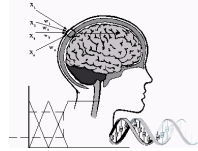




International

*Innovation in Knowledge Based and Intelligent
Engineering Systems*



INVITED SESSION SUMMARY

Title of Session:

The use of ICT in the power systems in the era of energy transition

Name, Title and Affiliation of Chair:

Prof. Wojciech Drożdż, University of Szczecin, Institute of Management, Poland

Co-Chair:

Marcin Rabe, PhD, University of Szczecin, Institute of Management, Poland

Bartosz Pilecki, PhD, University of Szczecin, Institute of Management, Poland

Details of Session (including aim and scope):

Dynamic changes in the energy sector require many new activities of companies operating in this area. Effective management of production, distribution and billing processes is essential for the current energy market. It is not possible without the use of ICT. In this session, we would like to focus on modern energy companies using ICT to support manage their basic processes but also to develop new areas of activity: smart home technology, electromobility, smart grids, security of energy supply, etc. The future of power system and energy companies is inextricably linked to ICT.

Proposed topics include, but are not limited to, the following issues:

1. Energy transition - assumptions, needs, challenges.
2. DSO as a special entity on the electricity market in the face of the energy transition.
3. The use of ICT in relation to new challenges of the electricity market participants:
 - a. distributed generation,
 - b. smart grids,
 - c. system users,
 - d. network flexibility,
 - e. operational management of the DSO enterprise (logistics, fleet, measurement information, cybersecurity).
4. ICT in the network management system and business process support:
 - a. SCADA systems and network management systems,
 - b. DMS systems with the ability to detect and locate faults in networks together with their remote reconfiguration.,
 - c. GIS and network asset management systems,
 - d. energy measurement systems for individual and industrial customers,
 - e. advanced forecasting systems based on weather, statistical and measurement data, allowing for the optimization of resource use,
 - f. engineering support and asset management (infrastructure) systems.

The format of the papers as well as the dates for submitting papers are the same as in the

general KES conference. The papers proposed in the session should present the original research work.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Website URL of Call for Papers (if any):

Email & Contact Details:

Prof. Wojciech Drożdż,

wojciech.drozd@usz.edu.pl

Marcin Rabe, PhD

marcin.rabe@usz.edu.pl

Bartosz Pilecki, PhD

bartosz.pilecki@usz.edu.pl