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ITU-T's Zhao Attends Tsunami Early Warning Meeting

ITU recently lent its expertise in the field of disaster recovery and mitigation to a high-level global gathering looking to develop an early warning system for tsunamis.

A delegation headed by Houlin Zhao, director of the Telecommunication Standardization Bureau (TSB) and representatives of the radiocommunication and development bureaux attended The Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements, Phuket, Thailand, 28-29 January.

Envoys from 43 countries and 13 international organizations attended the event hosted by the Thai foreign ministry, to discuss arrangements for an early warning system that could help to reduce the scale of devastation following any future tsunami.

Ahead of the event Zhao said: "I believe that ITU has much to offer in the development of an early warning system for tsunamis. This tragedy has, once again, underscored the fact that information and communication technologies are a vital component in disaster relief and prevention. We have a proven track record in the field of disaster management, and I hope that we can offer some valuable advice here. The dissemination of information using these technologies is a crucial part of all disaster relief strategies. It is impossible to imagine disaster relief today without radios, fixed-line telephony and mobile phones. And now the Internet has also proved that it has an important role to play, supporting the more traditional media of radio and television.

"It is very unfortunate that it took a disaster on this scale to wake the world up to the need for an early warning system in this area. But, this meeting should serve to spearhead and coordinate in the most efficient manner the very necessary work towards a system that will reduce the devastating effects of such an event in the future."

Standard for Disaster Relief

A new standard developed by Study Group 9 will help to facilitate communication over IPCablecom networks in disaster situations. Even when not directly damaged, networks may have to cope with congestion, overload or the need to be rapidly extended due to limited bandwidth.

The Recommendation -J.260 – defines requirements for authentication and priority mechanisms in IP-based cable architectures. It ensures, that even in times of limited bandwidth, emergency communication is transmitted without problems.

Modem Support in IP Networks

A new ITU-T Recommendation from Study Group 16 aims to support the continued use of modems in IP networks by providing interoperability between products that emulate modem signals. A number of products had emerged to provide this functionality, but no standard solution – until now.

Modem signals have traditionally been transported by circuit switched systems and equipment. As service providers increasingly look towards Internet Protocol (IP) infrastructure, more modem signals will be carried over the protocol. The problem is that the basic design constraints of IP networks do not allow for transparent transport of modem signals (voice-band data (VBD)), hence necessitating special protocols to be run on top of IP to ensure the necessary end-to-end high quality of service.

Many thousands of people still use dial-up (modems) to access the Internet, and so the continued support of modems as many telecommunication service providers move to packet based networks is seen as imperative. Without standards that support their continued use, modem users would suffer from a significantly downgraded experience.

V.152 defines procedures for equipment that interconnect traditional circuit-switched networks with IP networks to provide satisfactory, transparent delivery of modulated VBD as encoded audio content over IP (data modems, facsimile terminals and text telephones). The Recommendation complements the functionality in the modem relay Recommendation V.150.1

Home Networking Event Announced

ITU-T is to host a Workshop on Home Networking Systems, 13-14 October 2005 in Geneva.

Home Networking is the linking of all types of electronic devices for applications such as entertainment, telecommunication, home automation systems and telemetry (remote control and monitoring systems). And given the wide range of previously unrelated technologies involved, standards that allow for interoperability are seen as key to the successful marketing of the concept.

The event will be jointly organized by Study Groups 9 and 12, in cooperation with several other ITU Study Groups and organizations outside of ITU. It follows the Workshop on Home Networking and Home Services held 17-18 June 2004, Tokyo.

Study Group 9 has been working on standardization in home networking systems for more than four years. It has already approved three Recommendations in the field. A current focus is a new Recommendation that will specify ways to bridge conditional access systems (that ensure payment in pay TV for example) to digital rights management (DRM) systems, an important step toward smooth operation of fully integrated home networking.

Korea to Host NGN Overview

ITU-T is to hold an NGN Technical Workshop, 14-15 March 2005 at the Lotte Hotel, Jeju Island, Korea, at the kind invitation of the Korean Government. The workshop will serve as a useful review point on the road towards NGN, and precedes a meeting of the Focus Group on NGN (FGNGN).

In May of 2004 study on NGN standards found a home at ITU, with the formation of the FGNGN. Since that time intense work has taken place in this group and across many of ITU-T's other study groups, towards the development of standards that will define services, network and systems architecture in IP enabled next generation communication systems. Indeed NGN has become a key area of study for ITU-T's study groups. Study groups 2, 11, 13 and 19 for example have a significant NGN focus (Study Group 13 is the lead Study Group for NGN).

The convergence between internet protocol (IP), public switched telephone network (PSTN), digital subscriber line (DSL), cable television (CATV), wireless local area network (WLAN) and mobile technologies is a task that many believe is impossible without the development of global standards. NGN will offer a richer set of applications to the end user. The work of FGNGN and other ITU-T groups will build on existing fixed/mobile convergence architecture (e.g. 3GPP/3GPP2 IP multimedia subsystem (IMS)) to provide transparency between fixed and mobile networks.

Among many recent achievements in the NGN field are an output relating to IP-QoS signalling for inclusion in the first set of specifications (Release 1), the foundation of a 'joint coordination activity' (NGN-JCA) aiming to see that standards are developed in the most appropriate place and that no duplication of effort occurs and the development of a project management tool that will give a unique overview of the NGN work going on across the standardization world.

Geneva Motor Show - ITU Event Speakers Announced

An impressive line-up of speakers has been confirmed for the upcoming ITU-T event – The Fully Networked Car – A Workshop on ICT in Vehicles, to be held at the Geneva Motor Show, 2-4 March. Global experts who will frame the major issues and engage the audience in discussion on this important topic include high-level representatives from BMW, Cisco, Magna Electronics, PSA Peugeot Citroën, Motorola, Bosch, France Telecom, Volvo, Nissan and Swisscom.

Topics to be discussed include, the introduction of extra-vehicle communication systems that allow communication with nearby vehicles, for example to communicate that a car is hydroplaning and advise appropriate action to nearby cars. Another session will focus on a pan-European in-vehicle emergency call. Experts will discuss how automatically generated in-vehicle emergency calls (eCalls) can speed-up the response of the emergency services and potentially reduce the number of fatalities, severity of injuries and stress in post-crash situations.

Video Address to Service and Network Operations Group

TSB Director, Houlin Zhao is to address the latest meeting of the Service and Network Operations Group (SNOg) in a pre-recorded video. The meeting is to take place in Melbourne, Australia, 14 February and is hosted by Telstra.

The TSB head sent his apologies for not being able to attend the event in person, and thanked SNOg for its contribution to ITU-T's work, also congratulating the group on reaching its silver jubilee.

SNOg aims to make sure that the operations staff – often at the frontline of any telecommunication service provider – needs are taken into account in the development of standards.

Michael Lawrey, Head of Network Services, Telstra, a keynote speaker at the event described emerging technologies as changing the way networks operate. "Our upcoming meeting will provide us with an opportunity to hear the challenges we face as experts of network operators as well as presenting a great opportunity for all attending delegates to nut out the implementation of network and service management activities.

"The challenges for us are many and come in the form of network convergence, integration of processes, new tool sets required to understand the customer experience, and most importantly, the shift in our mindset from managing technology to managing customer services and their experiences."

For further information on SNOg please contact Morris Flory - mflory@ntwkmgt.org.

Study Group Advances Standards for IP QoS

A recent meeting of Study Group 12 saw progress in the development of QoS-related standards for IP-based networks and services.

QoS is seen as a key area to address in IP-based networks, especially as more carriers announce plans to carry voice traffic using the protocol.

Progress was made on the revision of Recommendation G.1020 which gives performance parameter definitions for quality of speech and other voiceband applications utilising IP networks. The updates will specify voice quality measurements associated with the use of the VoIP management protocol, RTP Control Protocol Extended Reports (RTCP XR). RTCP XR defines a set of metrics that contain information for assessing VoIP call quality and diagnosing problems.

And Y.1541 which gives network performance objectives for IP-based services, is also actively under revision to include new QoS classes with more stringent packet loss performance, needed for example for commercial video applications and certain TCP formats.

Also during its meeting - the first of the new study period - SG12 consented a revision of Recommendation G.107 (the E-model) to include an improved treatment of bursty packet loss.

UPCOMING EVENTS

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- **ITU-T Meetings:**
 - 15-25 February 2005 . Study Group 4 - Telecommunication management, Geneva
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 - $\begin{array}{l} \textbf{16-24 February 2005} \\ \textbf{Study Group 2}-\textbf{Operational aspects of service provision, networks and performance, Geneva} \end{array}$ • 11-12 March 2005
 - TSB Director's Ad Hoc IPR Group, Geneva
 - 14-18 March 2005 TSAG - Telecommunication Standardization Advisory Group, Geneva
 - 30 March-8 April 2005 Study Group 17 - Security, languages and telecommunication software, Moscow, Russian Federation
- Workshops and Seminars:
 - 2-4 March 2005
 - The Fully Networked Car, A Workshop on ICT in Vehicles, Palexpo, Geneva
 - 14-15 March 2005 NGN Technical Workshop, Jeju Island, Korea (Republic of)
 - 29 March 2005 Cybersecurity Symposium II, Moscow, Russian Federation