APB Office Report - Distinguished Lecture Tours in 1999

Mr. Nelson Sollenberger, on his way to give his presentation at TENCON'99 in Cheju, South Korea was our second Distinguished Lecturer for the year to tour the Asia Pacific. He covered our Communications Chapters in Seoul(South Korea), Malaysia, Singapore and Hong Kong from the 13 to 27 Sept. In between, he also gave talks and had discussions in Hsin Chu, Chiao Tung University and Tsing Hwa University in Taiwan. Mr. Nelson Sollenberger currently heads the Wireless Systems Research Department of AT&T and is an IEEE Fellow.

Mr. Nelson Sollenberger presentation was on the Wireless Internet Access. He provided an overview of the current wireless voice subscription in this region, its rapid growth, the proliferation of the Internet, and the increasing use of portable computing devices. Industry looks towards enhanced services, including the wireless internet services to provide further growth and competitive opportunity. The presentation then focussed on third generation wireless access such as WCDMA and the evolution of second generation systems as TDMA IS-136+, EDGE and GPRS for GSM and TDMA, and evolutions of IS-95 CDMA which provide bit rates of 50 to 384 kbps in macrocellular systems. GSM is the dominant wireless technology in these areas with the exception of South Korea which has deployed IS-95 CDMA. There was strong interest on the part of some of the audience in EDGE (Enhanced Data rates for GSM Evolution), since it offers peak packet data rates of about 384 kbps to provide 3G packet data services, well beyond existing capabilities, and it is an evolutionary capability to GPRS (General Packet Radio Service). Mr. Nelson Sollenberger also presented an overview of EDGE Classic for enhancing GSM networks and EDGE Compact for deployment as a complementary wireless packet data system for TDMA networks using only 2x 1 MHz of spectrum initially. The audience expressed significant interest in Bluetooth and WAP (Wireless Application Part). There were lively discussions on the potential for Wideband OFDM technology to provide 2 to 5 Mbps peak downlink packet data transmission rates with EDGE or WCDMA providing return radio links for asymmetrical wireless packet data services.

During his eventful tour, that included an earthquake experience in Taiwan and a typhoon in Hong Kong, his presentations drew a good audience attendance of about 600 people in total. The presentations were tailored to meet the needs of our Chapter audience in the form of a 45-60 mins talk or a 2-3 hour tutorial. There was a good mix of attendees from industry and academia representing interested communities in their various fields of cellular service providers, internet service providers, vendors, consultants, university professors and students. The audiences were enthusiastic and the Q&A sessions that followed were many and lively.

We would like to thank our Distinguished Lecturer, Mr. Nelson Sollenberger, our active Communications Chapter chairs and their committees in hosting another successful DLT to our region. Last but not least, the audience that made this possible.

This article would not have been possible without the synopsis of our Chapter chairs and Mr. Nelson Sollenberger of the event in their respective countries.