International
Telecommunication
Union

ITU-T/ATIS Workshop
on Next-Generation Network
Technology and Standardization

LAS VEGAS, 19-20 MARCH 2006

Introduction

A joint ITU-T/ATIS (Alliance for Telecommunications Industry Solutions) workshop on Next-Generation Network Technology and Standardization will take place at the Mandalay Bay Convention Center in Las Vegas, USA, from 19 to 20 March 2006 inclusive.

This workshop will be held during the TelecomNEXT event.

Next-Generation Network (NGN) standardization work is now well under way in ITU-T and ATIS (as well as in other standards organizations) to increase quality and service features for users, independent of the underlying transport technology. Following the success of these two organizations to identify and react to industry's NGN standards requirements, and in continuation of their commitment to achieve interoperable global standards, this workshop will build on the existing relationship between the two organizations to:

- examine the status of the work in both organizations;
- identify standards work needed to support ongoing viable businesses for all parties as NGN becomes reality;
- enhance and extend ITU-T and ATIS cooperation to further coordinate regional and global NGN standardization.

The combined objectives seek to promote successful NGN deployment, service transparency, and the transition from existing networks. A particular emphasis of the workshop will be NGN requirements and standards objectives from a North American perspective, and the relationship of these with the global standardization work of ITU-T.

For more information please see:
www.itu.int/ITU-T/worksem/ngn/200603
and
www.atis.org/ngnworkshop.shtml

International
Telecommunication
Union

ITU-T/ATIS Workshop
on Next-Generation Network
Technology and Standardization

Programme

DAY 1, 19 MARCH 2006

09:00–09:30   OPENING SESSION

- *Welcome address –* **Houlin Zhao** (TSB Director)
- *Welcome address –* **Susan Miller** (President and CEO ATIS)

09:30–11:00   NGN MARKET DRIVERS: A CARRIER'S PERSPECTIVE

Session Moderators: ITU-T: **Yoichi Maeda** (NTT) and ATIS – **Charles Bailey** (AT&T)

Objectives: The objective of this session is to obtain the view of several network operators on their vision for NGN, the drivers behind their implementation of NGN, and the most critically important elements for commercial success.

- *IPTV as a market driver –* **Brad Medford** – (AT&T)
- *BT's perspectives for Next-Generation Networks and standards –* **Kevin Foster** (BT)
- *The customer-centric NGN –* **Andrew White** (Qwest)

11:00–11:30   COFFEE BREAK/NETWORKING   Sponsored by   **CISCO SYSTEMS**

11:30–12:30   SESSION 1: ITU-T/ATIS – UPDATE ON NGN ACTIVITY

Session Moderators: ITU-T: **Reinhard Scholl** (TSB Deputy Director, ITU) and
ATIS: **Tim Jeffries** (Vice President of Technology and Development)

Objectives: This session presents the current status and outlines the work programme of NGN standardization in ITU-T and ATIS.

- *ITU-T NGN activities*: ITU-T – **Brian Moore** (Lucent Technologies)
- *ATIS NGN activities*: ATIS – **Janet Davidson** (Chair of ATIS NGN Focus Group; Lucent Technologies)

12:30–14:00   LUNCH BREAK   Sponsored by   **at&t** and **N⊘RTEL**

14:00–15:30   SESSION 2: AN IMPLEMENTABLE NGN ARCHITECTURE AND ITS CAPABILITIES

Session Moderators: ITU-T: **Chae-Sub Lee** (ETRI) and ATIS: **Art Reilly** (Cisco Systems)

Objectives: This session will discuss standards-based, implementable NGN architecture, taking into account: overall functional architecture of an implementable NGN architecture; functional architecture for supporting mobility and realization of fixed-mobile convergence (FMC) environments; architectural viewpoints on quality of service and network performance to meet NGN service requirements from users and providers. In addition, this session will discuss several underlying key network/support capabilities essential for a successful NGN.

- *NGN architecture:* ATIS – **Charles Bailey** (AT&T)
- *ITU-T NGN security standards – status and challenges:* ITU-T – **Igor Faynberg** (Lucent Technologies)
- *Security:* ATIS
- *ITU-T overview of NGN management:* ITU-T – **Dave Sidor** (Nortel)
- *Quality of Service for next-generation networks:* ITU-T – **Hui Lan Lu** (Lucent Technologies)

15:30–16:00   COFFEE BREAK   sponsored by   CISCO SYSTEMS

16:00–17:30   SESSION 3: NGN SERVICE ENABLERS

Session Moderators: ITU-T – **Herb Bertine** (Lucent Technologies) and ATIS – **James McEachern** (Nortel)

Objectives: This session focuses on service enablers that have been identified as critical to NGN, with IP Television as one of its most interesting near-term services. The standards that are required to address the full range of mobility and associated services are outlined, as well as the requirements on NGN from next-generation multimedia terminals.
  * *ATIS NGN FG gap analysis – service enablers:* ATIS – **James McEachern** (Nortel)
  * *ATIS IPTV Interoperability Forum (IIF):* ATIS – **Steven Wright** (Bellsouth)
  * *Ethernet OAM and protection switching:* ITU-T – **Hiroshi Ohta** (NTT)
  * *Mobility and fixed-mobile convergence:* ITU-T – **John Visser** (Nortel)
  * *Next-generation of multimedia terminals:* ITU-T – **Noah Luo** (Huawei)

DAY 2, 20 MARCH 2006

10:15–11:45   SESSION 4: SIGNALLING AND CONTROL

Session Moderators: ITU-T – **Joe Zebarth** (Nortel) and ATIS – **Bob Hall** (AT&T)

Objectives: This session will discuss the necessary core capabilities for signalling and control within NGN, with a specific focus on the IP Multimedia Subsystem (IMS). Quality of Service (QoS) is one of the benefits NGN is hailed for. Attention will be given to mechanisms for priority marking of packets for emergency communications, and the more general problem of resource and admission control will be discussed.
  * *Resource and admission control and IMS:* ITU-T – **Keith Mainwaring** (Cisco Systems)
  * *Signalling architecture:* ATIS – **Viqar Shaikh** (Telcordia)
  * *Emergency services and priority signalling:* ATIS – **Martin Dolly** (AT&T)
  * *IMS for the fixed network:* ITU-T – **Jane Humphrey** (Ericsson)

11:45–12:45   LUNCH BREAK   Sponsored by   at&t   and   NORTEL

12:45–14:15   SESSION 5: INTERCONNECTION, INTERWORKING AND EVOLUTION

Session Moderators: ITU-T – **Jane Humphrey** (Ericsson) and ATIS – **Martin Dolly** (AT&T)

Objectives: Interoperability is the *conditio sine qua non* for seamless service provisioning. Topics covered in this session include both the user-to-network interface (UNI) supporting NGN services and the evolution of the network-to-network interface (NNI) from circuit-switched to IP.

Defining requirements for the various implementations and deployments that perform session/border control functions for mapping these to physical implementations will be discussed. Testing methods and procedures are examined, as well as interfaces for end-to-end authentication in NGN.

- *User-to-network interface:* ATIS – **Gerald Ezrol** (AT&T)
- *NGN NNI signalling profile:* ITU-T – **Takumi Ohba** (NTT)
- *Session border control – The ATIS perspective:* ATIS – **Thomas Helmes** (Verizon)
- *Principle and methodology of NGN technical means testing:* ITU-T – **Denis Andreev** and **Dmitry Tarasov**, co-authors (ZNIIS)
- *End-to-end authentication requirements for next-generation networks (NGNs):* ATIS – **Ray P. Singh** (Telcordia)

14:15–14:45   CLOSING SESSION WRAP-UP AND NEXT STEPS

Session Chairman: ITU-T – **Helmut Schink** (Siemens) and ATIS – **Art Reilly** (Cisco Systems)

For updated information, please see:

www.itu.int/ITU-T/worksem/ngn/200603
and
www.atis.org/ngnworkshop.shtml

For more information on ITU-T workshops:	**www.itu.int/ITU-T/worksem/**
For information on ITU-T:	**www.itu.int/ITU-T/**
For news and subscription to the ITU-T e-Flash:	**www.itu.int/ITU-T/lighthouse/**
For ITU-T Technology Watch:	**www.itu.int/ITU-T/techwatch/**
For ITU-T membership information:	**www.itu.int/ITU-T/membership/**
Workshops contact:	**tsbworkshops@itu.int**

ITU Telecommunication Standardization Bureau (ITU-T) • Place des Nations • CH-1211 Geneva 20 • Switzerland

Organized by: ITU-T and ATIS (Alliance for Telecommunications Industry Solutions)