Global

Communications

Newsletter

History Forum at GLOBECOM 2010

By Jean-Marie Dilhac and Jacob Baal-Schem, Communications History Committee
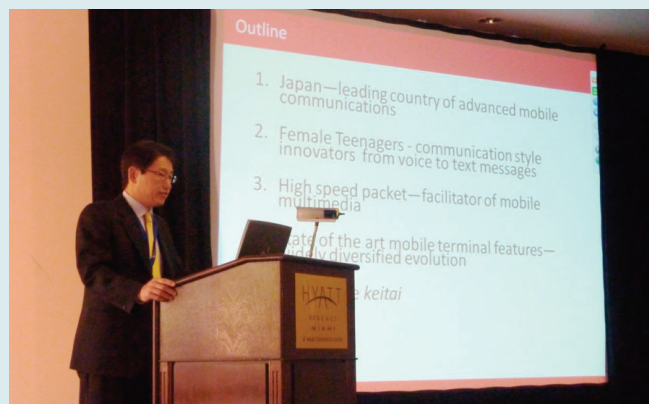
During GLOBECOM 2010 hosted in Miami, Florida, last December, the History Forum was held on the afternoon of Tuesday 7 December. The theme was "Mobile Telephony and Its Economic and Social Impacts." A group of panellists had been invited by the two organizers, Jacob Baal-Schem (Tel Aviv University, Israel) and Jean-Marie Dilhac (University of Toulouse, France), members of the Communications History Committee of the IEEE Communications Society History Committee.

The session started with a brief presentation by Dilhac on the activities of the IEEE ComSoc History Committee, making a connection with the comment made the same morning by IEEE ComSoc's President during his GLOBECOM opening speech: he had mentioned in his talk an articlerecently published in the History Column of *IEEE Communications Magazine*. Dilhac then launched the session by recalling the introduction of GSM in France and presenting the speakers.

The first speaker, George F. McClure (IEEE Life Fellow, Past President of IEEE Vehicular Technology Society) exposed his views about the impact of mobile services.

The next speaker was Dr. Atsushi Murase (Managing Director of NTT DoCoMo Inc Research Laboratories, Japan). He presented the history of cellular communications in Japan, stressing specific aspects such as the wide acceptance of new services by Japanese customers.

The session was concluded with a talk by Gunther Karger

Dr. Atsushi Murase delivering his talk on the history of cellular communications in Japan.

(IEEE Senior Life Member, consultant). He exposed an early (the first?) and barely known cellular system, developed in the 1960s by the U.S. Air Force to enable communications to survive a nuclear attack. The session was recorded (voice and PowerPoint) by IEEE. The audience peaked at 50 attendees, all of them appearing happy with the presentations.

ComSoc Portuguese Chapter: Activities in 2010

By Luis M. Correia, Technical University of Lisbon, Portugal Chapter Chair

In 2010, the ComSoc Portuguese Chapter continued the activities of organizing seminars jointly with IST — Technical University of Lisbon (taking advantage of the university's initiatives) and providing, through its website (http://chapters.comsoc.org/Portugal), a permanent list of conferences in the communications area, allowing a better flow of information among the Portuguese technical and scientific community working in the area.

Several individual talks were held: "Interconnection among Operators," Fernando Luís (Director of Planning and Engineering, ZON), 19 January; "Transforming Communications via Software," Rui Silva (Unified Communications Manager, Microsoft), 9 February; "New Generation Networks and Services," Luis Alveirinho (Director of Network Planning and Implementation, Portugal Telecom), 6 March; "LTE, the Fourth Mobile Generation," Luis Santo (Manager for Wireless Technologies, Optimus), 20 April; and "The SIRESP Network: Technology for the Future of

Safety and Emergency," Pedro Vitor (CTO, SIRESP), 19 October.

A seminar took place on 28 May on mobile communications, essentially aimed at students about to graduate but open to those working in the industry as well. There was a mix of topics and speakers, covering an operator, a manufacturer, and the regulator: "Fixed-Mobile Convergence," Ana Claro (Optimus), "Mobile Broadband — Evolution to LTE," Claudia Queiros (Ericsson), and "Quality of Service in Mobile Communications Services", Antonio Vassalo (ANACOM). The event was well attended by more than 60 people, the majority being students.

Lisbon was also the host for a Distinguished Lecturer Tour on 14 June by Prof. J. R. Cruz (University of Oklahoma, Norman, United States), who gave a talk on "The Role of Communications Signal Processing in Storage Systems."

The average attendance of these talks has been around 75

Distinguished Lecture Tour of Qian Zhang in Malaysia

By Hafizal Mohamad and Borhanuddin Mohd Ali, Past Chairs of the Malaysia ComSoc Chapter

The Malaysia Chapter hosted Prof. Qian Zhang of Hong Kong University of Science and Technology (HKUST) 9–13 December 2010 as part of the ComSoc Distinguished Lecture Tours (DLT) program. Three talks were given in three different places over one and a half days. They were "Advances in Cognitive Radio Networks" at Suruhanjaya Komunikasi dan Multimedia Malaysia, or Malaysia Commission of Multimedia and Communications (SKMM); "Cooperation in Cognitive Radio Networks" held at Universiti Kebangsaan Malaysia or National University of Malaysia (UKM); and finally on "Wireless Sensor Networks and Applications" at Universiti Putra Malaysia (UPM) on a Saturday morning. Plans to host this event were initiated by the local Chapter in August 2010.

The first talk, held at SKMM on the morning of 10 December 2010, was conducted in collaboration with MCMC's Spectrum Research Collaboration Program. It was attended by 85 participants who were mainly from the industry. Prof. Zhang delivered an inspiring presentation, combining an overview of cognitive radio with highlighting research challenges in cognitive radio. She discussed how wireless stakeholders (regulators, equipment providers, content providers, licensed and unlicensed operators) have different perspectives on cognitive radio. She also argued that both technology and economic (policy and marketing) aspects need to be well studied to understand the impact of cognitive radio for future wireless networks. The second talk, conducted at UKM in the afternoon, was attended by 31 participants comprising students and faculty members. Prof. Zhang gave a research oriented but down-to-earth presentation on both intranetwork and internetwork cooperation in cognitive radio networks. She also highlighted some research directions related to dynamic spectrum access and cognitive radio.

Professor Zhang delivering her second talk at UKM.

The final talk of this grueling two-day series was given at UPM, the university that hosts the National Centre of Excellence for Sensor Technology (NEST). Despite being a weekend, the talk was well attended by 32 participants, a mix of students, faculty, and industry professionals. The talk focused on exploiting node mobility in wireless sensor networks, illustrated with her research applications. Major challenges for mobile sensor networks, including localization, coverage, and event collection, were explained in this talk.

All three talks were well received and generated a lot of interest among the participants, and each was followed with about 30 to 40 minutes of lively Q&A. We would like to record our sincere appreciation to ComSoc, Prof. Zhang, Ewell Tan of the IEEE AP Office, the local chapter committee, the three host organizations, and all those who contributed their time and effort, direct and indirectly, to ensure the success of this DLT.

ComSoc to Provide Technical Sponsorship of ITU's Telecom World 2011 Technical Symposium

By Blaise Judja-Sato, ITU Telecom, and Tarek S. El-Bawab, Jackson State University, USA

The International Telecommunication Union (ITU) is the leading United Nations agency for information and communication technology (ICT) issues, and a global focal point for governments and the private sector in this regard. For 145 years, ITU has coordinated the shared global use of the radio spectrum, promoted international cooperation in assigning satellite orbits, worked to improve telecommunication infrastructures in the developing world, established worldwide standards that foster seamless interconnection of a vast range of technologies and systems, and addressed many of the global challenges of our modern life, such as mitigating climate changes and strengthening cyber security.

The membership of ITU includes 192 Member States and more than 700 Sector Members and Associates. As such, the agency has the mission to enable the growth and sustained development of telecommunications and information networks, and to facilitate universal access so that people everywhere can participate in, and benefit from, the emerging information society and global economy. As part of its efforts to fulfill this mission, ITU organizes global ICT events, such as its flagship event ITU Telecom World. This event brings together some of the most influential representatives of governments and industry from all over the world. It provides an

excellent forum to exchange ideas, knowledge, and technology for the benefit of mankind.

ITU Telecom World events have traditionally attracted all stakeholders in the public and private sectors who are involved in the development of networks and services. The emphasis in the past has been on exhibitions displaying new technologies. But now ITU Telecom World 2011 brings a new focus to its events in which the emphasis is on networking, knowledge sharing, and consensus building; and in these activities the Technical Symposium plays a pivotal role. The new Technical Symposium at ITU Telecom World 2011 shall focus on knowledge sharing in the area of communications technologies and enablers. While the application of new technologies has created a number of major challenges for the ICT sector, it is their further development to address broad issues such as interoperability and openness between devices, services, and networks that will turn those challenges into opportunities.

Promoting cooperation and collaboration between organizations involved in standardization is one of the key challenges facing those involved in standards. In this spirit, the IEEE Communications Society and ITU will resume the collaborative approach to ITU Telecom events that was the

Networks 2010 Conference in Warsaw, Poland

By Michal Pióro, Jacek Rak, and Krzysztof Szczypiorski, Poland

Networks 2010, held 27–30 September in Warsaw, Poland, was the 14th in the series of symposia. Since the first conference, held in Paris 30 years ago, the meetings have been attracting world-class participants from all over the world, ranging from telecom operators, regulatory and standard bodies, through systems and software companies and research units from universities and industry, to systems integrators. The conference was organized by Warsaw University of Technology in cooperation with the Polish Association of Telecommunication Engineers. The IEEE Poland Section was a technical co-sponsor of the conference together with FP7 Euro-NF Network of Excellence and the Polish Academy of Sciences. Networks 2010 was a four-day professional and scientific event focused on network design and planning methods including the issues of network planning and optimization that are necessary to deliver the promise of the Network of the Future. The motto of Networks 2010 was Networks for the e-Society.

The conference presentations mainly addressed the issues of optical networks design, management and optimization techniques, quality of service, economic aspects of network design, routing in future generation networks, economic evaluation of new solutions, routing methods and algorithms (optimizing resource efficiency, robustness, and costs), evolution and future generation of wireless systems, and optimization in network planning, including resilience, and network security.

Around 100 technical papers submitted by researchers from America, Asia, Australia, and Europe were carefully reviewed by the members of the Technical Program Committee and external reviewers. The 51 high-quality papers accepted were finally organized into 16 technical sessions. On top of that, six keynote talks, eight invited papers, and four tutorials enriched the conference program. The conference was attended by more than 130 participants. Conference papers were published in printed proceedings and are also available at IEEE Xplore. Authors of the top 20 conference papers have been invited to publish extended versions of their papers in a special issue of Springer's *Telecommunication Systems Journal*.

Detailed information is available at the conference web site: http://www.networks2010.pl.

Presentation of one of the three best paper awards (left to right: Michal Pióro, Oscar Gonzalez-Soto, Jean-Philippe Joseph).

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norm a quarter of a century ago. In particular, ComSoc has agreed to provide sponsorship of the new Technical Symposium of ITU Telecom World 2011, which shall take place 24–27 October 2011 in Geneva, Switzerland. The goal for this Symposium (http://www.itu.int/WORLD2011/pdf/cfa.pdf) is to be truly inclusive, encompassing developments across all world regions and standards. The technical sponsorship of IEEE ComSoc involves several of the Society's Technical Committees, and is key to ensuring top quality for the ITU Telecom technical symposium.

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people, with a maximum of 140. All presentations are made available at the website, thus enabling better dissemination of the information for those who could not attend the talks. Probably as a result of these activities, the number of members in 2010 has increased around 8 percent. In 2011, the ComSoc Portuguese Chapter will continue pursuing the same objectives, more specifically, the organization of seminars on a monthly basis with speakers from industry and academia.