TSG T Meeting #20 **TP-030135**
Hämeenlinna, Finland, 4 – 6 June, 2003

Title: **3GPP-OMA Overlap Report**
Source: **TSG-T Vice Chair (Kevin Holley)**
Agenda Item:
Document for: **Discussion**

During the TSG SA #19 meeting in Birmingham it was proposed that a study be undertaken to identify work underway in 3GPP which is related to work in OMA, in order that SA can decide on what additional co-ordination mechanisms (if any) are required with OMA work.

This report is presented to RAN, CN, T and SA for discussion and conclusion on a way forwards during the SA meeting.

Introduction

The Open Mobile Alliance (OMA) was formed in June 2002, creating an organisation suited to the development and publication of applications specifications. It was formed from the WAP Forum, with the addition of several other fora including SyncML, Wireless Village and LIF. The working procedures in OMA have substantially changed from the WAP forum procedures and are in many ways now similar to 3GPP's, with Work Items (4 supporting companies), Requirements and Architecture documents, plus more detailed technical specifications. There is also a Change Request procedure which replaced the old WAP Forum method of publishing separate change documents alongside the original specification.

The intention of OMA, as outlined in a presentation to the 3GPP PCG in October 2002, is to develop application enablers or "service enablers" which can run over a variety of different mobile networks including those specified by 3GPP. OMA already has activity underway on many service enablers including Instant Messaging, Multimedia Messaging (MMS), Location Services, Device Management, Device Synchronisation, Games Services, Download, DRM and mobile browsing capabilities.

OMA's service enablers are at a high level and OMA does not get involved with the detail of specific radio or codec technologies.

For more details see the website at http://www.openmobilealliance.org .

Summary and Issues

From a review of the table below it is clear that the 3GPP and OMA work programmes have been developed separately, but for the most part with an eye on the other side of the fence. Someone with an intimate knowledge of the 3GPP and OMA work can navigate the different work items and different groups and understand each piece of work and its individual merits. However there are a number of problems presented by the current situation:

- **People without a broad view are confused**

  It is clear that there are many in the industry who are confused about where it is best for certain work to be performed. Taking for example MMS, it is very hard to ascertain that Requirements are developed in 3GPP and OMA for different aspects, Architecture is mainly done in 3GPP (but not in S2), and implementation is split between 3GPP and OMA. No one body has an overview of the MMS work and companies have to make up their own overview.

- **Lack of a logic to how the work is partitioned**

  As explained above, some items have many groups in different fora progressing their development, and since the present situation is more or less dictated by whichever group started working on the item first, rather than analysis of the capabilities of the different fora, we have a strange situation where partitioning is not always logical. This also can result in lack of awareness of work items across the fora.

- **Risk of "forum shopping"**

  If we do not make it clear as an industry where the different aspects of the work are performed, companies may attempt to push work items into the forum which accepts them, rather than ensuring a co-ordinated focus on particular aspects in particular fora.

Proposal

3GPP and OMA need to come to a mutual agreement on division of work to help eliminate the above problems. Based on an analysis of the *raison d'être* for the two fora, the following principle for a work split could be agreed:

- OMA develops application and service enabler requirements for mobile services, and develops the high level architecture and implementation where the service enabler does not require tight coupling to the 3GPP System Architecture.

- 3GPP develops 3GPP-specific capabilities to support OMA applications.

- 3GPP and OMA establish a set of stable technical interfaces between specifications developed by the two organisations to allow each to fully complete its work without the need for too many liaison statements going back and forth.

- The existing independent release cycles of the two organisations will need to be factored into the relationship

The consequences of this approach would be that some work in 3GPP would need to be closed at some point to allow the focus for that work to move to OMA. Examples might be IMS Messaging (user and aspects above the SIP layer), MMS (user, high level architecture, aspects outside of {codecs, roaming, charging}).

At the same time 3GPP should have a very open dialogue with OMA and ensure that the uses of 3GPP technology such as SMS for OMA applications is well understood and appropriately documented on both sides.

In order to progress the above, it is proposed to have a 3GPP-OMA Workshop. One candidate timing for this workshop would be in September, when 3GPP and OMA are meeting in Germany in subsequent weeks.

Details received from WGs

Many of the 3GPP WGs are completely unaffected by the work in OMA, in particular RAN and GERAN WGs have responded that there is no work in their groups related to OMA. These are in many cases only an initial feedback from the groups and do not cover all the work in OMA which has a potential impact on 3GPP. For example, no-one has mentioned the Standardised Transcoding Interface work in OMA.

The input from the other groups is included here starting with SA, then T, then CN.

Work Item	Overlap with OMA	Reliance on Input (direction) from OMA	Reliance on output (specifications) of OMA	Other Comments
S1-SES	Some	Service architecture and SES services	TS 22.234	OMA is defining multimodal support. This work, although related has not been carried out in 3GPP
S1-Presence	OMA has an IMPS WG, which is defining Presence Service and Instant Messaging.	None	TBD	The work on presence in SA1 is stable for inclusion in Rel 6. OMA has defined Presence in IMPS 1.X (based on Wireless Village). Also OMA IMPS is having WID on SIP/SIMPLE that may have impact on how presence in IMS should be defined in future. Relation between 3GPP Presence and IMPS SIP/SIMPLE presence needs further clarification. This may lead to transfer of the primary responsibility for the development of Presence service related work to OMA after release 6.
S1-Privacy	NONE	In the future 3GPP privacy work may profit by referencing the OMA Privacy Requirements Document (OMA-REQ-Privacy)		The 3GPP privacy work is meant to identify existing privacy requirements investigate potential new requirements for a common Privacy capability The OMA privacy work (currently) focuses on requirements coming from legislations (e.g. EU directives) and business requirements.
S1-GUP	OMA has a UAProf	M-commerce		GUP encompasses the access to and handling of user

	(User Agent Profile), Data Synchronisation and Device Management activities as well as an Identity Management work item which are closely related to GUP.			data (settings, preferences, etc…). This may have effect on or be influenced by OMA M-commerce. Also, there is a strong relationship of GUP to user data management, which at the time seems to be covered by 3GPP (SA5) only.
S1-LCS	None	None	None	Refer to SA2 where the WID is managed. OMA has a Location WG (formerly known as LiF), which is developing location specifications
S1-Network Sharing	NONE	None	None	Specific to the 3GPP system
S1-OSA	OMA has a Web Services working group.	None		OSA has a requirement for Web Services interface for the existing service capabilities features Similar to PARLEY, OSA is useful for and potentially takes effect on OMA M-commerce
S1-IMS	No overlap.	TBD (Depending on how OMA enablers utilise IMS.)	None. (IMS platform development shall remain at 3GPP)	The IMS related work has just been started in OMA. It is not yet clear what will be result. However it can assumed that OMA will have a role in development of specifications for “IMS applications” in future. Currently OMA is investigating the applicability of IMS in OMA, as IMS provides functions (IMS session related) upon which OMA defined services (e.g. PoC) may be based. A BoF has been created that carrying out this investigation into IMS capabilities
S1-Messaging (IMS messaging)	OMA is developing IM in IMPS WG (SIP/SIMPLE WID)	None	TBD	The work on IMS messaging in SA1 is stable for inclusion in Rel 6. OMA has defined IM in IMPS 1.X (based on Wireless Village). Also OMA IMPS is having WID on SIP/SIMPLE that may have impact on how IM in IMS should be defined in future. Relation between 3GPP IMS messaging and IMPS SIP/SIMPLE IM needs further clarification. This may lead to transfer of primary responsibility for the development of IMS messaging related work to OMA after release 6.
S1-Messaging (MMS)	No overlap. 3GPP has relied on WAPF and now OMA for some	Generic messaging service architecture	TBD	3GPP should evolve the service capability aspects and the 3GPP specific functionalities. MMS: the complete responsibility on MMS could be transferred to OMA after Rel-6. This includes

	stage 3 work on MMS.			maintenance of MMS Rel-6 and earlier. 3GPP may have requirements on MMS > Rel-6 to be useable as "**Deferred delivery messaging"** for IMS messaging
S1-Features interaction	NONE	None	None	
S1-Priority	NONE	None	None	Specific to the 3GPP system
S1-WLAN	NONE	None	None	Specific to the 3GPP system
S1-MBMS	Potential overlap for the service centre	Generic messaging service architecture	None	Specific to the 3GPP system
S1-Push	Some. Stage 1 Requirements covering application level issues overlap with work in OMA Push.	None.	OMA Push is producing service enablers to allow the introduction of Push based services as per the Stage 1.	Also, the WAP Push solution was transferred to OMA, and provides one of the mechanisms to enable the Push Service.
S2-PS domain and IMS impacts for supporting IMS Emergency calls	None	None	None	
S2-Location Services enhancements 2: • Improvement on Le interface	Yes, with the OMA WI 41 Maintenance of OMA legacy location specs from LIF and WAP Forum.	None	The stage 3 of the Le interface is specified by OMA in LIF TS 101 "Mobile Location Protocol Specification"	
S2-Location Services enhancements 2: • Enhanced support for anonymity and user privacy	Yes, with the OMA WI 8 Privacy for Mobile Service and OMA WI 42 Privacy Checking Protocol.	None	The stage 3 protocols RLP and PCP for the Lr, Lpp, Lid interfaces and MLP protocol for the Le interface are specified by OMA.	
S2-Location Services enhancements 2: • Enhanced inter-GMLC interface	Yes, with the OMA WI 40 Roaming Location Protocol (RLP)	None	The stage 3 of the Lr interface is specified by OMA "Roaming Location Protocol Specification"	
S2-Location	?	None	The stage 3 of the	This SA2 Work Item affects the Le, Lr and probably the

Services enhancements 2: • Location Services support for IMS public identities	(*Check if any OMA WI created yet*?)		Le, Lr, Lpp, Lid interfaces are specified by OMA.	Lpp/Lid interfaces.
S2-Location Services enhancements 2: • New area event for location service triggering reports	? (*Check if any OMA WI created yet*?)	None	The stage 3 of the Le and Lr interfaces are specified by OMA.	This SA2 Work Item affects the Le, Lr and probably the Lpp/Lid interfaces.
S2-Location Services enhancements 2: • FS on applicability of GALILEO for LCS	None	None	None	
S2-Stage 2 of IMS Phase 2: • IMS Group Management	Yes, with the OMA WIs 26 Maintenance & Enhancemants of IMPS 1.X and OMA WI 28 OMA SIP/SIMPLE IMPS Service Definition.	None	None	Group Management is a potential area for coordination.
S2-Stage 2 of IMS Phase 2: • IMS Conferencing	Maybe with OMA WI 43 Push to talk over Cellular (PoC)	None	None	Conferencing is a potential area for coordination.
S2-Stage 2 of IMS Phase 2: • PSS alignment to IMS	None	None	None	
S2-Stage 2 of IMS Phase 2: • IMS Messaging	Yes, with the OMA WI 28 OMA SIP/SIMPLE IMPS Service Definition.	None	None	SIP based messaging is a potential area for coordination.
S2-Stage 2 of IMS Phase 2: • IMS Local services	None	None	None	

S2-Radio optimisation impacts on PS domain architecture	None	None	None	
S2-Interoperability and Commonality between IMS using different "IP-connectivity Networks"	None	None	None	
S2-Support of Push Services	Yes, with the WAP Push specifications and work in the MAG Push WG and OMA WI 24 WAP Push Security.	None	Push OTA protocol, Push Application Protocol (PAP) under OMA MAG WPG.	Push is a potential area for coordination.
S2-Support of Presence Capability	Yes, with the OMA WIs 26 Maintenance & Enhancemants of IMPS 1.X and OMA WI 28 OMA SIP/SIMPLE IMPS Service Definition.	None	None	Presence is a potential area for coordination.
S2-Multimedia Broadcast and Multicast Service	None	None	None	
S2-Speech Recognition and Speech Enabled Services	None	None	None	Maybe some coordination with the OMA WI 3 Multimodal and Multidevice Services is needed.
S2-Generic User Profile	None	None	None	Maybe some coordination with UAProf in OMA is needed.
S2-WLAN Interworking – Architecture Definition	None	None	None	
S2-Network Sharing	None	None	None	
S2-FS on Dynamic Policy Control	None	None	None	

enhancements for end-to-end QoS				
S2-Handling of early UEs	None	None	None	
S2-Overall architectural aspects of IP flow based bearer level charging	None	None	None	
S3-Presence	Wireless Village work on Presence	No	No	OMA Presence not compatiable
S3-MBMS	Possibility to send OMA DRM protected data on MBMS	No	No	
S3-GUP	Device Management and Identity Management	Unknown	Unknown	
S3-DRM	DRM security work moved to OMA	No	Reliant on OMA for DRM solution	Perhaps 3GPP DRM WI should be dropped
S3-Subscriber Certificates	See “Other comments”	No	Certificate profile (WAP Certificate and CRL Profile specification), WIM, WPKI	3GPP is interested in the progress of new “Key Generation and Enrolment” work item. Potentially, OMA could use AKA-based bootstrapping for securing enrolment from browser Certificate request format PKCS#10 will be used
S3-OSA	Yes, Web Services XML	Unknown	OMA are setting requirements that might require API and associated security work in 3GPP	
S3-UEM	Device Management	Unknown	Unknown	Awaiting guidance from SA5 (see S3-030181)
S3-MExE	None	No	No	MExE work has been effectively transferred to OMA. MExE TR can be used by OMA SG. 3GPP work completed.
S3-IMS	Instant messaging	No	No	

S3-LCS	None identified	No	No	LSs have been exchanged previously with LIF about security aspects of LCS
S4-PSS Rel-6	None	None	3GPP has declared that it will use OMA specifications on DRM. In SA4, OMA DRM is expected to be used in Rel-6 PSS and in related specifications.	Impact of DRM will be taken into account in PSS specifications to allow flexible and interoperable use of DRM protection for the .3gp file format and streamed content. (OMA will also be given feedback on any specific requirements 3GPP PSS sets for DRM.)
S5-BB User Equipment Management (UEM)	UEM Requirements	None	UEM Protocols	SA5 and OMA Requirements group are liasing on this subject
T1-Test Specs	Nil	Nil	Nil	T1 is trying to establish the gap between OMA's IOP work and the associated conformance tests that could be developed for enabler testing
T2-MMS Enhancements	None	None	MM1 stage 3 (The MMS system defined in 23.140 can only be implemented with the MM1 stage 3 from OMA in place.)	Bearer agnostic parts of TS 23.140 Technical realization of MMS: • Main parts of MMS stage 2 • MM4 stage 3 • MM7 stage 3 Not bearer agnostic parts of 23.140: Some parts of MMS stage 2, e.g. Address Resolution, maybe USIM handling (others to be identified yet)
T3-User Equipment Management	Potential overlap with OMA Device Management work.	See "Other Comments" column	Possibility for T3 specifications to be impacted by requirements from OMA Requirements WG (Device Management Requirements document) and/or OMA Device	The T3 UEM is a work task under SA5's UEM building block work item. T3's reliance on direction from OMA is tied to the resolution of the work-split determination between OMA DM and 3GPP UEM.

			Management WG (various DM specifications, e.g., DM Protocol, Representation, Notification, Security, Tree & Description, Standard Objects, Bootstrap)	
N1-Emergency Call Enhancements for IP& PS Based Calls – stage 3	None	None	None	
N1-IMS Stage-3 Enhancements: • IMS Group Management	Yes, with the OMA WIs 26 Maintenance & Enhancemants of IMPS 1.X and OMA WI 28 OMA SIP/SIMPLE IMPS Service Definition.	None	None	Group Management is a potential area for coordination.
N1-IMS Stage-3 Enhancements: • IMS Conferencing	Maybe with OMA WI 43 Push to talk over Cellular (PoC)	None	None	Conferencing is a potential area for coordination.
N1-IMS Stage-3 Enhancements: • IMS Messaging	Yes, with the OMA WI 28 OMA SIP/SIMPLE IMPS Service Definition.	None	None	SIP based messaging is a potential area for coordination.
N1-IMS Stage-3 Enhancements: • IMS Local services	None	None	None	
N1-Support of the Presence Service in Core Network Signalling Protocols	Yes, with the OMA WIs 26 Maintenance & Enhancemants of IMPS 1.X and OMA WI 28 OMA	None	None	Presence is a potential area for coordination.

	SIP/SIMPLE IMPS Service Definition.			
N2-CAMEL	None	None	None	CAMEL *Any Time Interrogation* procedure could be used to obtain mobile's location and status information, if needed for OMA purposes.
N4-Location Services Enhancements 2; Enhanced support for anonymity and user privacy	None	None	OMA-LWG will develop the protocols for the Lid and Lpp interfaces	
N4-Location Services Enhancements 2; Enhanced inter-GMLC interface	None	None	OMA-LWG will develop the protocol for the Lr interface	
N5-OSA3	IMS Architecture Framework Web Services	Web Services	None	