

*WORKSHOP:*  
**More power electronics into the grid:**  
Innovative solutions for operations, and impacts on connection rules

**6th April 2017, Brussels**  
ENTSO-E premises, Avenue de Cortenbergh 100

***The challenge***

By 2020, more and more generators interfaced with power electronics - mainly wind and solar electricity generators - will be connected to the electricity network, with significant impacts on the European transmission system such as growing dynamic instability and power quality issues. To ensure a safe transition towards a grid with massive power electronics integration, new solutions are required – new technologies and control strategies-, leading on the long term to an evolution of connection rules.

***The MIGRATE project***

MIGRATE gathers TSOs from 11 countries together with manufacturers and researchers to develop innovative solutions for the secure transition towards network operation with massive power electronics integration.

***Why attending this workshop?***

MIGRATE plans to propose also recommendations on how grid connection rules should evolve to enable the actual implementation of the innovations developed. **This workshop is your opportunity to have your say on how MIGRATE should interact with your community** (industry, consumers, etc.) to make sure that the proposed deployment of solutions and grid code evolutions will be technically and economically realistic.

Please register by following this link: [Registration form](#)



## WORKSHOP AGENDA

Time	Session	Speaker
10.30	<b>Workshop introduction</b> <ul style="list-style-type: none"> <li>Challenges of massive PE penetration in the electricity system</li> <li>Objectives and approach of the MIGRATE project</li> </ul>	Andreas Menze, TenneT
10.45	<b>'Roundtable' with the audience</b> <i>What are your expectations about the project outcomes?</i>	Audience
11.15	<b>Increasing PE penetration in today's grid</b> <i>Strategies to mitigate power stability issues</i>	Sven Rüberg, TenneT
11.45	<b>Real time monitoring and control in tomorrow's grid</b> <i>Demonstrating technological solutions for real time monitoring, forecasting and control</i>	James Yu, SPEN
12.15	<b>Operating a network with 100 % PE penetration</b> <i>New control algorithms and management rules to operate a network with 100 % PE</i>	Marie-Sophie Debry, RTE
12.45	<b>Wrap up of morning session and discussion</b>	Animated by Hannes Munzel, TenneT
13.00	<i>Lunch break</i>	
14.15	<b>System protection strategies under high PE penetration</b>	Santiago López Barba, REE
14.45	<b>Mitigation of Power quality disturbances</b> <i>Mitigation measures to meet power quality requirements under increased PE penetration</i>	Jaka Žvab, ELES
15.15	<b>MIGRATE results &amp; Industry Associations involvement</b> <ul style="list-style-type: none"> <li>Forecasted project results and next dissemination actions</li> <li>Discussion: how to best interact with the power system stakeholders directly impacted by MIGRATE?</li> </ul>	Hannes Munzel, TenneT, Eric Peirano TECHNOFI
15.45	<b>Wrap up, discussion and conclusions (+ questionnaire)</b>	Animated by Hannes Munzel, TenneT
16.15	End of workshop	

