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We welcome sponsorship from industries, businesses, organizations, associations, regulators, schools and international bodies that wish to showcase products and services. We have put together a number of different packages to provide a level of participation that meets every need. We are open to other suggestions from sponsors as well. For more information visit the workshop website.

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IFAC Technical Committee on Power and Energy Systems (TC 6.3.)

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IFAC with Czech and Slovak National Committee CIGRE/ Czech National Committee CIRED Workshop on

Control of Transmission and **Distribution Smart Grids** CTDSG'16



First Announcement and Call for Papers

11 – 13 October 2016 Prague, Czech Republic

www.ifac.ctdsg2016.cz

Scope

Operation and Control of Transmission and Distribution Power Electric Systems is engaged IFAC within TC 6.3. On the other hand the associations CIGRE and CIRED are directly aimed to the same problems. In addition, there are other associations focused in this direction, ENTSO-E (European Network of Transmission System Operators for Electricity) and EDSO (European Distribution System Operators). The goal of this workshop is to establish cooperation between IFAC TC 6.3. and relevant international associations CIGRE, CIRED and also ENTSO-E and EDSO.

The involvement of industry will be done primarily through the associations CIGRE and CIRED. One of the ways realization will be granting "Industrial Achievement Award". In addition to the technical sections will be organized technical tours.

Focus on education will be largely ensured by technical universities, their representatives and students, who are Supporting Organizations, members of the committees, and workshop participants. There will be granting "Student Paper Award" and organizing "Student Competition".

The involvement of women will be provided by IPC Vice-Chair, e.g. through the granting "Edith Clarke Woman Paper Prize", which will be founded in Prague.

Registration

Early registration fee (by 1 August)	350 EUR
Standard registration fee (2 August – 15 September)	450 EUR
Late registration fee (16 September and later)	550 EUR
Student early and standard fee	200 EUR
Student late fee	300 EUR

Registration fees include admission to all sessions during the workshop days, workshop electronic proceedings, coffees, welcome party, workshop dinner and VAT. Students are entitled to workshop dinner at extra fee (60 EUR).

Deadlines

Invited Session Proposal	9 May 2016
Notification to session proposer	9 May 2016
Submission of full draft papers	16 May 2016
Notification of acceptance	7 July 2016
Cubmission of full papers	= Contombor

Submission of full papers 5 September 2016 Dates of workshop 11 – 13 October 2016

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Topics

1. Power Systems

• Transmission & Distribution Systems Operation and Control

2. Smart Grids

- Control of Smart Grids (Smart Meters, Smart Buildings, Demand Side Response – ADR, Smart Thermal Grids, Artificial Intelligence, Neural Networks).
- Integration of Renewable Energy Systems RES (photovoltaic and wind plants, District Heating Systems),

3. Power Electronics

- Power Electronics (Power Inverters, FACTS, UPFC, DPFC, HVDC),
- Advanced Primary Techniques (Phase Shift Transformers PST),
- HVDC corridors and their impact on load flow in neighboring power systems (Example: German HVDC corridors and their impact on the Czech TSO – CEPS),

4. Energy Market and Trading

 Regulators, Trading and Contracted Ancillary Services (Power and Heating Plants, RES, Municipal and Regional District Heating Systems, Demand Response of Thermal Loads),

5. WAMS and WAMPaC Systems, PMU

- Phasor Measurement Units PMU, Wide Area Monitoring, Protection and Control (WAMPaC)
- Nonlinear Power Systems, Stability of Power Grid, early detection of disturbances and collapses, monitoring and control of "deterministic" chaos in electricity, Grid Dynamics Analyzing System (GDASys)

6. Simulators

- Dispatch Training Simulators (DTS) for Transmission & Distribution Systems Operators
- Real Time Digital Simulators (RTDS) of T & D Power Systems
- Engineering & Training Simulators of Power and Heating Plants

Paper Submission

Full draft papers (max. 6 pages and 1MB file size, in word and pdf. format complying with IFAC-POL guidelines) relating to one or more of the topics are encouraged. Draft papers on-line submission deadline is 16 May 2016 (see www.ifac.ctdsg2016.cz).

All contributions must be in their final form according to IFAC style. Please refer to http://www.ifac-control.org/events/information-for-ifac-authors.

Venue

Czech Technical University in Prague Faculty of Mechanical Engineering Technická 4 166 o7 Praha 6 – Dejvice Czech Republic GPS: 50°6′10.450″N, 14°23′30.016″E

Prague and Visits

Prague is one of the oldest gothic cities in Europe and also the centre for research and education. There are many of the renowned universities and research organizations. The most important are Charles University (founded in 1348) and Czech Technical University (founded in 1707), which is hosting and main supporting organization of this workshop.

During the workshop the cultural historical and social events will be organized for the participants.

Accommodation

Accommodation is not included in the workshop registration fee. Hotel accommodation will be arranged by the Workshop Secretariat on request.

All hotels (from student hostel, good 3-star accommodation to a world-class 5-star hotel) will be offered at the reduced rates and located within a reasonable distance from the workshop venue.

Contact

Workshop Scientific Program

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CTU in Prague

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