



Integrated Research Programme on Wind Energy

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Definitions

EERA	European Energy Research Alliance
JP	Joint Programme
JP WIND	Joint Programme on Wind Energy
IRP	Integrated Research Programme
TP	Technology Platform
WP	Work Package



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1. Participant list

EERA JP WIND Advisory Board

Mauro Villanueva (GAMESA), Lise Backer (VESTAS), Dominic von Terzi (GE), Aidan Cronin (SIEMENS)

EERA JP WIND Management Board

Peter Hauge Madsen (DTU), John Tande (SINTEF), Peter Eecen (ECN), Michael Durstewitz (Fraunhofer IWES), Claudia Calidonna (CNR), Klaus Skytte (DTU), Mattias Andersson (DTU), Antonio Ugarte (CENER), Martijn van Roermund (ECN)

Not participating

Kurt Rohrig (Fraunhofer IWES), Andreas Makris (CRES), Arno van Wingerde (Fraunhofer IWES), Hans Christian Bolsted (SINTEF), Søren Knudsen (DTU), Poul Erik Morthorst (DTU), Anna Maria Sempreviva (DTU), Hans Ejsing Jørgensen (DTU), Xabier Munduate Echarri (CENER), Scott Otterson (Fraunhofer IWES), Nikolaos Stefanatos (CRES)

2. Executive Summary

Peter Hauge Madsen gave an introduction to the Joint Programme for Wind Energy (EERA JP WIND) and the IRPWIND project. In relation to this, the question of a new EERA JP WIND sub-programme on Cold climate was discussed. This was followed by a presentation of each of the existing EERA JP WIND Sub-programmes (SP). In relation to the SP for infrastructure the advisory board asked for the existing catalogue of research facilities among the EERA JP WIND partners. The Advisory board members further encouraged EERA JP WIND to address issues such as Wind turbine noise as well as the effect of law and regulation on the cost of wind energy within the relevant SPs.

Advisory board member Aidan Cronin gave an introduction to the Strategic Research Agenda of the European Technology and Innovation Platform for Wind Energy, highlighting the 5 priority pillars for future R&D. This led to a discussion about the need for a much stronger European leadership in wind energy with strong political support as well as the importance of EERA JP WIND providing independent advice to the European Commission on long term research priorities.

Other challenges addressed included the need for better access to open data; an area where the advisory board recognised the challenge and proposed new ways to address this. International cooperation was also addressed. The advisory board strongly supported the initiative for joint EU-US collaboration on low TRL research.

Finally, the issue of EERA JP WIND's outreach to industry was discussed. The take home message here was the need to increase awareness about EERA JP WIND, especially at CTO level.

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3. Agenda

Time	Title	Responsible
9.00-9.10	Welcome	Peter Hauge Madsen
9.10-10.00	Introduction to the EERA JP WIND and IRPWIND Project - <i>Presentation of EERA JP WIND Strategy</i>	Peter Hauge Madsen Sub-programme Coordinators
Theme: Cooperation between the EERA JP WIND and the industry?		
10.00-10.40	Agenda setting - <i>Presentation of The European Technology and Innovation Platform's (ETIPWind's) SRA</i> - <i>Discussion</i>	Aidan Cronin, Siemens
10.40-11.00	Implementing the agenda - <i>Setting up H2020 consortia – current procedure</i> → <i>How to involve industry in the best way?</i> - <i>Commissioned research</i> → <i>Does the industry reach out to EERA – or the individual organisations?</i>	Peter Hauge Madsen
11.00-11.30	Other challenges - <i>Open access to data</i> - <i>International collaboration</i>	John Olav Tande Peter Hauge Madsen
11.30-11.45	Dissemination – Reaching out to industry - <i>Presentation and discussion of current strategy</i>	Peter Hauge Madsen Martijn van Roermund
11.45-12.00	Priorities for the coming year	Peter Hauge Madsen

4. Minutes of Meeting

Welcome (9.00-9.10)

The coordinator of IRPWIND, Peter Hauge Madsen, welcomed the meeting and thanked the members of the advisory board for their willingness to join. That was followed by a tour de table.

Introduction to the EERA JP WIND and IRPWIND Project (9.10-10.00)

Peter Hauge Madsen gave an introduction to the EERA AISBL, the EERA Joint Programme for Wind Energy and the IRPWIND project funded by the European Commission under FP7.

Commenting on the sub-programme structure of JP WIND and the idea to have a new sub-programme on cold climate, **Mauro Villanueva** suggested that this focus would be too narrow. It

should instead focus on extreme weather conditions. This could be part of a reformulation of SP1 (Wind conditions) making a SP on weather conditions.

Comment: Fraunhofer IWES support the proposed sub programme. Perhaps the working name is not properly chosen. The intended focus is not only a matter of SP1 (Wind conditions). Cold climate - or to be more precise – “Cold and Icing Climate Issues” cover the whole spectrum of wind energy utilization from the scratch. In JP WIND this would be at least the SP’s 1, 2, 3, 4 and 7 but also SP5 and SP6. Cold and icing climate should be considered as a mainstream topic. Icing conditions happen almost anywhere where temperatures only temporarily reach the freezing point and below.

One example: The area of Kassel is definitely not considered as a cold climate site. It is rather an average low mountain range region like there are many others in our market target hemisphere. In past winter seasons (which were comparatively mild) we have measured at our 200 m met mast approximately 800 hours of instrumental icing per winter. This is not negligible at all for this and many other sites.

Following Peter Hauge Madsen’s presentation, each of the EERA JP WIND Sub-programme coordinators presented brief introductions to their sub-programmes strategic priorities.

In relation to the sub-programme on Research Facilities **Dominic Van Terzi** asked about an available online catalogue of research facilities at the partner organisations.

The pdf-version of the catalogue will be distributed to the advisory board members.

Dominic further asked about whether the sub-programme focused on the use of existing research facilities or identifying future needs. Antonio Ugarte replied that the focus so far has been on what is available, but in the future the sub-programme will also identify future unmet needs relevant to industry. Peter Hauge added that EERA JP WIND is also looking at building research facilities on a European level. Related to SP7 on Wind Integration **Dominic van Terzi** asked if JP WIND is looking at the effect of law and regulations on the cost of energy; how could the wind industry and society reduce cost by having similar laws and regulations. Klaus Skytte agreed that this would be interesting and is something partly covered when the energy systems economics are modelled.

Mauro Villanueva recommended that JP WIND should address Wind turbine Noise; this was also supported by **Lisa Backer** stating that as industry claiming to be sustainable this needs to be further addressed; **Dominic van Terzi** agreed that this is important, especially addressing the propagation and perception of noise. **Aidan Cronin** also supported this.

Agenda setting (10.00-10.40)

Presentation of The European Technology and Innovation Platform’s (ETIPWinds’s) SRA followed by discussion

Aidan Cronin gave an introduction to the European Technology and Innovation Platform (ETIPWind)’s Strategic Research Agenda (SRA). Aidan Cronin informed the meeting participants that the SRA would be presented the following week at the WindEurope Summit in Hamburg (September 27-30 2016). The SRA consists of 5 priorities defined by the ETIPWind Steering Committee following input from the WindEurope CTO advisory board. The ETIPWind Steering

Committee consists of 16 members from industry and 8 members from EERA JP WIND representing the research organisations.

The SRA will be used to promote funding priorities at EU and national level and is intended to convey an easily understandable snap picture of the research priorities. This is followed up by an ETIP work programme. **Aidan Cronin** emphasised that ETIPWind sees support to strong research organisations as vital.

Peter Hauge Madsen asked about the follow up in terms of providing input to the funding agencies. **Aidan Cronin** outlined the strategy to define a priority list and how that could be supported. He also invited the EERA to help ETIPWind on this as research organisations have a much longer experience in how to promote topics towards the European Commission.

Dominic van Terzi recommended that EERA adds an EERA priority pillar to the five pillars presented by ETIPWind. This was supported by the rest of the advisory board. He also underlined that the *Next technology pillar* should be strong. **Lisa Backer** added that there are big opportunities in using enabling technologies from adjacent technologies and this is an area where research organisation partners are needed to make them fit.

Mauro Villanueva suggested that the SRA could also be a chance for EERA JP WIND to look at competences currently not covered by the JP.

Mauro Villanueva added that the important issue is to ensure European leadership in the wind energy sector. In areas such as Aerospace and automotive industry there is a strong political support – this should happen in wind energy as well. **Dominic van Terzi** commented that this happens because wind energy is challenging incumbent industries. **Lisa Backer** commented that we should not simply play along with the European Commission's focus on offshore; we need to explain the reality of market conditions for wind energy today. This also related to the role of JP WIND, with the current development what is the role of medium to long term research? **Mauro Villanueva** emphasised that we need to make the case for the importance of onshore wind. **Aidan Cronin** responded that this requires the wind energy sector to convince member states about this.

Aidan Cronin suggested that ETIPWind should promote real high-quality research fora taking place at the EERA JPWind partners.

Going back to the ETIPWind SRA Peter Hauge asked how ETIPWind sees the priorities set out as supporting European industry's global leadership. **Aidan Cronin** replied that the priorities reflect the importance of standardisation in the European industry. **Lisa Backer** added that the addition of *new technologies* to the ETIPWind SRA was an important addition and that addressing the issue of disruptive technologies. Furthermore, she added that industry also have to be honest about what they actually want to collaborate on in European projects.

Dominic van Terzi raised the issue of how the ETIPWind SRA's 5 priorities and the setup of EERA are communicated as a common story.

Implementing the agenda (10.40-11.00)

Setting up H2020 consortia – current procedure: → How to involve industry in the best way?

Peter Hauge Madsen gave a short overview of how EERA JP WIND currently builds consortia to H2020 projects. He raised the issue that this approach provides some obstacles to ensuring a good industry involvement and therefore asked the members of the advisory board how they see this.

Commisioned research → Does the industry reach out to EERA – or the individual organisations?

Peter Hauge Madsen explained that EERA in different ways are trying to reach out to industry but it faces a basic question: whether this should be done as EERA or as the individual organisations? How will industry reach out to the research community?

Other challenges (11.00-11.30)

Open access to data

John Olav Tande outlined the challenges related to the access to open data in offshore research projects, starting with an overview of how these challenges are experienced in EERA JP WIND and IRPWIND. **Dominic van Terzi** asked what kind of data was difficult to get access to. John Olav Tande mentioned turbine data, but emphasised that they do not always needs very long time series. He also mentioned that ongoing discussions with Vestas are very productive.

So the question is: How do we address this in the future?

Lisa Backer said that the problem is that requests for data often happens in relation to specific projects; perhaps this was better done on a more formal level on a regular basis where the research organisations came with proposals for how the data could be used without violating manufacturers need for confidentiality. Industry knows that this is important and they are very satisfied with universities work on data; but we need different ways to address this.

John Olav Tande replied that we do see advances in IRPWIND, but it doesn't solve the issue. He raised the issue whether it would be possible for the research community to buy into an existing wind farm with older wind turbines. **Dominic van Terzi** said we need to look at which problem we are addressing. A blank check for access to data on a turbine is not feasible because insurance companies etc. will not agree to it. He recommends an approach where it is raised in relation to lighthouse research projects.

International collaboration

Peter Hauge Madsen gave a short introduction to EERA JP WIND and IRPWIND's approach to international collaboration. He explained how IRPWIND has identified US and Japan as priority countries for collaboration based on their level of research.

He went on to inform the meeting participants about a meeting organised between the EERA and the DoE (US) in June 2016 where industry also participated and that a follow up meeting is prepared

for November 2016 in Brussels. The purpose of these workshops is to increase collaboration, specifically through a joint EU-US call (on the European side through H2020).

Peter Hauge Madsen encouraged the participation of industrial partners in the autumn meetings with US partners in Brussels. **Dominic van Terzi** supported this given the presence of European companies in the US and the other way around. **The entire Advisory board strongly supported EU-US low TRL collaboration.**

Dissemination – Reaching out to industry (11.30-11.45)

Presentation and discussion of current strategy

Martijn van Roermund gave a presentation on IRPWIND and EERA JP WIND's current strategy for dissemination activities targeting industry, asking the advisory board for their view on how IRPWIND can best do this.

Martijn van Roermund asked how industry reaches out to EERA. **Lisa Backer** saw EERA as a good channel with the website as a first point of interface; **Dominic van Terzi** saw conferences and visits to EERA organisations as the standard way. He also saw the advisory board meeting of EERA JP WIND as a very valuable forum. Related to conferences he added that which conference to attend depends on the purpose.

Martijn van Roermund further asked about IP uptake and how that happens; **Aidan Cronin** said that he has a person hired to know who are the top institutions in different areas, if EERA had something to provide this overview that would be a big benefit.

Lisa Backer saw ETIPWind as the most important forum to show that EERA is *the* research partner.

Concerning IP Martijn van Roermund presented the IP repository and asked if this would be interesting for the companies; **Lisa Backer** confirmed and suggested that it is brought to the attention of the CTO's who will link on to internal IP offices. **Dominic van Terzi** suggested to make news feed that would communicate it directly as soon as it is available.

Peter Hauge Madsen asked what the advisory board would recommend for EERA's role and way to communicate to industry. **The Advisory board** emphasised that EERA should increase awareness of its existence among CTO level personnel in the companies. Furthermore, EERA should communicate ongoing research activities in simple bullet points to the right level in the companies.

5. Decision list

- The IRPWIND Research Facility catalogue will be send to the Advisory Board members.
- Interested Advisory Board members will be contacted about the LCE-07 Noise project.

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- EERA will look into adding a 6th pillar to the five priority pillars for wind research set out in the ETIPWind SRA.
- ETIPWind will ask EERA to contribute to the process of providing input to the H2020 Work Programme.
- EERA should increase awareness of its existence among CTO level personnel in the companies; furthermore, EERA should communicate ongoing research activities in simple bullet points to the right level in the companies.
- EERA JP WIND is encouraged to prioritize wind turbine noise as a research theme and EU-US low TRL collaboration.

