

September 2013

ComSoc - A Retrospective on this Century (Part 3): Visions for the Future

By Celia Desmond, past ComSoc President

(with thanks to Doug Zuckerman and Byeong Gi Lee for their comments)

Chance comments recently prompted me to reflect on ComSoc accomplishments over recent years. Consequently, I thought it would be interesting to review some pertinent published material reflecting on contributions of the six most recent Past Presidents, beginning with 2000, and running through to the end of the term of Byeong Gi Lee in 2011. Finding this material was actually easy, as the ComSoc Presidents have traditionally published a column each month in IEEE Communications Magazine. Generally, these columns were co-authored with the Vice Presidents, Directors, Committee Chairs and other contributors, providing an opportunity to share and highlight their accomplishments.

This article, the third of three, focuses on the many achievements during the years 2008-2011. I hope that this brief survey will illustrate how the significant work that our lead members – not only the Presidents, but their full boards and related committees – have improved the Society over recent years. In most cases the Past Presidents continued to serve both ComSoc and IEEE, even today. Short notes showing some of their continuing contributions follow the names of the Past Presidents.

Through these we can see some continuing trends. One of these is the continued globalization of ComSoc. In fact, since before 2000, we have always had BOG representatives from around the world, some elected and some via appointments.

We credit the exceptionally congenial work atmosphere that existed among our Board members as one of the key factors responsible for these very successful years. A second key component is the dedicated and ongoing loyal support provided by IEEE staff. Countless times we would have been lost without the experienced advice of their leader, Executive Director Jack Howell.

Let's look at these accomplishments.

Doug Zuckerman (2008-2009)

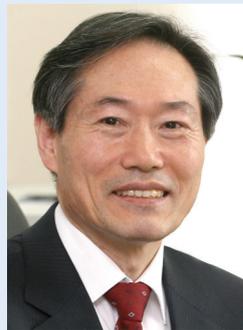
(Doug continued to support ComSoc in various positions, and also served IEEE on the Board of Directors as the Division III Director)

Based on a "COMSOC 2.0" vision, Doug Zuckerman worked with the volunteer leadership team and staff to achieve the following accomplishments:

- Improved the ComSoc Leadership environment by updating the structure of its Board of Governors, giving confer-



Doug Zuckerman



Byeong Gi Lee

ences, publications, education and standards more focus.

- Started to consider the impending appearance of open access and its impact on IEEE.

- Expanded ComSoc's financial involvement to more than 80 conferences worldwide.

- Grew ComSoc membership globally to >50% outside the US, with high Chapter growth both in the US and outside.

- Strengthened our relationship with industry by becoming stronger and more visible in standards develop-

ment, working in areas such as Dynamic Spectrum Access Networks (DYSPAN), Broadband over Power Lines, among others.

- Celebrated the 20th anniversary of its Network Operations and Management Symposia (NOMS and IM).

- Held first IEEE flagship conference in China—ICC 2008.

- Moved to Drupal for web content as an important step towards more efficient, user-friendly content delivery.

- Provided user-oriented upgrades to ComSoc's popular Digital Library.

- Shared President's column with VP TAB, showing our continued relationship with our IEEE parent; also shared column with IEEE GOLD representatives.

- Started new work flow process for ComSoc journal production.

- Started WCET Industry Advisory Board to strengthen this program; published the WEBOK, an important training aid.

- Strengthened ComSoc's focus on Women in Engineering, including initiating a ComSoc ad hoc committee on Women in Communications Engineering.

- Hosted workshops at GLOBECOM for GOLD groups which were tremendously popular.

- Grew number of Sister Society agreements which are now at 24.

- Set up relations with related Societies such as the IEEE Computer Society and IFIP (International Federation for Information Processing).

- Significantly grew the Society's Education programs for the first time in ComSoc's history.

Byeong Gi Lee (2010-2011)

- The 2010-2011 term was started with the declaration of "ComSoc's Golden Triangle" vision for the goal of innovation and vitalization of the Society. The Golden Triangle vision

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Professional Development Opportunity through an IEEE ComSoc DL Programme to New Zealand

By Nurul I Sarkar, Chair of IEEE Joint New Zealand North & South ComSoc Chapter

The IEEE New Zealand Communications Society (ComSoc) is a joint chapter of NZ North and South Sections. Being a Chapter Chair, Associate Professor Nurul Sarkar had nominated Professor Koichi Asatani (from Japan) for IEEE ComSoc Distinguished Lecturer (DL) tour to NZ. Professor Asatani gave three lectures/talks covering the three major cities (Auckland, Christchurch and Wellington) in NZ as part of his DL programme in November 2012.

In Auckland, the DL talk was held at the Auckland University of Technology (AUT). AUT's School of Computing and Mathematical Sciences hosted this talk on Monday November 19, 2012. In Christchurch, the DL talk was held at the University of Canterbury, Christchurch on Wednesday November 21 organised by Professor Harsha Sirisena. In Wellington, Prof Asatani gave a talk at the Victoria University of Wellington on Friday November 23. The talk was organised by NZ Central Chapter Chair Dr Paul Teal.

All three lectures were very successful in terms of professional development for the members of the society and the wider university communities, including staff and research students. However, in this article we highlight the event and activities held in Auckland only.

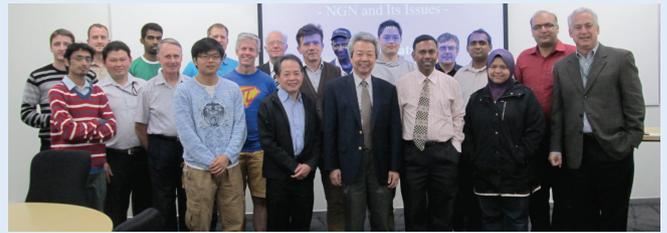
Professor Asatani stayed in a Scenic Hotel Auckland; walking distance to AUT University and the presentation venue. On 19 November in the afternoon, Prof Asatani visited AUT's School of Computing and Mathematical Sciences and met with key academic staff including Head of School and research students. Prof Asatani and I then walked to the presentation venue in the WF Building.

Prior to DL talk, we had an ample opportunity for talking/networking among the participants followed by light refreshments. People have enjoyed the round table facilities provided by AUT University. Overall, it was a productive session for the attendees as far as networking, academy-industry link, and sharing ideas are concerned.

The talk began with a short introduction by Chapter Chair Dr Nurul Sarkar highlighting the role of ComSoc Chapter and its association with IEEE NZ North Section. He then introduced Prof Asatani for his talk entitled "Carrier-Grade Networks toward the Future: Next Generation Networks and Its Issues".

Professor Asatani gave a fantastic presentation on Next Generation Networks (NGNs). He first gave an overview of NGNs highlighting the potential benefits to users and operators. The global ICT development, broadband access technologies, IP Network QoS, and architecture and characteristics of NGNs were discussed and presented. Prof Asatani focused on standardization process, release 1 service capabilities, and ITU-T Recommendations on NGNs. He gave a lot of practical examples from his own experience especially Japan Telecom. The talk concluded with Business models for NGNs and IPv6 multi-prefix issues. There was an excellent opportunity for question/answer, discussion as well as networking before and after the talk. However, the event was co-sponsored by IEEE ComSoc and IEEE NZ North section.

Despite of the busy time of the year, about 25 participants (15 IEEE and 10 non-IEEE members) from within and outside of AUT University attended the talk in Auckland. Most of the participants are from Universities (staff and research students), including University of Auckland, AUT University, Manukau Institute of Technology, and Unitec Institute of Technology. We had also quite a few Engineers and/or local industry participants. Overall, the talk was well received by participants and generated a lot of interest and further discus-



IEEE ComSoc DL talk attendees in Auckland CBD.



Chapter Chair Nurul Sarkar (left) introducing Prof. Asatani (right).



Prof. Asatani is delivering his talk on Next Generation Networks.

sion. The chapter chair Dr Sarkar had received positive feedback from the participants indicating that it was a successful event held at AUT University, Auckland CBD.

IEEE DLs are very high profile people in their field of specialization worldwide, and Prof Asatani's visit to New Zealand provided an opportunity for professional development through international link for the members of the society and the wider University community.

In addition to IEEE DL Programme, we hosted a day-long IEEE NZ wireless workshop at AUT University (Wellesley campus, Auckland CBD) on Friday 31st August last year. This annual event brought together more than 65 engineers, researchers, industrialists and policy makers working in the field of wireless communications and networking. People came all the way from Southland (south of South Island) to far north of Auckland covering the whole country. See Global Communication Newsletter, December 2012 for more details.

In summary, last year was very productive year for us says Chapter Chair Dr Sarkar. IEEE Joint NZ North & South ComSoc Chapter won 2012 IEEE ComSoc Chapter achievement award for outstanding contributions to the members of the wider community. Only 4 chapters out of 216 have been selected winners of this year's ComSoc Chapter achievement awards worldwide. The chapter received a plaque and honorarium of US\$1,000. The chapter had also a contestable IEEE fund (US\$1000) to run professional activities, such as workshops and distinguished lectures.

Based on feedback from the wider university community (both IEEE members and non-members), IEEE Joint NZ North & South ComSoc Chapter is currently working hard in organizing another DL visit to NZ this year.

Albania is Preparing for the EU Accession

An interview with Alketa Mukavelati,

Chairwoman of AKEP, the Albanian telecommunications authority

By Nicolae Oaca, Romania

What was Albania's preparative for the EU accession?

Albania started implementing the EU acquis in 2008 by adopting the Electronic Communications Law 9918, based on the EU 2003 regulatory framework, amended in October 2012 following the new 2009 EU regulatory framework.

The Electronic and Postal Communications Authority, AKEP, (<http://www.akep.al>) is an independent authority established in 2008 to monitor the Albanian market and to implement regulatory framework defined by the Law 9918 and to develop policies defined by the Council of Ministers.

The new Communications Law introduced the general authorization regime, while AKEP has had to make decisions to foster competition and reduce prices.

Reference Interconnection Offers for SMP operators has been in place since 2009, being updated regularly according to the market evolution.

To implement Carrier Selection and Pre-selection (CS(P)), AKEP conducted a public consultation and on 29 June 2011, we approved the Regulation and Instructions, Albtelcom being designated as the only operator to provide CS(P). LLU, an obligation imposed to the incumbent Albtelcom to offer access to other operators into its local loop, was implemented in 2012. Albania is not a success story for LLU and C(S)P, maybe because of low fixed penetration rate and many alternative networks.

On 4th May 2011 we implemented number portability, while by year-end 2012, 150.000 mobile numbers, or 3% of the total active SIMs, were ported.

Tariffs cost orientation: AKEP, after costs modeling and based on public consultation on mobile tariffs cost orientation, decided in 2011 that mobile termination rates should be reduced using a glide path to 3.26 euros/minute in September 2013 for the first three MNOs and in 2015 for the last entrant. We, also, imposed a glide path for SMS termination rates to reach 1 euro/SMS in September 2013.

Fixed Market Analyses: AKEP has undertaken three market analyses for fixed telephony.

The first two market analysis were concluded in 2007 and 2010, AKEP designating Albtelcom as SMP operator in retail and in wholesale markets imposing RIO publication, price control and cost orientation of retail and wholesale tariffs and retail tariffs rebalancing.

On August 2, 2012, AKEP published its third market analysis for consultation proposing to maintain Albtelcom as SMP in the retail and wholesale markets.

AKEP proposed a glide path to decrease Albtelcom's interconnection rates taking into account average values in the EU and in our region. We proposed a different glide path for the altnets rates with the aim to reach Albtelcom rates by 2015.

Mobile Market Analyses: In 2010, AKEP designated all three existing MNOs as SMP for wholesale mobile call termination and two of them as SMP for wholesale mobile access and call origination. Today, all four MNOs are designated as SMP.

What about the mobile broadband?

Our four MNOs have similar spectrum assignments in the 900MHz and 1800MHz bands, but only Vodafone, AMC and Eagle Mobile have been awarded 3G spectrum in 1900-2100MHz band. On 10 January 2011, Vodafone launched the first commercial 3G services in Albania, and AMC in November 2011.



Alketa Mukavelati

Our MNOs have been very active in providing Internet access through mobile devices and PC modem cards, the number of 3G users, by the year-end 2012, being about 55.000, or 25% of total fixed and mobile Internet users in Albania.

What about the analogue Tv switchover and digital dividend band usage?

The Albanian government adopted, in May 2012 a new strategy on switchover from analogue to digital terrestrial TV broadcasting envisaging a region-by-region approach, starting from April 2013, with the ultimate deadline of June 17, 2015. The freed-up band, the Digital Dividend, will be used for

mobile communications starting 2016, APEK planning a contest in 2015 to offer 72 MHz for a 15 years term.

A few words about the Albanian telecommunications by year-end 2012.

In 2012, mobile communications and Internet continued to grow and fixed telephony to decrease. The number of active SIMs by year-end 2012 reached about 5.6mn, or 198% penetration rate. Our four MNOs covers about 99% of population and 90% of territory, market leader being Vodafone, 36% market share, while the smallest Plus Communication, 6%, entered the market by year-end 2010.

Fixed telephony penetration is low, 11%, mainly due to the historical low levels and the large adoption of mobile telephony. Albtelcoms is our market leader, 74%, while the largest altnet, Abcom, cable operator, has 11% market share. Broadband access, still low at 7% of population, has increased continuously fueled by investments in optical fiber and 3G networks. Industry turnover has decreased from 408mn euros in 2010 to 371mn euros in 2011, mainly due to economic downturn and tariffs reduction.

What are your challenges and medium term plans?

On medium term, we hope Albania to become a member of the European Union, while AKEP has to play an important role: to put our telecommunications in line with the EU requirements, and our market to become part of the EU unique market.

Stable and predictable rules are very important for market development, so we are thinking on a medium term strategy to attract investments, to protect end-users, to better use scarce resources. I strongly believe in the driver role of ITC in accelerating Albania's economic growth and we are looking to be an independent, proactive and market oriented regulator aiming at connecting our country to high speed networks to stimulate economic development. Balancing investments and competition is the key success factor in developing national networks and providing modern and cheaper services to our citizens, businesses and administration, to reduce the digital divide. We have to look to the rural areas to reduce the gap and to increase coverage, competition and adoption. We have to act on both sides for adoption: supply, by stimulating high speed networks deployment, and demand side, by increasing Internet usage in administrating Albania. For this, we have to accelerate the Digital dividend band freed-up to be used for mobile communications, to connect Albania and foster competition.

We are dreaming about a digital Albania!

with the three vertices at Globalization, Young Leaders, and Industry, was warmly received by volunteers and staff, and guided ComSoc's activities throughout the two years.

- In the aspect of the Globalization, we, through the ad hoc Nomination and Election Process Committee (NEPC) chaired by Larry Greenstein, incessantly worked to bring in global culture and values to ComSoc's operation by instating geographically balanced representation to ComSoc's Board of Governors (BoG). After several trials and improvements, we were able to finally decide a three-bin based nomination/election process (one bin for the Americas, one bin for Asia Pacific, and one bin for Europe Middle East and Africa) in 2012, which is a big step leap toward globalization.

- In the aspect of the Young Leaders, we, through the VP-Publications and VP-Conferences, successfully established some open career paths for young leaders, which also contributed to vitalization of the Society. VP-Publications, Len Cimini, established open-call system for editor appointment, so-called "the 3-2-3 system". VP-Conferences, Khaled Letaief, formalized a Charter for each ComSoc's port-folio conferences which includes the terms of conference steering committee chair and members.

- In the aspect of the Industry, we created the ad hoc Industry Promotion Committee (IPC), chaired by Adam Drobot, and the ad hoc Industry Service Committee (ISC), chaired by Harvey Freeman. IPC was designed to provide package programs composed of ComSoc's products and services for the benefit of industry. ISC was designed to identify service items tailored for the needs of individual industry people.

- We, through the IPC, created the Corporate Patron Program (CPP) and Industry Now Program (INP), each led by Stan Moyer and Shri Goyal, and CPP made contracts of over 300 thousand dollars in 2010 as well as in 2011.

- In the middle of 2010, we announced "ComSoc's Growth Engines" vision with the three vertices at Converged Industry, Education/Content, and Standards in complement to the "ComSoc's Golden Triangle" vision, which helped us start new initiatives for the growth of ComSoc.

- In the aspect of the Converged Industry, we tried to expand ComSoc's customer line to include converged communications industry such as Apple, Google, Facebook, etc. in terms of creating new products and services as well as providing new programs and content.

- In the aspect of Education/Content, we desired to grow this sector to a third pillar of ComSoc's major revenue sources after publications and conferences. Potential of Education/Content was actually demonstrated by a new Virtual Intensive Courses developed and offered by a team effort led by John Pape in extension of the existing WCET program. Developing ComSoc's products in the form of smartphone applications, the so-called "smartphonics" was another experimental product in this category.

- In the aspect of Standards, we decided to elevate ComSoc's standards activities to a Vice President level from Director level, expecting that ComSoc's active participation in the IEEE standards activities will strengthen the IEEE's standards quality and ComSoc's relation with industry.

- The two visions and their derived activities helped significantly for innovation and vitalization of the Society, which was well demonstrated in the short-term recovery and stabilization of ComSoc's finance and the rapid growth of ComSoc's membership.

- ComSoc's finance made a 1.7 million dollar turnover to a surplus of about 450 thousand dollars in 2010 and the surplus continued in 2011 at about 350 thousand dollars.

- ComSoc's membership made a rapid growth of about 15% to about 50,000 in 2010 and continued to grow to about 51,000 in 2011.

- We have newly brought in the social-networking service to form ComSoc community over Facebook, Twitter and LinkedIn, with the members ("likes") fast growing to about 15,000 in 2010 and to over 40,000 in 2011, the largest number in whole IEEE.

- We completed extensive conference portfolio analysis, enabling to categorize ComSoc's conferences into several categories, which enables us to apply a differentiated management tool set in each category.

- We started conducting various strategic studies (e.g., marketing, meeting and conferences, ICT technology, education and content) and publishing the study results as white papers so that they can form a knowledge base to aid future ComSoc operations.

- We launched *Wireless Communications Letters* and *Publications Content Digest*, and completed contract for launching *China Communications Magazine*. We also completed launching a new conference on Smart Grid Communications, a new virtual Green Communications conference, and the International Conference on Communications in China (ICCC).

- We successfully managed the decision process for holding ICC 2011 in Kyoto, Japan, in June 2011, right after the Great East Japan Earthquake and tsunami of March 11. It was a big challenge to decide whether or not to hold the conference in Japan after that big natural disaster with a potential threat of nuclear radiation spread. It was another difficult task to calm down irritated potential participants and persuade them to make the trip. Everything was well managed and the conference turned out very successful with about 1,800 participants.

- Expecting that the changes to be made in communications and human society in general in the next decade would be tremendous, we launched an ad hoc "ComSoc 2020 Committee" at the end of 2010 to better understand the future changes and for ComSoc to get better prepared for 2020. After a year's intensive study the committee, led by Roberto Saracco, prepared a hundred-page report declaring our "ComSoc 2020" vision. The report will play a core role as ComSoc's new leadership team steers the Society throughout the unpredictable decade to come.

In looking back, we see that ComSoc has accomplished much over the years, always striving to keep up with its member and wider community interests.



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