NEWSLETTER - EERA JP Wind Spring 2015

This is the third bi-annual newsletter for the EERA Joint Programme on Wind Energy (EERA JP Wind) after EERA JP Wind has successfully acquired the EU funded IRPWind project. Feel free to distribute the newsletter among your colleagues and friends!

1. Introduction by the coordinator of the EERA JP Wind

We have now been well under way with the IRPWind programme for one year. The IRPWind is an unprecedented scheme funded by the European Commission. The IRPWind is designed to take the work done in the European Energy Research Alliance (EERA) Joint Programme on Wind Energy to the next level towards creating a European Integrated Research Programme on wind energy.

Throughout the first year of this pilot funding scheme, we have succeeded in setting up the programme. A main task during year one has been to improve the integration of national projects. This work is pivotal for one of the major objectives of IRPWind: further alignment of European and national research efforts within wind energy research in Europe. This is an ongoing task for the whole consortium.

More tangible achievements during the first year have been IRPWind yearly conference in Amsterdam and the successful completion of two rounds of mobility calls.

Since openness is crucial for the programme, the aim is that IRPWind should benefit not only the partners in IRPWind, but also all other EERA JP Wind members and future members. EERA JP Wind members shall for instance be eligible for applying for Expression of Interests (Eol's) in the work packages for mobility and research infrastructures. They will also benefit from several of the other coordination and support actions in the programme, including participating in workshops and in the yearly IRPWind conference.

During the second year we are expecting the first scientific results from the technical work packages. All the scientific work packages had their kick-off meetings during the first 12 months of IRPWind. I really look forward to see the real scientific work getting started in the technical work packages among other dealing with design of offshore wind farms, structural reliability of wind turbines and wind farm cluster control.

Enjoy the reading,

Peter Hauge Madsen



2. EERA JP Wind news

IRPWIND strategy seminar in Trondheim

In February, SINTEF Energy Research hosted an EERA JP WIND strategy seminar. Self-evaluation of the Joint Programme collaboration and coordination of national funding were the most important items on the agenda for the seminar.

In FP7, EERA JPWIND achieved a lot in setting up the Joint Programme, started several EU projects including getting funding for IRPWIND. In Horizon 2020, JP WIND has so far only been successful with 1 proposal. In order to turn this development various actions were agreed upon during the strategy seminar, including the formulation of Science Readiness levels as a way to push for more medium to long-term research at European level. The Science Readiness Levels will be complementary to the Technology Readiness Levels already used as a frame of reference in recent EU calls.

Additionally, the internal procedures of JP WIND will be updated aiming for more industrial participation, fewer participants and more scientific excellence, when formulating future JPWIND Horizon 2020 proposals.

Second part of the strategy seminar dealt with how we can improve the coordination of national funding within JP WIND. A major task for JPWIND in the years to come is to investigate how to implement the Berlin model among the EERA JP WIND members. The aim is to identify, coordinate and implement more joint projects between different EU member states. Within the field of wind energy, North Sea Offshore Network (NSON) project with respect to national alignment. A project like NSON requires international harmonization of national already aligned activities, which is not an everyday occurrence and requires a very good developed virtual environment of collaboration. Nevertheless, it is something we should strive for henceforward in JP WIND. First step will be the submission of a LCE-19 proposal on supporting coordination of national R&D activities using NSON as a case to show the challenges implied in coordinating national funded projects.

Christian Orup Damgaard - DTU

EERA annual congress

On April 30 the EERA secretariat organised the 5th Annual Congress of the European Energy Research Alliance in Brussels. With 220+ participants and a mix of industry, research and policy representatives the congress has developed into a good networking platform and an important event in the SET-plan calendar.

This year, the IRPWind was present at the congress with a poster and the fresh-from-print EERA JPWind brochure. That's important, because EERA needs to further improve the communication on what we do and the impact our work has. This was the recurring message from the Commission, from the Member States' representatives and not least from EERA chairman, Hervé Bernard.



JP Wind and with it the IRPWind can realise this. Both have results to show in the areas where EERA is intended to make a difference: dedicated conferences and workshops, close collaboration with industry organisations, projects such as the EERA-DTOC that delivered, increasing coordination of national research and so on.

Demonstration of the EERA JP's capabilities and results are the responsibility of all IRP's. Not only contractually with the European Commission, but also towards the rest of the EERA community. This is essential for the future of the European research on renewable energy.

Mattias Andersson- DTU and member of the EERA secretariat





EERA Annual Congress in Brussels...

... IRPWind present with a poster

EERA JP Wind leaflet

The EERA Joint Programme for Wind Energy has published a brochure that shows how the Joint Programme makes coordination of wind energy research happen.

The brochure is developed as part of the Integrated Research Programme for Wind Energy, IRPWind, funded under FP7. Quoting colleagues from US, Industry's association and Ministry representatives, the Brochure provides a good overview of how an EERA Joint Programme operates.

The brochure is available in pdf <u>here</u> and printed copies will be available at EERA and IRPWind events.



Christian Orup Damgaard - DTU



3. EERA JP Wind Sub-Programme (SP) news

The Joint Programme Wind Energy is subdivided into 7 sub-programmes.

SP4 "Grid integration" crosses borders of Joint Programme

The H2020 LCE6 call "Transmission and Wholesale Markets" addresses several objectives of the work plan of the sub-program Wind Energy Integration. Therefore, the SP decided to work out and submit proposals for this call. In addition, the JP Smart Grids started initiatives for proposals for the same call. Due to a good co-operation between JP Smart Grids and JP Wind Energy (SP Integration) in the past, we started a joint and co-ordinated procedure for the proposal process:

We discussed and agreed to avoid overlaps and competitive proposals

We exchanged those Expressions of Interest which fit better to proposals of the other JP We exchanged information of the state of the proposal development

This co-operation lead to the result, that 3 pillars (proposals) were worked out – addressing different topics of the call:

- Transmission planning and security (SG)
- TSO/DSO interaction (SG)
- Ancillary services procurement (Wind)

In addition to this co-operation, representatives of JP Wind Energy and JP Smart Grids were invited to workshops of ENTSO-E, to discuss proposals for the LCE₅ call and to present the R&D community. This workshop was jointly prepared be the JPs.

Kurt Rohrig – IWES/Fraunhofer

SP6 "Structures and materials" workshop

On the 13th of May a workshop for EERA Subprogramme "Structures and materials" partners was held in Athens. Purpose of the workshop was to discuss on progress of joint activities, potential alignment of running activities by forming joint actions and prepare for next calls on collaborative projects. Participants of 16 institutions from 9 EU countries attended the workshop. Summary report on the 15th???.

Denja Lekou - CRES



SP7 "Wind integration – economic and social aspects workshop"

On 9 March 2015, sub-programme: Economic and Social Aspects of Wind Integration organized a workshop entitled, *Public Engagement Strategies and Wind Energy*. The purpose of the workshop, held in Roskilde, Denmark, was to gather social scientists and wind engineers from Europe, Turkey and the USA to discuss the state of the art and science of public engagement and identify key questions relevant for the wind community in EU and beyond. The invited keynote speaker, Prof. Dr. Ortwin Renn from the University of Stuttgart, began the workshop with a presentation on "The Lack of Public Acceptance: A New Experience for Wind Farms." This kicked off a very rich dialogue among the over 30 participants. There were also 3 roundtables that addressed specific questions on the topic and a discussion at the end of the day that identified some important research questions for the EERA jp Wind Sub-Programme interested parties.

The group addressed some aspects of the grand challenges of climate change urgencies for moving towards a clean electricity transition and the need to engage in a meaningful dialogue with the public(s) about energy choices and needs. Bonnie Ram, a Guest Scholar at DTU Wind Energy and task leader for the EERA Sub-Programme on Public Engagement, was the organizer and moderator of this workshop.



Klaus Skytte - DTU



4. IRPWIND news

IRPWind @ #EWEA Copenhagen 2015 (WP4)

At the EWEA Offshore 2015, in Copenhagen, Peter Eecen (ECN) took the opportunity to present the Integrated Research Programme Wind (IRPWind) to the industry. In the 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.

Peter 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.



After diving a little deeper into the content of each work package of the project, he concluded 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. IRPWind will continue to convey this message and further intensify EERA JP Wind's link to the industry.

IRPWind on LinkedIn (WP4)

After the IRPWind general assembly in Copenhagen, IRPWind initiated a LinkedIn group aiming to inform a broad audience. We encourage all participants to start discussions on the various posts that you will already find. Keep a close eye on the group, as there will be regular news items that will be posted by your IRPWind partners.

Join the IRPWind LinkedIn Group now!

IRPWind conference 2015 open for registration (WP4)

The dates for the IRPWind conference 2015 are set. On September 28th and 29th the results of all EERA projects will be shared among the attendees. All sub-programmes will have the opportunity to hold a specific workshop. The conference is free of charge and will host industrial and member state representatives as well.

Moreover, the registration is now open and can be completed through this form.



IRPWind @ #EWEA Paris 2015 (WP4)

The latest developments of the IRPWind project will be presented during EWEA 2015 Annual Event that will take place in Paris, from the 17th to the 20th of November 2015. The EWEA Annual Event is the leading pan-European event for the wind energy sector and participants are expected from more than 60 countries all around the globe. In a joint session with EERA-DTOC, IRPWind will use the opportunity to disseminate its preliminary results and to share the outcome with an extended audience of industry leaders, policymakers, potential customers and business contacts.

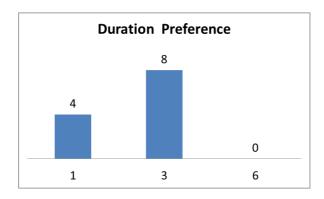
Presenting these results will be an important opportunity to receive feedback from industry and other relevant stakeholders. We invite interested parties to already get in contact with the IRPWind team through the contact details mentioned at the end of the newsletter.

Edit Lulu Nielsen - EWEA

Mobility (WP5) - How long is long enough?

After one year, the IRPWind mobility programme is taking off, gaining popularity. There is no doubt about the interest for the programme as we are receiving an increasing number of questions about the rules.

Looking back on the first 12 months of IRPWind, we had 12 applications. Only one application was not granted since it was aiming for an exchange with the USA. The majority of questions are regarding the length of the grants. At present we have fixed the duration into three options: one, three and six months. Summarizing, the stats of the first 12 months of IRPWind are the following:



The preferred length is 3 months. The 6-month scheme was never chosen, which indicates that short to medium-term stays are valued most, not the longer period. An interesting exception showed during the second call, where the applicant indirectly applied for six months, divided into two 3-month periods for staying at two different institutions. Why not?

So, how long is long enough? Further evaluation will take place in the next Management Board meeting. Keep on being informed on the developments of WP5 at www.IRPWind.eu.



Testing of blade subcomponents (WP7)

The first technical deliverable of WP7, D7.1 "Methodology for testing subcomponents; background and motivation for subcomponent testing of wind turbine rotor blades" was submitted earlier this year. The report aims to provide an overview of the design methodology followed by wind turbine blade structural designers, along with the testing procedure on full scale blades which are followed by testing laboratories for blade manufacturers as required by the relevant standards and certification bodies' recommendations for design and manufacturing verification. The objective of the report is not to criticize the design methodology or testing procedure and the standards thereof followed in the wind energy community, but to identify those items offered by state of the art structural design tools that cannot be verified through the currently followed testing procedures and recommend ways to overcome these limitations. The recommendations provided in the report are relevant for the design and testing of wind turbine subcomponents, in order to verify the numerical analysis tools used in the structural design of wind turbine blades.

Denja Lekou - CRES

Technical meeting - Preparation for subcomponent testing (Wp7)

On the 12th of May the 2nd technical meeting among participants of WP7.1-WP7.5 to discuss progress and plan work for the next period was hosted by CRES. First tests on wind turbine blade subcomponents and model support structures are planned for the end of the year 2015 and issues involved to achieve that will be the focus of discussions during the meeting. Due to the interconnecting structure of WP7 group a strong interaction between the different work packages and research teams involved is required and the meeting will form the perfect opportunity to discuss subjects of interest between all partners.

Denja Lekou - CRES

5. Suggestions and feedback?

If you have any topic suggestions for the next newsletter, or if you have ideas on how to improve it, feel free to send your input to vanroermund@ecn.nl.

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