



EUROPEAN  
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## Towards Smart Integration of Wind Generation - II

# Wind Power Forecasting with Focus on Extremes

Paris, France, 31 August 2012

## SafeWind Workshop



### General Theme:

The integration of wind generation into power systems and electricity markets is affected by uncertainties in forecasting the expected power output of wind farms. Misestimating of meteorological conditions or large forecasting errors are very costly for infrastructures and reduce the value of wind energy for end-users. The European FP7 project SafeWind aimed at improving wind predictability with focus on challenging and extreme situations at different temporal and spatial scales, ranging from the wind farm to the European scale. SafeWind is a follow-up of the ANEMOS project.

The Workshop presents the state of the art and new developments in the field achieved through SafeWind. It provides comprehensive information to different actors like policy makers, end-users, researchers.

### Main Topics:

- State of the art in short-term wind power forecasting
- Advances with focus on prediction of extremes
- Contributions of the meteorology
- Highlights of the SafeWind project
- Optimal use of forecasts in power systems & markets
- Best practices , Operational experiences
- Challenges and R&D priorities for the future

### Venue:

PALAIS BRONGNIART (Auditorium), 28, Place de la Bourse, 75002 PARIS, France, <http://www.palaisbrongniart.com>

### Invited Speakers:

Invited speakers will present an overview of the state of the art, research priorities, industry needs and requirements in the field of wind power forecasting in Europe and worldwide.

### Registration - Information:

#### ARMINES :

• Ms C. Gschwind, [christine.gschwind@mines-paristech.fr](mailto:christine.gschwind@mines-paristech.fr), tel: +33-493957411

Updated information and registration form at <http://www.safewind.eu>.

Preferably before 20/8/2012. Registration will close at 100 participants.

### Supporting Organisations:

- **ARMINES, MINES ParisTech** (FR, *SafeWind Project Coordinator*)
- ECMWF (INT)
- TERI - The Energy & Resources Institute (India)
- ENERGY & METEO SYSTEMS GmbH (DE)
- FORWIND – UNIV. OLDENBOURG (DE)
- OVERSPEED GMBH & CO. KG (DE)
- ENERGINET.dk (DK)
- ENFOR A/S (DK)
- TECH. UNIVERSITY OF DENMARK (DK)
  - IMM DTU
  - RISOE DTU
- ACCIONA ENERGIA (ES)
- CENER (ES)
- UNIV. CARLOS III DE MADRID (ES)
- UNIV. COMPLUTENSE MADRID (ES)
- EDF (FR)
- METEO FRANCE (FR)
- RTE (FR)
- ICCS - NTUA (GR)
- PPC - PUBLIC POWER CORP. (GR)
- EIRGRID (IE)
- SONI (UK)
- UNIV. OF OXFORD (UK)



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### Preliminary Programme

08:30	<b>Registration – Welcome coffee</b>	
09:00	<b>Introduction</b>	<i>G. Kariniotakis (MINES ParisTech)</i>
09:05	<b>R&amp;D activities in wind energy supported by the EC. Towards Horizon 2020</b>	<i>M. Soede (European Commission)</i>
09:25	<b>State of the art in Wind Power Forecasting</b>	<i>G. Giebel (DTU)</i>
09:45	<b>Leading edge R&amp;D in Wind Power Forecasting - From ANEMOS to SafeWind</b>	<i>G. Kariniotakis (MINES ParisTech)</i>
10:10	<b>Challenges &amp; contributions from the Meteorology</b> ▪ New dedicated ECMWF forecasting products for wind industry	<i>T. Petroliaigis (ECMWF)</i>
10:30	<b>Coffee Break</b>	
11:00	<b>Advances in Wind Power Forecasting</b> • New statistical approaches for extremes prediction • Forecasting of fast wind power ramps • Advances in forecasting using weather ensembles • Detection of extreme events and timely warnings	<i>P. Pinson (DTU)</i> <i>R. Girard (MINES ParisTech)</i> <i>L.v. Bremen (ForWind)</i> <i>M. Lange (Energy &amp; Meteo)</i>
12:50	<b>Lunch Break</b>	
14:00	<b>Wind Power Forecasting in Business Processes</b> • The ANEMOS system. Experiences from Australia, India, and SafeWind demonstrations • Forecasting as a decision parameter in the wind farm investment planning phase • The role and benefits of forecasting for renewables integration in France • Power, market prices and uncertainties: Forecasting experiences & needs in business processes	<i>H.P. Wald (Overspeed)</i> <i>J. Sanz (CENER)</i> <i>V. Lefieux (RTE)</i> <i>H. Madsen (DTU)</i>
15:45	<b>Coffee Break</b>	
16:15	<b>Round table – “Future challenges in Wind Power Forecasting”</b>	<i>Invited experts</i>
17:15	<b>End of the Workshop</b>	

