immediate Cooperation

- Multimodal
- CC/PP and UAProf
- SVG
- SMIL for MMS