



Integrated Research Programme on Wind Energy

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Author(s) information (alphabetical):

| Name | Organisation | Email |
|----------------------|--------------|-------------------|
| Martijn van Roermund | ECN | vanroemund@ecn.nl |

Aknowledgements/Contributions:

| Name | Organisation | Email |
|-------------------------|--------------|-------------|
| Christian Orup Damgaard | DTU | cdam@dtu.dk |

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Definitions

| Acronym | Description |
|---------|-----------------------------------|
| EERA | European Energy Research Alliance |
| JP | Joint Programme |
| IRPWind | Integrated Research Programme |



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Executive Summary

In the first 12 months of the IRPWind project, three events were used as dissemination events for the industry. Although the contact with the industry has been plentiful in these three dissemination moments, we have so far failed to consequently document this feedback, as well as the specific companies in the audience. The feedback is therefore limited to the IRPWind 2014 conference (keynote speech) as well as the Deepwind 2015 conference (panel discussion).

For future events IRPWind will select dedicated existing events that will be targeted per technology subject. The audience will be asked to share contact details, to be able to directly contact for feedback if none is logged during the event.

Introduction

Task 4.2 of the IRPWind project aims to organise a dedicated event for the industry to be informed about and get involved in the activities of EERA JP WIND. The event should look for opportunities to cooperate, start new projects or share data with the industry and vice versa.

The IRPWind project itself has technical topics that can be disseminated at such an event, however, as the technical work packages yet have to produce results, it was decided to focus on transferring the intentions of IRPWind and communicate results of running national and European projects.

In 2014, existing events have been used to “tag along” to.

1. Dissemination topics

IRPWind strives to disseminate both technical topics as well as the intentions of the integrated research approach of the institutes. The technical topics are formed by the EERA Core Projects such as AVATAR, INNWIND, EERA-DTOC, NSON, Windscanner.eu, the national linked projects and the results of IRPWind’s technical work packages. Disseminating the intentions of the IRPWind approach is a more strategic effort: integration of research facilities and efforts to shorten the time to market for technology and knowledge resulting from R&D activities. EWEA is a key party that can form the link between the research institutes and the industry, conveying this message effectively.

Timely dissemination will facilitate the exploitation of the results of the aforementioned projects.

2. Dissemination events in P1

The Description of Work asks for a dedicated annual dissemination event for the industry, preferably linked to the yearly EWEA Offshore Wind conference. Practice has shown that EERA JP WIND can more effectively disseminate at existing events throughout the year.

After consultation with the Project Officer, we have decided to break-up the dissemination event for the industry into dissemination moments at relevant existing events. For example, the IRPWind conference will see a larger participation of industry, where general dissemination will take place of all national and EERA related wind research projects.

In the first 12 months of the project, we can identify three dissemination moments to the industry, see industry, see Tabel 1.

Tabel 1. IRPWind presenters at dissemination events

| EERA JP WIND presentations | |
|----------------------------|--|
| Event | Presenter |
| IRPWind Conference 2014 | See report on D4.1, Appendix C (over 45) |
| Deepwind Conference 2015 | Peter Hauge Madsen, DTU |
| EWEA Offshore 2015 | Peter Eecen, ECN |

Response is a critical element of Work Package 4. Although the contact with the industry has been plentiful in the aforementioned dissemination moments, we have so far failed to consequently document this feedback, as well as the specific companies in the audience. Table 2 shows the industrial attendees for each event. The IRPWind conference shows 7 industrial representatives. Deepwind counts 19.

2.1 IRPWind Conference 2014

At the IRPWind conference, Mr. Villanueva (Gamesa) presented on the past, present and future cooperation between industry and EERA JP WIND. He concludes that R&D could think more like industry:

- Think and act “lowering the cost of energy”
- Be realistic on expectations of openness of data and IPR
- Have a positive business case prior to starting new R&D topics
- Be more aggressive and show flexibility in time of great need

On the other hand, industry could open up more:

- Cooperate in a symmetric fashion
- Grow and build collaboration paths together
- Help minimize EU participation
- Give before receiving
- Be realistic on expectations of openness of data and IPR

Moreover industry should be involved in the very early stages of R&D. The technology recipient should review the intermediate R&D results. The research community should be aware of the consequences of truly cooperating with the industry as partners.

An introduction to EERA JP WIND was given by Peter Hauge Madsen, DTU. In his presentation he provided the audience with the outlines of IRPWind and the technical goals and results from various EERA JP WIND research projects. Among others, INNWIND, EERA DTOC, WindScanner, NEWA, AVATAR and NSON were touched upon. All presentations from the conference have been made available to the audience through the conference website www.irpwindconf.eu. The presentation has also been uploaded to Sharepoint for the reviewers of the IRPWind project (D4.5 IRPWind conference 2014 - Introduction to EERA JP WIND).

2.2 Deepwind Conference 2015

Peter Hauge Madsen from DTU chaired a workshop with industry on *access to data*. After a short introduction of the objectives of *open data/open knowledge*, Susanna Galoni from the European Commission elaborated on the *open access in H2020*.

Subsequently, John Olav Tande from SINTEF outlined the goals and progress of IRPWind work package 6 in his presentation on *sharing data*. After presenting the partners, planning and main products of the work package, he proceeded to emphasise the need for sharing of operational data as well as the accompanying meteo and design data. Only this way can the research community support the industry with developments in simulation software. This is done through a benchmarking exercise, leading to fewer, more accurate and reliable calculation models. With input from the industry, the research community can directly feed back the results to the end users who will eventually benefit from sharing their data with others.

The panel discussion (that followed the presentation of DTU, MARINTEK and SINTEF on examples of open data) showed the ongoing topics of discussion that are essential to make sharing data a success. The panel consisted of three representatives of industry and three representatives of the research community. On behalf of the industry, Jørgen Krogstad (Statkraft), Inger Marie Malvik (Fedem) and Jan Matthiesen (Carbon Trust OWA) were taking part. From the minutes of meeting of that event (“Minutes from IRPWind meeting 2015-02-04”):

Jørgen Krogstad, Statkraft

- We need also to know what we use data for, not only how to access and store data.
- Qualification program internal in companies are needed with given qualification criteria

Inger Marie Malvik presented her company *FEDEM* and *DISKOS*, The Norwegian National Data Repository for Petroleum data.

- For the SW tool OLGA the missing data is in particular the turbine manufacturer that are experienced but not willing to share data about their turbines. Also missing is operator data regarding operation and production, availability, performance.

Jan Matthiesen; Carbon Trust OWA

- What is the value of the data. If I get access to data what will be given in return
- Examples of the above is 33kV - > 66kV activity. Share of data through the Supply Chain was important to move the industry forward. Data sharing can also move the R&D activity forward through shared reports etc.
- The value of the data may change over time and high level reports can be made. If the data is not traceable it is possible to share more openly.

2.3 EWEA Conference

At the EWEA Offshore 2015, in Copenhagen, Peter Eecen, ECN took the opportunity to present the IRPWind to the industry. In the 15-minute presentation at the Speaker’s Corner,

he explained why it is essential for the European research community to strive for integration of research infrastructures, and how EERA JP Wind is planning to achieve this.

Mr. Eecen started off by explaining the mission of the European Energy Research Alliance (EERA) and how it brings together 150 research institutes under the Joint Programme (JP) Wind umbrella. *“With the IRPWind project consisting of both integration and R&D-related work packages, the goal will not only be to inventory the available knowledge and facilities, but also to agree on a common strategy for the middle and long term wind research. The emphasis will be on the dialogue with the industry, to ensure alignment”*, says Mr. Eecen.

After diving a little deeper into the content of each work package of the project, he concludes that not only the industry should unite, but the research community should unite with them. Only then we can maximize the impact of R&D and shorten the time to market of R&D efforts.

We have received no feedback from the audience, as there was no time to ask questions before the next presentation started. Concluding, the presentation could have had more impact, by inviting the people we would like to be informed. The event was open to all, however, at EWEA offshore, time is limited and the industrial agenda is often fully booked. Timely invitation is therefore extremely important.

The presentation from Peter Eecen has been made available through Sharepoint (D4.5 EWEA Offshore 2015 - Speakers corner).

Tabel 2 Industrial presence per event

| Industrial presence | | |
|--|-------------------------------------|---------------|
| IRPWind Conference 2014 | | |
| Organisation | Sector | Participant |
| Aeolis | Wind forecasting | Van Noort |
| DNV GL | Testing, certification, consultancy | Landber |
| DONG Energy | Developer | |
| EU-Japan Centre for Industrial Cooperation | Centre for Industrial Cooperation | Matsumoto |
| Japanese Mission of Japan | - | Takahama |
| Tulipower BV | Small wind turbines/ solar | Duivenvoorden |
| EWEA | Wind industry representative | Radvilaite |
| Deepwind conference 2015 | | |
| Organisation | Sector | Participant |
| 1-tech | Project support | Hansen |
| 4Subsea | Offshore wind and Waves | Frøyd |
| Acona Flow Tehnology | Well engineering | Manger |
| Blue H Engineering | Renewable engineering | Bolleman |
| Carbon Trust | Reps renewable industry | Matthiesen |
| DNV GL | Testing, certification, consultancy | Harries |

| | | |
|---------------------------|---|--------------------|
| EOLFI | Independent wind expert (reps industry) | Paillard |
| Fedem technology | Software developer | Malvik |
| Ferrx AS | Material testing/monitoring | Horn |
| Fugro OCEANOR A/S | Offshore soil research | Neshaug |
| GustoMSC | Offshore engineers | Huijs |
| INNOSEA | Marine renewable energy | Philippe |
| Kongsberg | Wind farm monitoring | Malmö |
| Simis AS | Aeroelastic simulations | Thomassen |
| Statkraft | Generator of renewable energy | Krokstad |
| Statoil | Oil and gas production | Nielsen |
| STRI | High voltage testing | Djurström |
| Subhydro | Pumped hydro storage | Schramm |
| SindGuard Certification | Certification | Irschik |
| EWEA Offshore 2015 | | |
| Organisation | Sector | Participant |
| Not known | | |

Conclusion chapter

IRPWind has yet managed to disseminate with the maximum impact to the industry. Reasons for this are:

- Targeting the right events
- Presence of industry at EERA JP Wind organised events
- Request for feedback are lacking, unanswered or not officially logged
- Right procedure for retrieving feedback was lacking

For future dissemination events EWEA technical workshops as well as other dedicated wind energy events will be used by IRPWind to disseminate specific technical topics, such as advances in aerodynamic, structural, foundation, socio-economic, lay-out, electrical research.

To ensure proper registration of response and feedback, registration of attendance and targeted feedback requests will be initiated. We will ask the audience to share their business cards, so we can contact afterwards if direct feedback at the event is not possible.

