



# 1½+½ Day Workshop: Innovative Approaches for Secure Operation of the Future Electricity Transmission System

Program for day I - March 15, 2016  
(Theme: results from ongoing R&D projects)

12:00	<b>Registration, sandwiches</b>	
12:30	<b>Welcome</b> <i>Prof. Jacob Østergaard, head of CEE-DTU</i>	Background & Introduction
12:40	<b>TSOs' Future Challenges to Secure Operation</b> <i>Per Lund, Energinet.dk</i>	
13:05	<b>The iTesla R&amp;D project</b> <i>Stéphane Châtellier &amp; Jean-Marc Jansen, RTE R&amp;D, France</i>	Overview of R&D Projects
13:40	Break	
13:55	<b>The APOGEE R&amp;D project</b> <i>Jean-Marc Jansen &amp; Antoine Marot, RTE R&amp;D, France</i>	
14:30	<b>The SOSPO R&amp;D project</b> <i>Hjörtur Jóhannsson, CEE-DTU</i>	
15:05	Break	
15:15	<b>R&amp;D Demonstration in PowerLabDK's Control Room</b> - Real time stability and security assessment - Real time countermeasures - Informative visualisation	Demonstration of R&D Results
16:05	Break	
16:15	<b>Panel Discussions - The Future Outlook</b> <i>Representatives from TSOs, academia and manufactures</i>	Discussions
16:55	Closing remarks for day I	
17:00	...	
19:00	<b>Dinner - Networking</b> <i>Location announced later</i>	Networking





**SOSPO**

Secure Operation of Sustainable Power Systems

# 1/2+1/2 Day Workshop: Innovative Approaches for Secure Operation of the Future Electricity Transmission System

Program for day II - March 16, 2016

(Theme: demonstration of real-time assessment, control and visualization)

09:00	<b>Welcome,</b> <i>Prof. Jacob Østergaard, head of CEE-DTU</i>				
09:05	<b>Overview of the R&amp;D demonstration activities</b> <i>Hjörtur Jóhannsson</i>				
09:20	<b>Parallel R&amp;D demonstration tracks: real-time stability &amp; security assessment</b>				Assessment
	<b>Rotor Angle Stability</b> <i>Hjörtur Jóhannsson</i> - Demo: Early warning for the 2003 DK-SW blackout - Poster presentations	<b>Voltage Stability</b> <i>Angel Perez</i> - Method demonstration - Poster presentations	<b>Static N-1 Security</b> <i>Jakob Glarbo Møller</i> - Method demonstration - Poster presentations	<b>Dynamic Security</b> <i>Tilman Weckesser</i> - Method demonstration - Poster presentations	
10:10	Break				
10:20	<b>Parallel R&amp;D demonstration tracks: wide-area countermeasures in real-time</b>				
	<b>Real-Time Countermeasures Against Voltage Collapse</b> <i>Hjörtur Jóhannsson</i> - Demo: avoiding the 2003 DK-SW Blackout - Poster presentations	<b>Wide Area Emergency Control</b> <i>Andreas Søndergaard Pedersen</i> - Demo: re-dispatch to avoid OEL activation in critical situations - Poster presentations	<b>WA Prosumption Control</b> <i>Martin Wittrock</i> - Demo: WA prosumption control to re-establish security - Poster presentations		
11:10	Break				
11:20	<b>Informative Visualization of System State - Demonstration in PowerLabDK</b> <i>Morten Lind and Xinxin Zhang</i> - Presentation of visualization concepts - Demonstration of how insecure system operation appears in a control room - Demonstration of how emerging instability (emergency) appears in a control room				Visualization
11:55	Closing remarks for day II, end of workshop				
12:00					

Register at: [www.cee.elektro.dtu.dk/Calendar](http://www.cee.elektro.dtu.dk/Calendar)  
For further information see: [www.sospo.dk](http://www.sospo.dk)



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