

## *Plenary Session I :*

### **Standardization and Its Trend Direction of NGN**

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#### **Biography**

Koichi Asatani received his B.E.E.E., M.E.E.E. and Ph. D degrees from Kyoto University in 1969, 1971 and 1974, respectively. From 1974 to 1997, Dr. Asatani was engaged in R&D on optical fiber communication systems, hi-definition video transmission systems, FTTH, ISDN, B-ISDN, ATM networks and their strategic planning in NTT. Currently he is Dean, Department of Computer Science and Communications Engineering, Kogakuin University, and a visiting professor, Graduate School of Global Information and Telecommunication, Waseda University, both in Tokyo, Japan. He is a Fellow of IEEE and a Fellow of IEICE. He was also appointed as a distinguished lecturer of IEEE Com Soc in 2006.

He is a founder of QoS, Reliability and Performance Modeling series symposium at ICCs and Globecom. He served as co-chair for this symposium at ICCs and Globecom for 2002-2004. He is Ex-Chair and Advisory Board Chair Emeritus of IEEE Technical Committee on Communication Quality and Reliability (CQR-TC), Feature Editor on Standards (1993-1999), Senior Technical Editor (1999-2005) of IEEE Communications Magazine, and Technical Editor on Broadband Technology of IEEE Communications Survey.

From 1988 through 2000, he served as Vice-Chairman of ITU-T SG 13 (formerly CCITT SG XVIII), responsible for digital networks including GII and IP networks. He serves as Chair for National Committee on Next Generation Networks in Japan.

He has published more than fifty papers, and gave more than seventy talks including keynotes and invited talks at international conferences such as ICCs and Globecom. He is author or co-author of fourteen books including "Designs of Telecommunication Networks"(IEICE, in Japanese), "Introductions to ATM Networks and B-ISDN)" (John Wiley and Sons, 1997), "Multimedia Communications Networks - Technologies and Services" (Artech House, 1998), "Multimedia Communications" (Academic Press, 2001), "Information and Communication Technology and Standards" (Denki Tsushin Shinko Kyokai, in Japanese, 2006), "Introduction to Information Networks-Fundamentals of Telecom & Internet Convergence, QoS, VoIP and NGN-" (Corona-sha, in Japanese, 2007).

His current interests include Information Networks including Broadband networking, Internet Interworking, IP telephony, NGN and their QoS aspects.

## **Abstract**

Telecommunication networks are providing real-time-base services with guaranteed QoS (Quality of Services) based on the connection-oriented networks. The IP based networks are, based on connectionless networks, providing non-real-time and non-guaranteed QoS services, such as e-mail, ftp and WWW.

Internet is being enhanced to support connection-oriented emulation applications such as IP telephony, IP facsimile, and IP teleconferencing, whereas the telecommunication networks are going to support multigrade of services including non-guaranteed QoS to accommodate the requirements of IP based applications.

The next generation networks (NGNs) will provide very wide variety of services with wide variety QoS classes ranging from non-guaranteed QoS to high-guaranteed QoS, real-time and non-real time bases on very secure platforms.

This presentation will introduce the current status of standardization on the next generation networks and services with the focus on its future trends.