

Call for Papers for *Selected Areas in Communications Symposium* *--- Track on Access Systems and Networks ---*

Scope and Motivation:

Access networks and systems use great variety of technologies to deliver many services and functions. The complexity of such systems combined with increased user expectations both in bandwidth and quality continue to make this field one of the most challenging. Recent developments in SDN and Network Function Virtualization will find their applications in Access. Similarly wired access network will represent an important support for the fifth generation mobile networks (5G). However, the concrete benefits from these innovative solutions remain to be seen.

The motivation of the Access Systems and Networks (ASN) Track of the Symposium on Selected Areas on Communications is to provide a platform that attracts engineers, practitioners, scientists and researchers from all over the world to present their new ideas, views, innovations, deployments, and implementations in all aspects of the field. Papers on practical applications and R&D results from industry and academic/industrial collaborations are particularly encouraged.

Main Topics of Interest:

To ensure complete coverage of the advances in this field, the ASN 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
- Integrated wired/wireless access
- 5G front/mid-haul networks
- Optical-Wireless integration and radio over fiber
- Free-Space Optical-Access (components, systems, and networks)
- Digital satellite access technology
- Access network architectures and protocols
- Software Defined Networking in access



- Service convergence and multimedia networks
- Quality of Service (QoS): characterization and provisioning
- Access network survivability and security
- Municipal, community, and utilities networks
- Power Line Communication (PLC)
- Home/Building/Neighborhood Area Networks
- Networked appliances and their virtualization
- Body area, health care and biomedical access networks
- Applications (video streaming/IPTV etc.)
- Virtualization of Network Functions in access
- Synchronization (time & frequency) support in the access
- Billing and management aspects
- Standardization
- Techno-economic analysis of access alternatives

Sponsoring Technical Committees:

- Transmission, Access and Optical Systems (TAOS)

How to Submit a Paper:

The IEEE Globecom 2016 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. **The paper submission deadline is April 1, 2016. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.**

Symposium Chair:

- Luca Valcarenghi, Scuola Superiore Sant'Anna, Pisa, Italy, luca.valcarenghi@sssup.it

Biography:

Luca Valcarenghi (IEEE M'99-SM'14) holds a Laurea degree in Electronics Engineering(1997) from the Politecnico di Torino, Italy, a M.S. in Electrical Engineering (1999), and a Ph.D. in Electrical Engineering-Telecommunications (2001) both from the University of Texas at Dallas (UTD). From January 2002 to August 2002 he was Research Associate of the Optical Networking Advanced Research (OpNeAR) Lab of the University of Texas at Dallas Erik Jonsson School of EE/CS. From September 2002 to November 2014 he was an Assistant Professor at the Scuola Superiore Sant'Anna of University Studies and Doctoral Research of Pisa, Italy, where he is currently an Associate Professor.

Dr. Valcarenghi published more than 150 papers in International journals and conference proceedings and actively participated in the TPC of several IEEE conferences, such as Globecom and ICC "Optical



Network and System Symposium" and "Next-Generation Networking & Internet Symposium." He has been co-chair of the "Optical Network and System Symposium" at IEEE ICC 2011 and ICC 2015. Dr. Valcarengi received a Fulbright Research Scholar Fellowship in 2009 during which he visited, from April 2009 until September 2009, the Photonics and Networking Research Laboratory (PNRL) of Stanford University under the supervision of Prof. Leonid Kazovsky. He also received a FY2012 JSPS "Invitation Fellowship Programs for Research in Japan (Long Term)" during which he conducted research on energy efficient TWDM PON at the Photonic Networks Laboratory of Osaka University under the supervision Prof. Ken-Ichi Kitayama.

His main research interests are optical networks design, analysis, and optimization; artificial intelligence optimization techniques; communication networks reliability; IP over WDM networking; QoS in network infrastructures for grid computing; fixed and mobile network integration; energy efficiency in communications networks; 5G transport networks.