The conference’s extensive keynote and plenary schedule concluded this morning with the highly-informative addresses of leading industry experts highlighting the next wave of transformational communications and the evolving needs, expectations and requirements of companies and individuals worldwide.

Introduced by Industry Forums & Exposition Chair Brian Lakey, Marcus Weldon, CTO of Alcatel-Lucent began the executive session by welcoming attendees to “The Arrival of the Tablet Generation” and its role in changing the principles of behavior on a global scale. As background, he cited the recent sale of more than 100 million tablets globally and other statistics illustrating that 66 percent of Americans sleep with SmartPhones, 84 percent of Germans would choose the Internet over a car and 500 million people use Facebook application platforms monthly. According to Weldon, this has created a “profound shift in the next digital economy” that will generate new revenue streams based on the tablet’s ability to transcend age groups and converge the cloud with enterprises and the home to provide “everything in one device.”

Following these comments, Dr. Raj Jain of Washington University, St. Louis, spoke about the “Next Generation Internet and the Architecture for the Future.” He stated that “the real money is knowing the future” and understanding that “the most valued companies in the stock market are generally those that lead the paradigm shift.” Dr. Jain also noted that we are at the “knee of the mobile internet age” and the industry is about to experience an “explosion of mobile applications and cloud services” offering enhanced miniaturization, mobility, distance and applications driven by the ability to meet numerous social needs related to energy, health and security.

Lucy Hood of the Institute of Communications Technology Management (CTM) then discussed her company’s “mission to create and disseminate knowledge” based on information derived from the entire business value chain. This includes studying the symbiotic relationship between devices and activities to better understand “what is coming next” and “what people are likely to do next in their digital lives.” For instance, while “everyone wants more variety, control and security,” some specific “user groups desire very different innovations.” For instance, “basic folk” crave home security, while “gaming people would like more access to educational content such automated online tutorials.”

During the final address of the morning, Victor Bahl of Microsoft discussed “Putting the Cloud in the Palm of Your Hand.” In addition to highlighting the need for ubiquitous connectivity, he talked about the latest research utilizing cloudlets as hot spots in public spaces as well as WhiteFi connectivity options for building world-class cloud services delivering nearly unlimited resources. This includes realizing the full potential of mobile computing supported by 100k+ cloud-enabled applications.
• Happening Today at IEEE ICC 2012 •

08:00 – 12:30
Tutorials
T07: Inter-Vehicular Communication / 201/2F
T08: New Frontiers in Opportunistic Communication / 206/2F
T09: Remote Wellbeing Monitoring in 4G Networks / 106/1F

Workshops
F1: EHC: Energy Harvesting for Communication / 101/1F

08:00 – 18:00
Workshops
F2: WiSAAN: Wireless Sensor Actor and Actuator Networks / 104/1F
F3: ViOpt: Realizing Advanced Video Optimized Wireless Networks / 202/2F
F4: LTHE: Long Term HSPA Evolution / 209/2F
F5: MobilCheSS: Mobile Consumer Health Care Networks, Systems and Services / 107/1F
F6: NovaEnEv: Novel Approaches to Energy Measurement and Evaluation in Wireless Networks / 204/2F
F7: RiDO: Re-think ICT Infrastructure Designs and Operations / 105/1F
F8: RSN: Radar and Sonar Network / 108/1F
F10: SDN: Software Defined Networks / 103/1F
F11: GCN: Green Communications and Networking / 102/1F
F12: SFCS: Security and Forensics in Communication Systems / 210/2F
F13: SmallNets: Small Cell Wireless Networks / 212/2F

12:30 – 14:00
Lunch (Tutorial & Workshop Attendees Only) / Foyer/2F

14:00 – 18:00
Tutorials
T10: Mobile-Station and Base-Station Cooperation for Wireless Communications / 201/2F
T11: Disruption/Delay Tolerant Mobile I Ad Hoc Networks / 106/1F
T12: Network Coding / 206/2F

• App after the Conference •

The Paperless™ application will be unavailable from 18:00 – 20:00 on Friday, June 15, 2012 in order to set-up the off-site system that will be accessible until Sunday, June 9, 2013.

Email questions about using the app after the conference to paperlessplus@icc2012.ca.

Thursday morning commenced with the highly-anticipated “Patent & Licensing Strategies” Industry Forum’s focus on new laws and regulations, while the “IPTV” session outlined some of field’s newest technologies for improving at-home video cinema experiences and multi-screen content deliveries.

Curtis Behman of Borden Ladner & Gervais began the patents talk with a general industrial overview highlighting the importance placed on intellectual property in the technology marketplace. As an example, he cited the recent $3 billion purchase of Nortel’s physical assets in relation to the $4.5 billion received for its patent portfolio. To further emphasize his point, he also highlighted Google’s $12.5 billion purchase of Motorola Mobility, which according to Behman was “really about the patent portfolio.”

Before turning the dais over to Steve Chang of Georgetown University, who spoke on “The America Invents Act: What Do I Need to Know?” Behman also emphasized the need for scientists to “distinguish from what’s already out there” in addition to thoroughly understanding “what your company and the market is doing” when patenting inventions that are both “new and unobvious.” Chang then followed these statements by addressing some of the latest changes to the U.S. patent process. Among these was the reminder that is more important than ever to “get an application on file promptly” since the “first inventor to invent system” has now been changed to a process that grants first patent rights to the “first inventor that files a claim.” As a result, Chang advised the research community to “act promptly on your patent rights,” keeping legal in the loop in all advances and never eliminating the trail of research.

Held simultaneously with this session was also the “IPTV” Forum, which described new research in adaptive streaming for multi-screen video delivery and achieving better QoE and end-to-end response times on the Internet. Also detailed was the research into “JPEG 2000 Image Transition Using Encryption Domain Authentication” by Pallier Crytosystem and its success in displaying digital cinema data using a home projector.

Industry Forums Concluded with Sessions Dedicated to Government Defence, IPv6, Internet Authentication and Content Deliver Network (CDN) Issues

Thursday afternoon marked the end of IEEE ComSoc’s comprehensive schedule of technical symposia consisting of the last of nearly 1,100 separate paper presentations on topics ranging from “Vehicular Network Synthetic Modeling,” “E-voting System Confidentiality & Accuracy” and “Next-Generation Network Misbehaviour Detection” to “Enriched IPv6 Services Personalization,” “Smart Grid Machine-to-Machine Communications” and “Automated Tactical Wireless Networks.”

Among the other sessions also concluding Thursday evening were the conference’s final four Industry Forums. Highlights included the sessions on “Government & Defence” featuring the panel on “Information Service Provision Challenges in the Defence and Security Environment” and “IPv6” focusing on the impact of the adoption of this new protocol.

In addition, the Forum on “Identity Management” discussed at-length the latest processes currently under development to help service providers better secure and authenticate the numerous corporate and personal identities held by single individuals in today’s digital marketplace. This includes the creation of new centers of business that will specialize in the management of the latest frictionless and transparent technologies that will eliminate passwords and intuitively extend online access to the newest on-demand applications without the need of any intermediary log-on steps.

The “Content and CDN Industry Forum” also continued the ongoing conference theme of convergence by exploring the advance of architectures, standards and layered system approaches needed to accommodate society’s ongoing transition from traditional and classic TV delivery systems to IP-Internet video provided by digital multi-screen devices. Included in the discussion was the integration and adaptation of new measures and encryption protocols that will not only provide added levels of security, but adapt to changing network conditions driven by the explosion of devices, video formats, resolutions and cloud-based content.
The next annual IEEE ICC conference will be held June 9 – 13, 2013 in the Central European cultural and industrial center of Budapest Hungary. Themed “Bridging the Broadband Divide,” IEEE ICC 2013 is expected to host more than 2,000 industry professionals, scientists, academics and government officials attending nearly 1,500 presentations highlighting the entire array of wireless and wireline communication technologies.

“It is one of Europe’s most beautiful cities,” says IEEE ICC 2013 General Chair Christopher Mattheisen, Chairman-CEO of Magyar Telekom, Hungary. “Each year, millions travel there to sample its old-world culture and modern-day amenities. We’re honored to have such a historic site serve as our first-ever venue in Eastern Europe. It will be especially thrilling to discuss the emergence of the latest communications innovations during the day and then at night experience the lovely Danube River, magnificent museums, castles and cathedrals.”

Beginning on Sunday, June 9, the five-day international event will hold the first of two days of tutorials and workshops highlighting topics such as machine-to-machine communications, advances in wireless sensor networks, energy harvesting, intelligent vehicular networking, mobile consumer health care, cognitive radio & green networking, the future Internet and cloud computing. Over the next three days, the conference will then offer more than 1,000 keynotes, high-level business panels, industrial forums and scientific paper presentations grouped into 12 thematic tracks and 18 to 20 parallel sessions. Technical Paper Submissions are due September 16, 2012.

For more information, please visit http://www.ieee-icc.org/2013. All website visitors are also invited to network with colleagues and peers, share their professional experiences or address IEEE ICC issues through the conference’s Facebook, LinkedIn and Twitter pages.

We look forward to seeing all of you at IEEE ICC 2013!

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And Thank You All!

The IEEE ICC 2012 Organizing Committee would like to thank the 2,600+ registrants, speakers, volunteers, patrons and exhibitors for attending and supporting the conference!