**Call for Papers for**
**Selected Areas in Communications Symposium**
***Communications for the Smart Grid Track***

**Symposium Track Chair**
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***Submissions must be done through EDAS at*** http://edas.info/N20931

**Scope and Motivation**
Communications technology has profoundly changed our daily lives in the last few decades. From the prosperity of e-commerce to the proliferation of social networking, communications has significantly improved system efficiency, functionality, adaptability and consumer-centricity. We are currently witnessing a similar enablement of power systems to that of a smarter grid providing opportunities for greater sustainability, reliability and increased capacity.

As such smart grid systems are on the cusp of a rapid technological, economic and environmental evolution. Communications no doubt is at the center of this surge facilitating situational awareness, advanced operation and control and collaboration. For example, wide area monitoring protection and control, advanced metering and demand response represent a fraction of the new applications facilitated through greater grid connectivity. Smart grid communication systems must accommodate a wide variety of often changing requirements and constraints. Differences in geographic size, user scale, bandwidth, latency, reliability and security have resulted in great debate on appropriate media, tools and technologies. Moreover, the distinct characteristics of power systems make use of off-the-shelf communication systems infeasible at times.

**Main Topics of Interest**
This Communications for the Smart Grid track invites contributions that explore communication requirements in various grid applications, analyze existing communication technologies within that context and develop communication architectures, protocols and communication-centric data-management solutions meeting those requirements. Topics of interest include, but are not limited to:

- Channel characterization and modeling in smart grid systems
- Physical layer technologies for smart grid systems
- Medium access and routing protocols for smart grid systems
- Resource allocation and cross-layer optimization for smart grid systems
- Coexistence, interoperability and interference in smart grid systems
- Optimized implementation solutions in smart grid systems
- Architectures and networking in smart grid systems
- Data models, communications requirements and quality-of-service for data delivery in smart grid systems
- Modeling, performance analysis, and field trials for smart grid systems
- Effects of communication technologies on smart grid operation
- Communication-power system co-design
- Security analysis and attacks in smart grid systems
- Secure communication architectures for smart grid systems
- Standardization efforts and regulation for smart grid systems

**Sponsoring Technical Committees**
- Subcommittee on Smart Grid Communications (SGC)
- Technical Committee on Power line communications (TC-PLC)

**Biography of Track Chair**
**Lutz Lampe** received his Dipl.-Ing. (Univ.) and Dr.-Ing. degrees in electrical engineering from the University of

Erlangen, Germany, in 1998 and 2002, respectively. Since 2003 he has been with the Department of Electrical and Computer Engineering at the University of British Columbia, where he is a full professor. His research interests are broadly in theory and application of wireless, optical wireless and power line communications, including communications for Smart Grid. He is (co-)recipient of a number of Best Paper Awards, including awards at the 2006 IEEE International Conference on Ultra-Wideband (ICUWB), 2010 IEEE International Communications Conference (ICC) and 2011 IEEE International Conference on Power Line Communications (ISPLC). He is currently an Associate Editor for the IEEE Wireless Communications Letters and the IEEE Communications Surveys and Tutorials, and has served as Associate and Guest Editor for several IEEE Transactions and journals. He was the General Chair of ISPLC 05, ICUWB 09, and IEEE International Conference on Smart Grid Communications 2013. He has been the Chair of the IEEE Communications Society Technical Committee on Power Line Communication (TC-PLC) from 2010 to 2014 and currently serves as Vice-Chair of the Subcommittee on Smart Grid Communications (SGC).