

## In this issue

Letter from the President

Overview of the MSF and impact of earlier GMI events

GMI2008 plans and progress

Certification Program: Overview and Update

NGN Interoperability Test Bed: Overview and Update

## Short takes

NSN deploys IMS for Com Hem

Huawei selected by T-Mobile International

## Members in the news

## Upcoming events

### MSF Technical Committee Meetings

San Francisco, USA. Jan 29-31.  
Details at: [msforum.org/events/upcoming.shtml#sf](http://msforum.org/events/upcoming.shtml#sf)

Shanghai, China. April 1-3

Dublin, Ireland. July 8-10

## Other events

**Spring VON.x,**  
March 17-20 San Jose, California

**IEC Sofnet 2008,**  
April 28 - May 1, London, UK

**NXTcomm 2008,**  
June 16 - 19, 2008, Las Vegas

# MSF – We Make Next Generation Networks *Work*

## Letter from the President

Dear MSF Member,

Yes, it's been a while since we issued an MSF Newsletter, but we have a good excuse. So much has happened and so much good work has been achieved that we simply have not had the time to make a good job of it! With so much going on of course, it is now more important than ever to keep everybody informed as we head in 2008, which is shaping up to be a decisive 10th anniversary year for the forum.

To help us better communicate our ongoing programme, I am delighted to announce that we will in future be using the services of a freelance writer who has written several articles on IMS and Next Generation Networks. Bob Emmerson, who is also the European Editor of VON Magazine and a Euro Innovations newsletter, will be editing this newsletter in future and it will be bi-monthly. I've worked with Bob for a number of years & he is a great professional who will greatly help us keep you all informed of the exciting developments we have planned for this year.

The MSF started in 1998, so we have been in operation for almost ten years now and when one looks back, it is clear that we have had a very significant impact on the industry over this period, particularly with our Global MSF Interoperability programme (GMI2002, GMI2004, GMI2006).

With the accelerating pace of NGN deployment, it is hard to exaggerate the importance of in-depth practical testing to underpin the collaborative work that the MSF does on NGN architecture and Implementation Agreements (IAs). Given this, we are very pleased to have recently announced two significant new additions to compliment GMI2008, adding certification testing & interoperability testing to our ongoing programme.

The first major milestone was the launch of the MSF Certification Programme in July 2007 and the appointment of Iometrix as the forum's official certification laboratory. This enables the MSF to provide a globally recognized and trusted certification programme to underpin key aspects of multi-vendor Next Generation Network (NGN) implementation.



The second major milestone was the launch of the MSF Permanent NGN Test Bed facility in September 2007 in conjunction with University of New Hampshire - IOL. This facility gives MSF members an environment to conduct year-round, in-depth interoperability and conformance testing on the MSF architecture and implementation agreements.

Finally, of course there is GMI2008 itself. Hosted by major carrier labs to provide a showcase of intensive networked tests around key NGN deployment issues facing the industry, this event is scheduled to take place 20 – 31 October 2008.

With all of this going on, I look forward to meeting you all for a full and profitable meeting in San Francisco, 29 – 31 January 2008. I do hope you find the rest of this newsletter informative and if you have any good ideas for future articles, I am sure Bob Emmerson will be glad to hear from you.

Roger Ward  
MSF President  
London

*PS: Please send your MSF inputs to Bob: bob.emmerson@melisgs.nl. NL indicates that Bob is based in The Netherlands.*

## Certification Program

The MSF Certification Program was launched in July 2007. Iometrix, which is the forum's official certification laboratory, will test and certify compliance to the Forum's technical specifications. The key objective is to provide a globally recognized and trusted certification for the Next Generation Network (NGN). The pilot program will include certifications of RTCP implementations of NGN networking components such as SIP end-points, SIP phones, residential gateways (CPE), access gateways, trunking gateways, media servers and session border gateways.

The first certification test started in Q4 2007 and the first MSF certified vendors will be announced during Q1 2008.

### The Real Time Control Protocol (RTCP)

RTCP is a protocol that allows the sender of a media stream to receive information about the packet loss, delay and jitter that were encountered by the RTP stream as seen by the recipient of that stream. The protocol takes the form of reports generated by the sender and receiver. This information is subsequently passed upwards into the management domain of the operator's network.



*MSF Certification testing in progress at Iometrix Paris Lab*



## The pilot phase

The main goal of the pilot phase is to certify that RTCP reporting is accurate. Three variants of the protocol are tested:

### **Basic RTCP:**

The test scenarios include point-to-point calls that are initiated between the software being tested and emulated end points. The objective is to verify that basic RTCP jitter, delay, packet loss, packet duplication and short calls are reported correctly by the end systems. They also include complex calls where they verify that a mixer maintains the correct RTCP statistics for each RTP session it supports.

### **Basic RTCP XR:**

These scenarios are similar but the objective is to verify that VoIP metrics such as packet loss and discard metrics, burst metrics, delay metrics, signal related metrics, call quality metrics, configuration parameters and jitter buffer parameters are reported correctly and accurately by the endpoint.

### **Basic RTCP XR XNG:**

In this case the objective is to verify RTP and RTP XR interoperability with RTCP XR XNO, as well as the correct handling of RTCP XR statistics transfer.

For more information contact Richard Dagnall ([richard@iometrix.com](mailto:richard@iometrix.com))

## *NGN Interoperability Test Bed*

The MSF NGN Test Bed at the UNH InterOperability Lab gives MSF members an environment to conduct year-round, in-depth interoperability and conformance testing on the MSF architecture and implementation agreements.

Why interoperability, why open-interfaces? From a carrier perspective, the answer is simple — open interfaces allow service providers more choice in which products they purchase from which companies. Having the ability to choose “best-in-breed” with the confidence that different products from different vendors will work together has the potential to significantly impact CapEx/OpEx costs, saving carriers from larger than necessary financial burdens and creating better networks for end-users. In a nutshell, that is MSF’s mission, it’s “raison d’etre”.


For the vendors, the answer is slightly more complex, but can be found in the standards process. Vendors spend a significant amount of time at standards bodies, contributing and building standards. We have standards because they are the best way to deploy a new technology — the market will never adopt a technology or a network architecture that is completely proprietary, it is too expensive and too risky. For the same reason, interoperability is imperative. Interoperability between different vendor equipment is a sign that the technology is maturing and is ready for mass deployment.

## **NGNs and IMS**

NGNs and the IMS architecture are complex, so more interfaces that to be tested. Testing each individual interface is a significant commitment in terms of resources, time, and finances, both for vendors and service providers. Vendors perform substantial testing in-house that is typically repeated by in-house service provider labs prior to purchasing the equipment. Consequently, vendors and service providers are spending significant amounts of money to test and duplicate testing.

In another nutshell, that is the mission of Test Bed facility: it’s a place where NGN equipment can be housed and employed by equipment vendors and service providers. Moreover, the Lab provides neutral, third-party test reports to equipment vendors that service providers can ask for and build into their





RFQ processes. The end result is that everyone saves money by working collaboratively in a secure, vendor-neutral environment dedicated to performing cost-effective testing.

### **Background on the Lab**

The UNH InterOperability Lab has been testing networking and telecommunications products, services, and networks since 1988. A part of the University of New Hampshire, the UNH-IOL is 100% funded by commercial companies in exchange for testing and professional services. The lab focuses on testing interoperability and standards conformance in many areas, including IEEE 802 Ethernet technology, storage area network components, wireless, voice over IP and Internet protocols. For more information visit: <http://www.iol.unh.edu/>

## **Looking ahead to GMI 2008**

In November last year the MSF announced it's plans for GMI 2008, which will bring together product implementations supporting the Release 4 architecture. Interoperability of critical NGN elements will be verified in practical scenarios supporting IMS-based fixed/mobile convergence. In addition, specific service capabilities such as Quality of Service (QoS), Location Management, IPTV and Service Oriented Architecture (SOA) will be included to validate key NGN concepts.

Roger Ward: "GMI 2006 convinced us of the growing maturity of IMS as a basis for fixed/mobile convergence. This year we will verify selected high-value services, such as IPTV, that can take advantage of IMS. The MSF plans to test IPTV service integration and interoperability during GMI 2008 to help assess the maturity of existing IPTV solutions and identify gaps in the current industry standards."

GMI 2008 will also enhance the testing of QoS control for multi-service IP networks that serve both fixed and mobile clients. In addition, it will demonstrate important service enablers such as "location" information. Finally, GMI 2008 will test the interoperability of a Services Oriented Architecture (SOA) gateway with the core IMS capability. This will combine the rapid service creation environment of the Internet with the service guarantees provided by an IMS infrastructure.

## **Implementation agreements for IPTV**

The MSF IPTV Task Force is defining an interoperable architecture so that a set of Implementation Agreements for testing and verification of the IPTV service during the GMI 2008. This is a significant task: IPTV must support both traditional broadcast and on-demand TV services in addition to enhanced services that include the presentation of native and foreign/third party programs based on presence, profile, device, convenience, service/quality requirements, etc. At the same time, the service providers must implement these new services without affecting the end-to-end reliability, availability, scalability, and performance requirements.

MSF is revamping the Release 3 (R3) architecture with in order to support the emerging services like IPTV and location based services. These services rely heavily on the enhanced capabilities of Access and Interconnect domains. In addition, Web-based mechanism and services are proliferating and becoming integral parts of core service control and delivery methods. Therefore, it is becoming necessary to add a group of common/Web-based elements to support these services. The 'Call and Session Control' of the MSF R3 architecture is based on 3GPP IMS standards, so it is also necessary to augment the capabilities of that plane by adding non-IMS (Web, non-NGN, etc.) control and delivery of the IPTV service.



## ***Short takes***

Nokia Siemens Networks says it has deployed the first commercial IMS platform in Sweden with Com Hem. The operator uses an IMS core, VoIP application server and SIP technology.

Huawei has been selected by T-Mobile International to provide Packet Switched Core Networks across five key European countries: Germany, the UK, Austria, the Netherlands and the Czech Republic.

## ***Members in the news***

In future issues of this newsletter we shall be doing short interviews with MSF members who have made a particularly significant contribution to the program. So, watch this space and get in touch with Bob Emmerson if you would like to be included.-

