

**IEA Task 19 panel minutes from [WinterWind 2015 conference](#)**



Event: IEA Task 19 session panel  
Date: 11<sup>th</sup> of June 2014 13:30-15:30  
Place: WinterWind 2015 conference Piteå, Sweden

Memo created Lehtomäki (25.6.2014)  
Comments from Silke Dierer (26.6.2014)  
Approved Lehtomäki (27.6.2014)

## 1 Background and goal of Task 19 session

In order to boost dissemination and innovation activities, IEA Task 19 organized a dedicated session at WinterWind 2015 conference (see program: <http://winterwind.se/>). In this session, latest Task 19 activities were presented (2 presentations) followed by a panel discussion. The panel had two Task 19 members (René Cattin from Meteotest and Rebecka Klintström from Meventus) and two industry participants (developers Daniel Gustafsson from Vattenfall, Sweden and Sebastien Trudel EDF, Canada).

Prior to the panel, Task 19 set up a web survey (<http://goo.gl/forms/YYSHcr3WW6>) and this survey was sent to all WinterWind participants on the previous week. The goal of this web survey was to collect statistical information from WinterWind participants in order to **identify the main R&D topics of focus for the Task 19 working group for next working term 2016-2018**. The theme of the survey was to identify from a predefined list of topic focus areas that most effectively remove barriers slowing down deployment of cold climate wind energy.

## 2 Outline of panel

Task 19 Operating Agent Ville Lehtomäki presented the web survey results and top three topics with highest ratings we as follows:

1. Standards, certifications and recommended practices
2. Financing including risk, uncertainty and ice assessment
3. De/anti-icing, equipment and procedures

The panel was given two questions to answer within the given topic:

- What are the main challenges per topic?
- Next steps towards solutions

The panel was moderated by Carla Ribeiro, DNV GL and each topic was discussed for 15 minutes. The audience was also extremely actively commenting and asking questions to the panellists.

### 3 Panel discussion results

Top three topics:

1. Standards, certifications and recommended practices
2. Financing including risk, uncertainty and ice assessment
3. De/anti-icing, equipment and procedures

Topic	Challenges	Solutions
1	<ul style="list-style-type: none"> <li>• Validate, extend, improve IEA ice classification</li> </ul>	<ul style="list-style-type: none"> <li>• Database of wind farm measurements to lower financial uncertainties &amp; model validation</li> <li>• Unified vocabulary regarding cold climate (etc. de/anti-icing)</li> <li>• Different anti/de-icing products for different sites</li> </ul>
2	<ul style="list-style-type: none"> <li>• Banks &amp; financiers understanding of icing needs improvement, missing from WinterWind participant list</li> <li>• How to correlate measured icing to turbine specific losses? Big need.</li> <li>• Icing has high interannual variability, what are long-term production losses?</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce financial uncertainties with more wind farm data publically analysed</li> <li>• Task19 to make guidelines for site ice assessment</li> </ul>
3	<ul style="list-style-type: none"> <li>• Anti/de-icing site specific performance evaluation difficult</li> </ul>	<ul style="list-style-type: none"> <li>• Guidelines for discussion between developer and turbine OEM, starting point for warranty discussion</li> <li>• More detailed anti/de-icing evaluation: average system performance per ice load (develop IEA Ice Classification)</li> </ul>

### 4 Workshop conclusions & next steps

Panel discussion results were very useful, discussions were lively and on the point. As a top level general observation, **lowering the financial uncertainties caused by icing was seen as the main challenge for Task 19 to focus on.** In order to reduce the financial uncertainties, exchange of experiences/dissemination and more publically available databases and/or analyses of wind farm performance in icing conditions is needed also for simulation model validations.

Task 19 should:

- develop guidelines and standardized methods for site ice assessment. They were seen crucial as this is the project development phase where all major risks are evaluated and quantified and the site assessment serves as the basis for the wind farm business case calculations
- develop guidelines to enable warranty discussions between the developer and turbine manufacturer. Develop methodology to assess non-heated and anti/de-icing system performance for site specific icing conditions.

As next steps, Task 19 will use input gathered from the survey and panel discussion to plan areas of work for next working period 2016-2018. Attendees are recommended to read the existing Task 19 reports (links below) and provide comments/suggestions for improving these reports.

#### 5 Useful links

[http://www.ieawind.org/task\\_19.html](http://www.ieawind.org/task_19.html)  
[Task 19 Recommended Practices report](#)  
[Task 19 State-of-the-art report](#)

#### 6 Dissemination

Task19 website  
WinterWind website