ENERGY 2013

Foreword

The Third International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies [ENERGY 2013], held between March 24 - 29, 2013 in Lisbon, Portugal, continued the event considering Green approaches for Smart Grids and IT-aware technologies. It addressed fundamentals, technologies, hardware and software needed support, and applications and challenges.

There is a perceived need for a fundamental transformation in IP communications, energy-aware technologies and the way all energy sources are integrated. This is accelerated by the complexity of smart devices, the need for special interfaces for an easy and remote access, and the new achievements in energy production. Smart Grid technologies promote ways to enhance efficiency and reliability of the electric grid, while addressing increasing demand and incorporating more renewable and distributed electricity generation. The adoption of data centers, penetration of new energy resources, large dissemination of smart sensing and control devices, including smart home, and new vehicular energy approaches demand a new position for distributed communications, energy storage, and integration of various sources of energy.

We take here the opportunity to warmly thank all the members of the ENERGY 2013 Technical Program Committee, as well as the numerous reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to ENERGY 2013. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the ENERGY 2013 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that ENERGY 2013 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the fields of smart grids, green communications and IT energy-aware technologies.

We are convinced that the participants found the event useful and communications very open. We also hope the attendees enjoyed the charm of Lisbon, Portugal.

ENERGY 2013 Chairs:
Stefan Mozar, CCM Consulting / CQ University - Sydney International Centre, Australia
Mehrdad (Mark) Ehsani, Texas A&M University - College Station, USA
Petre Dini, Concordia University, Canada / China Space Agency Center, China
Mardavij Roozbehani, Massachusetts Institute of Technology, USA
Dave Cavalcanti, Philips Research North America, USA
Marco Di Girolamo, Hewlett-Packard Company - Cernusco sul Naviglio, Italy
Thomas M. Overman, Boeing Energy Cyber Security, USA
Angelantonio Gnazzo, Telecom Italia - Torino, Italy

Dragan Obradovic, Siemens AG, Germany
Avi Mendelson, Microsoft Corporation, USA
Peter Müller, IBM-Zurich, Switzeland
Giorgio Nunzi, NEC Europe Ltd. - London, UK
Ritwik Majumder, ABB AB / Corporate Research Center - Vasteras, Sweden
Brian P. Gaucher, IBM Research Division - Yorktown Heights, USA
Gargi Bag, ABB Corporate Research, Sweden
Ken Christensen, University of South Florida, USA
Grzegorz Swirszcz, IBM Watson Laboratory, USA
Luciano Bertini, Fluminense Federal University, Brazil
Cathryn Peoples, University of Ulster, UK