



## Selected Areas in Communications Symposium Access Networks and Systems Track

### Symposium Co-Chairs

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The 2015 IEEE International Conference on Communications (ICC) will be held in London, UK from 8-12 June 2015. Themed “Smart City & Smart World,” with its proximity to Tech City, the fastest growing technology cluster in Europe, this flagship conference of IEEE Communications Society will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2015 will also include an exceptional Industry Forum & Exhibition program including business panels and keynote speakers. We invite you to submit your original technical papers, and industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2015 Conference Proceedings and submitted for inclusion in IEEE Xplore®/IEEE Digital Library. Full details of submission procedures are available at <http://www.ieee-icc.org/2015>.

### Scope and Topics of Interest

Access Networks and Systems continue to be one of the most active fields of telecommunication research and development in recent years. Variety of technologies and services came together to create technological challenges in the access domain. Advances in Voice over IP (VoIP), IPTV, conventional and high-definition video, and multimedia have significantly impacted the access segment of service-provider networks. Moreover, many access lines today terminate on multiple home devices. This led to a need for home networks that are designed for a blend of multi-computer Internet access, multi-platform entertainment, and voice support. The evolution towards multi-service platforms and the emergence of a spectrum of new IP-based applications are fueling more demand for bandwidth. As service providers, Telcos and Cable MSOs alike, face the challenge of triple and quadruple play delivery (voice, data, and video to end customers; over wired and wireless networks), researchers in both academia and industry must develop innovative solutions to tackle this challenge.

Broadband access utilizes a variety of transmission media and systems, such as twisted-pair copper based systems (xDSL), coaxial-cable plants, fiber based solutions (passive and active optical networks), wireless systems (Wi-Fi, WiMAX, and cellular technologies), power-lines systems (PLC), and hybrid combinations of these. Various protocols are also required to support both downstream and upstream traffic. Understanding the performance characteristics of all the technological ingredients of tomorrow’s access networks/systems is critical for delivering the desired Quality of Service (QoS) to end users.

The aim of the Access Networks and Systems (ANS) Track of the Symposium on Selected Areas on Communications is to provide a forum that brings together scientists and researchers from all over the world to present their cutting-edge innovations in all aspects of the field. Papers on practical applications and R&D results from industry and academic/industrial collaborations are particularly encouraged.

To ensure complete coverage of the advances in this field, the ANS Track of the SAC Symposium solicits original contributions in, but not limited to, the following topical areas:

- Twisted pair copper systems and networks; xDSL
- Hybrid Fiber Coaxial (HFC) systems and networks
- FTTx and Passive/Active Optical systems and networks (PONs and AONs)
- Cable TV systems and networks
- Bluetooth, Wi-Fi, WiMAX, and Cellular Access

- Optical-Wireless integration and radio over fiber
- Free-Space Optical-Access (components, systems, and networks)
- Digital satellite access technology
- Access network architectures and protocols
- Service convergence and multimedia networks
- Quality of Service (QoS): characterization and provisioning
- Access network survivability and security
- Municipal and community networks
- Power Line Communication (PLC)
- Home Networks
- Networked appliances
- Applications (video streaming/IPTV etc.)
- Synchronization (time & frequency) support in the access
- Billing and management aspects
- Standardization

### **Submission Guidelines**

Prospective authors are invited to submit original technical papers by the deadline 15 October 2014 for publication in the IEEE ICC 2015 Conference Proceedings. All submissions should be written in English with a maximum paper length of Six (6) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

**Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at**

<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

**Alternatively you can follow the sample instructions in template.pdf at**

<http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf>

**Only PDF files will be accepted for the review process and all submissions must be done through EDAS at**

<https://edas.info/newPaper.php?c=17727&track=57953>

### **Co-Chairs Biographies**

**Jochen Maes** joined Alcatel-Lucent Bell Labs in 2006 where he has been continuously shifting the limits of copper. He heads the Bell Labs team that researches transceiver and system design for copper access. The team is currently focused on G.fast that delivers 1 Gb/s over the telephony network. His previous work includes vectoring and phantom mode transmission.

He received his Masters in Physics and Ph.D. in Science from the Katholieke Universiteit Leuven in 2000 and 2004 respectively. During his Ph.D. and postdoc he researched Blu-ray laser structures, quantum nanostructured telecom lasers and synthetic diamond. He was visiting researcher at Laboratoire National des Champs Magnétiques Pulsés in Toulouse and at Technische Universität Berlin.

He is author of 60+ peer-reviewed papers, 19 pending and 11 granted patents and 50+ standardization contributions. He is TPC member for all ICC and Globecom conferences since 2012 and acts as reviewer for several IEEE and Eurasip journals. He is a senior member of the IEEE. His work received the Infovision Award for Broadband Innovation in 2010 and the Bell Labs President's Award in 2011.