



IEEE New Zealand South Section

New Zealand (North & South) Communications Chapter Lecture

Title: Trends of Next Generation Network (NGN) and Its Issues

Speaker: Prof. Dr. Koichi Asatani
IEEE ComSoc Distinguished Lecturer

Date: Wednesday 18 November 2009

Time: Light refreshments served from 5:00 pm
Lecture begins at 5:30 pm

Venue: University of Canterbury
Dept of Electrical and Computer Engineering
Room A309 (Level 3 Lecture Theatre)

Abstract:

Next Generation Network (NGN) is designed to be capable of QoS management and controls like in traditional telecommunication networks and to support economical, versatile multi-media applications like those on the current Internet. NGN also provides fixed-mobile convergence (FMC) with generalized mobility, and horizontal and vertical roaming as well as improved security.

The concepts and architecture of the Next Generation Networks (NGN) are described. NGN voice and Internet services are attractive from the view points of service flexibility and cost effectiveness and the capability of integrating third-party applications with high dependability and high security. The current status of NGN implementation in a commercial offer by NTT (Nippon Telegraph and Telephone Corporation) is touched upon.

Issues for the global evolution of NGN are also described, such as technical key issues, global standards and regulations.

Biography:

Professor 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, IP 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 appointed as a distinguished lecturer of IEEE Com Soc for 2007-2009.

He is a founder of Communications QoS, Reliability and Performance Modeling series symposium at ICCs and Globecom. He served as co-chair for this symposium series at ICCs and Globecom for 2002-2004. He is Ex-Chair and Advisory Board Ex-Chair Emeritus of IEEE Technical Committee on Communication Quality and Reliability (CQR-TC), Feature Editor on Standards (1993-1999), Senior Technical Editor/Technical Editor (1999-) 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, IP networks and NGN. He is serving as Chair for National Committee on Next Generation Networks in Japan, and also as Chair, R&D and Standardizations Working Group, Next Generation IP Network Promotion Forum.

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 eighteen books including "Designs of Telecommunication Networks"(IEICE, 1993, 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 Publishing Inc., in Japanese, 2007). His current interests are Information Networks and Network Architectures including Broadband networking, Internetworking, IP telephony, NGN and their QoS aspects.