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June 2012

Report of Distinguished Speaker Program Lecture: Bhumip Khasnabish in New York

By Bhumip Khasnabish, USA

I am delighted to report a very successful ComSoc Distinguished Lecture — under the auspices of IEEE ComSoc's Distinguished Speaker Program (DSP) — during IEEE Region 1 Innovation Day in New York, USA. My sincere thanks to the General Chair of the event, Prof. Durga Misra, and the Program Chair Technology/Industry, Dr. Ashutosh Dutta for inviting me to deliver the Lecture on Next frontier of Innovation in Communications during this outstanding Industry event. I am also grateful to Dr. Yigang Cai, ComSoc DLT/DSP Coordinator, Mr. Michael Haroutunian, New York ComSoc Chapter Chair, Dr. Gabriel Jakobson, NA Region Director, and Dr. Shri Goyal, Membership Programs Development for constant encouragement and kind approval of this trip request on a short notice.

The event was held at the Pfizer Auditorium, Dibner Building, 5 Metro Tech Center, Polytechnic Institute of New York University (NYU Poly), Brooklyn, NY, 11201, USA and was very well attended. More than two hundred (http://ewh.ieee.org/reg/1/innovation_day/speakers.html) representatives from Government, Academia and Industry participated in this full-day event. Detailed program of the Innovation Day event can be found at the following Websites: http://ewh.ieee.org/reg/1/innovation_day/ programs.html , and http://www.ieee.li/calendar/2011_05 _17.pdf . The event was also reported in the Chair's message of The Pulse of Long Island (http://www.ieee.li/ pulse/pulse_2011_05.pdf).

The Title of my talk was "XaaS: The Next Frontier of Innovation in Communications." The basic message included a discussion on how fast the computing and communication paradigms are changing for the benefit of everyone. Using distributed virtualized resources and tighter cross-layer communications, anyone with Internet access can now establish and use any and all types of computing and communication services/solutions. And, this can now be achieved on an on?demand basis without incurring any significant capital expenditures and operational/process overheads. These are making continuous innovation and customization of standards in real-time a possibility. However, the issues related to privacy, security, regulatory compliance, and Intellectual property protection must now be resolved amicably in order to derive the full benefit of these innovations. The slides from the presentation are available at the following website, http://ewh.ieee.org/reg/1/innovation_day/presentations/bhumip.pdf . I sincerely encourage the IEEE members to review the slides and let me know of their comments and suggestion, as appropriate.

Because of limited time, there was opportunity for a few questions only. The following is a summary of the Q&A session.

Questions were raised about recent security breaches on Cloud/ Data center based service like Sony Play-Station and how these could be avoided. While there is no magic bullet, the practice which always helps is to stay a few steps ahead of the hackers. This calls for continuously monitoring the system and services for malfunctions and attacks, and proactively developing solutions so that these can be activated on short notice based on the situations.

Dr. Bhumip Khasnabish delivering his lecture during IEEE Region 1 Innovation Day in the Pfizer Auditorium of the Polytechnic Institute of New York University, USA.

The next question was related to the importance and usefulness of Cloud computing, networking and services for improving the lifestyle. We are already seeing the benefits of early adoption of distributed virtualized networked (Internet-accessible) resources sharing in many fields. The examples include ubiquitous music, video, file sharing, and Apps and services access without carrying huge dedicated computing and networking resources personally all the time. Researchers and developers in many other fields including Smart Grid, Healthcare, and Environment protection are now considering using virtualization of computing and communications for significantly improving the performance and efficiency of practices.

The final question was "What's next after Cloud Computing and Networking?" While it is difficult to predict the future, one can easily see the signs of what is happening now and can make a reasonable guess of what might happen next. Of course there will always be a place for disruptive innovations. At this point in time it appears that mobile and nomadic Cloud for machine to machine and personalized any media services are what everyone is running after!

Based on my XaaS presentation and subsequent interactions with the audience, I am also writing an article entitled, "Mobile and Nomadic Cloud for Personalized Any-Media Services, Anywhere!" for publication in IEEE Monitor (http://www.sites.ieee.org/ny-monitor). I am indebted to Dr. Amitava Dutta-Roy, Life Fellow, IEEE for his encouragement, patience, and kindness for accommodating this article in the Monitor.

Digital Dividend Coagulates Central and Eastern Europe

By Nicolae Oaca, Romania

A few years ago, in September 2009, at the regional conference INFOFEST held in Budva, Montenegro, ANCOM, the Romanian telecommunications regulatory body, proposed a common regional approach for the digital dividend band usage and a regional reunion of the regulators from Central and Eastern Europe.

The digital dividend band was the starting point for a regional cooperation in Central and Eastern Europe, while the future could reveal many other regional common topics. Central and Eastern Europe bets on the Digital Dividend and cooperation!

First Step: Aiming at a Common Approach

On March 30th 2010, Bucharest hosted the first regional event on the Digital Dividend in Central and Eastern Europe: Digital dividend - Challenges and Opportunities in the Region, organized by ANCOM and attended by regulators from Bulgaria, Croatia, Greece, Hungary, FYRoMacedonia, Moldova, Montenegro, Serbia, Slovenia and Romania.

The event aimed at developing a common regional approach to the allocation of the digital dividend band: 790-862MHz, the spectrum to be freed up by the switchover from analogue to digital TV. Allocating this band to mobile communications would increase Internet penetration and would have a significant economic impact by driving innovation, job creation, productivity and competitiveness. Spectrum coordination on a regional basis is needed for the scale economy to drive down handsets and network equipment costs and make broadband access affordable to consumers and reduce the digital divide in the region. The low-frequency digital dividend band is ideally suited to roll out of mobile broadband in rural areas in our region, where population density is lower than in Western Europe and scattered over large areas. The region's position on the EU borders makes coordination between states more complex, while the high number of multiple border issues threatens to complicate coordination further.

Second Step: Proposal for a Regional Portal and a Regional Working Group

Three months later, Belgrade hosted the South-East Europe Ministerial Summit on the Digital Dividend, organized by the Serbian Ministry of Telecommunications and Information Society, The event brought together regulators from Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Greece, Hungary, Italy, FYRo Macedonia, Poland, Romania, Serbia, Slovenia and Turkey.

ANCOM proposed an instrument for enabling regional cooperation: a portal dedicated to the regional synchronization of the digital dividend band usage in our region, to accelerate common decisions on: contest type and timing, technology to use, bundling digital dividend band and 2.6GHz band etc. ANCOM expressed its readiness to create and operate such a portal together with a working group - at least one representative for every country. ANCOM proposal was accepted and included in the summit final document

Third Step: CEE Regional Working Group Comes Alive!

In March 2011, ANCOM prepared a draft version of the regional portal and invited the regulators in our region to join the regional project by nominating representatives in the Regional Group. In early April 2011, 12 authorities from 11 countries - Albania, Bosnia & Herzegovina, Croatia, Hungary, FYRo Macedonia, Moldova, Romania, Serbia, Slovenia, Montenegro and Turkey - nominated their representatives in the CEE Regional Working Group and started consulting basic working rules - language, consultation procedure and technical functionalities of the portal.

The main result was a functional Regional Working Group to deal with the regional portal and cooperation in the region.

Fourth Step: 12 May 2011, Kick-Off Meeting Agreed Portal Content and Working Rules

On May 12th 2011, ANCOM organised in Bucharest the second regional meeting on regional cooperation on spectrum problems, with a large regional and international participation. In the same day, the CEE Regional Working Group had its first meeting deciding on the main issues under consultation: portal content, portal technical functionalities, working rules.

Regional Portal: www.CEERegionalWorkingGroup.net

According to the kick-off meeting decisions, the regional portal covers the next topics: Digital Dividend (our region, Europe and World, auctions and other assignment methods), Events (contests, conferences, seminars, etc. in our region, Europe and World), Countries (every member country has pages dealing with ASO process, digital Tv progress, Digital Dividend, spectrum management, national market statistics), Working Group (documents elaborated by the Regional Working Group, forum), European Union (recommendations, documents, news), Other topics (relevant websites: ITU, CEPT, EBU, case studies), but without being limited to them.

The main aim of the regional portal is to become a one-stop-shop for telecommunications in our region and to gather around it regulators in our region for cooperation in the benefit of their countries. The portal is targeting regulators, operators, vendors, investors, consultants, international organizations, EU bodies, and end-users.

CEE Regional Working Group

The Group is composed by 16 members representing 13 authorities from 12 countries (Moldova represented by ANRCETI, regulator and CNFR, agency for frequencies): deputy directors, directors, heads of regions, managers, experts, advisers.

(Continued on Newsletter page 4)

Distinguished Lecturer Tour of Prof. Koichi Asatani in India

Prof. Deergha Rao Korrai,
Chair of the Communications and Signal Processing Societies Joint Chapter, Hyderabad;
PM Sasi, Chair, Pradeep Balachandran, Secretary, Kerala Chapter, India

A Distinguished Lecturer tour of Dr. Koichi Asatani, Kogakuin University, Japan, was held in India during January 2012. Lectures on 'Trends in NGN and Its Issues' were given in India from 23 January to 31 January 2012 with the following schedule:

1) Mumbai, 23 January 2012 (one lecture);
2) Pune, 24th & 25th January 2012(two lectures);
3) Hyderabad, 27 Jan. 2012 (two lectures);
4) Bangalore, 30 January 2012 (one lecture).
5) Thiruvananthapuram, 31 January 2012 (one lecture);

The IEEE Communications Society has funded the DLT of Dr.Asatani.The lecture at Bombay was held at Tech Mahindra Ltd., Oberoi Gardens Estate.and also Web Chat on Topic 'Delivering and maintaining End to End Quality of Experience in Next Generation Services (with special reference to service assurance and fulfilment processes) held at Boombay. The two lectures at Pune were held at College of Engineering, Shivajinagar Pune on 24th January and Pune Institute of Computer Technology, on 25th January respectively. The DL at Bangalore was held in the Indian Institute of Science(IISc). The DL at Thiruvananthapuram was held at Center for Development of Advanced Computing (CDAC). About 85 delegates from both academia and Industry have attended the lecture at Thiruvananthapuram

Dr. Asatani's lectures in Hyderabad were organized by the Communications and Signal Processing Societies Joint Chapter of the IEEE Hyderabad Section at two places within Hyderabad. The lecture at the Indian Institute of Technology, Yeddumailaram, Hyderabad was held on 27 January 2012 from 9.00 a.m. to 10.30am. The audience for this lecture are 36(thirty six) including students, Research scholars, and faculty from colleges. The lecture at the International Institute of Information Technology, Gachibowli, Hyderabad was held on 27 January 2012 from 3.30 pm. to 5.00pm. The audience for this lecture are 41(forty one) including students, Research scholars, and faculty from colleges.

Dr. Asatani Koichi delivering the talk in Kerala.

During his lectures, Dr. Asatani gave an introductory overview of the major ICT enabled developmental activities with the aid of vital statistics triggering the need for sophisticated data networking infrastructure at the global level. He

(Continued on Newsletter page 4)

ComSoc Portuguese Chapter: Report of 2011 Activities

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

In 2011, the ComSoc Portuguese Chapter continued the activities of organising seminars jointly with IST - Technical University of Lisbon (taking advantage of this 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.

Lisbon was the host for a Distinguished Speaker Tour, on Mar. 18th, by Dr. Javan Erfanian (Bell Mobility Canada, Toronto, Canada), who gave a talk on "Future of Wireless Experience, Technologies & Research".

The series of talks were as follows: "Implementation of Digital Terrestrial TV", Carlos Lages (Portugal Telecom, Portugal), Apr. 19th; "Spectrum Management: Scenarios for Change", Jaime Afonso (ANACOM, Portugal), May 3rd; "Security in Telecommunications Networks and the Pressure Point Warfare Doctrine", Luis Sousa Cardoso (Portugal Telecom, Portugal), May 17th; "Security in Networks and Electronic Communications Services", Manuel Barros (ANACOM, Portugal), July 12th; "Iterative Processing for Cooperative Communications Allowing Intra-Link Errors", Prof. Tad Matsumoto (Advanced Institute of Science and Technology, Japan & University of Oulu, Finland), Oct. 18th; "Enterprise Communications", João Gonzalez (Avaya, Portugal) and Pedro Ferreira (SVDI, Portugal, Nov. 14th;"A Perspective of the Networks of the Future and Smart Cities", Prof. Luis M. Correia (IST/IT-Technical University of Lisbon, Portugal), Dec. 14th.


Attendance overview during a seminar.

A seminar took place on May 27th, on Mobile Communications, essentially aiming at students about to graduate, but open to industry as well. There was a mix of topics and speakers, covering an operator, an infrastructure manufacturer, and a phone manufacturer: "Quality of Service" Ivo Henriques (Portugal Telecom, Portugal), "LTE", Paulo

(Continued on Newsletter page 4)

PORTUGESE CHAPTER/*continued from page 3*

Nascimento and Marta Almeida (NSN, Portugal), and "Mobile Phones for the Mass Market", Hugo Braz (Samsung, Portugal). The event was well attended, by more than 70 people, the majority being students.

The average attendance of these talks has been around 80 people, with a maximum of 140. All presentations are made available at the website, hence, enabling a better dissemination of the information, namely, for those that could not attend the talks. Probably as a result of these activities, the number of members in 2011 has increased around 12%. In 2012, the ComSoc Portuguese Chapter will continue pursuing the same objectives, more specifically, the organisation of seminars on a monthly basis with speakers from industry and academia.

DIGITAL DIVIDEND/*continued from page 2*

The main task of the CEE Regional Working Group is to make decisions on the regional portal content, to upload and refresh the relevant information, to debate topics of interest in our region.

Fifth Step: 29 March 2012, First Technical Meeting on Regional Spectrum Coordination

ANCOM organised on 29-30 March 2012 the first technical meeting of CEE Regional Working Group, http://www.ceeregionalworkinggroup.net/news.php?extend.16.4, on regional spectrum coordination, in Bucharest. 14 authorities representing 11 countries (Albania, Croatia, Czech Republic, Greece, Hungary, FYRo Macedonia, Moldova, Montenegro, Romania, Serbia, Slovenia) attended the regional meeting, first day being dedicated to the regional spectrum coordination. Each country presented the present status regarding digital TV switchover and plans for digital dividend band usage. In the third session, there were presented principles for a regional coordination, and, based on these, two draft agreements for regional coordination of 800MHz and 2600MHz bands. Both draft agreements are in consultation within the group until the end of June 2012, their signature by the majority of the members being envisaged for later this year.

A high official of the ITU, Mr. François Rancy, Director of the BR, also attended the regional meeting. The second day of the event was dedicated to a workshop on planning and organizing a spectrum auction.

DISTINGUISHED LECTURE/*continued from page 3*

opined that the combined interplay of the telephone, the internet and the broadcasting scenarios have accelerated the growth of ubiquitous broadband proliferation.

Dr. Asatani Koichi explained the significance of Next Generation Network (NGN) in offering enhanced reliability and safety services for legacy telecommunication networks and in the support of economical, versatile multi-media applications on the internet space. He made the critical observation that NGN voice and Internet services are attractive from the view points of service flexibility and cost effectiveness and also for its capability in integrating third-party applications with high dependability and high security. He also remarked that NGN paves way for fixed-mobile convergence (FMC) with generalized mobility and roaming with improved security features. According to him, this convergence will prove to be beneficial for worldwide network operators, opening up new business development opportunities in the market.

Dr.Asatani has highlighted the principles of NGN and the configurational characteristics of intelligent network systems. Concepts and the architecture of the Next Generation Networks (NGN) were also explained. Comparative evaluation of competing technologies with respect to the specific domains of telecom and internet were made. Technical and commercial issues arising from the global evolution of NGN, especially relating to global standards and regulations, were also discussed at length.

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