

The implementation of the EWI: state-of-play and next steps

State-of-play

- ❑ The EWI 2013 – 2015 Implementation Plan and 2013 Work Programme were developed by the Secretariat and are based on the inputs provided by TPWind Working Groups over the past 2 years
- ❑ They were presented to EU Institutions and Member States at the last two Wind EII Team meetings, in October 2012 and January 2013
- ❑ Following these meetings, two rounds of comments were received by the Secretariat. Comments came from the EC, the JRC, Member States, EERA and TPWind members (WGs 1 and 3)
- ❑ The final version of both documents was submitted to the EC on 22/2 and approved by the Wind EII Team
- ❑ They were then circulated within TPWind

2013 – 2014 EWI funding recommendations (I)

- ❑ EWI Strand 1, new turbines and components, recommendations are (in order of importance):
 - Smarter operation and maintenance (O&M): preventive maintenance and condition monitoring, as well as optimisation of life-cycle costs (EWI Component 1.1.2 - suggested EU budget: €10m).
 - Sensing, algorithms and actuation in control strategies and systems (EWI Component 1.1.1 – suggested EU budget: €10m).
 - Optimisation of turbines to complex terrains and extreme climates (EWI Component 1.1.3 - suggested EU budget: €10m).
- ❑ EWI Strand 2, offshore technology, recommendations are (in order of importance):
 - Design tools for very large, far from shore, deep waters wind farms (EWI Component 2.4.1 - suggested EU budget: €10m).
 - New bottom-fixed substructures (EWI Component 2.1.1 - suggested EU budget: €10m).
 - Cost-effective multi-MW floating platforms (EWI Component 2.1.4 - suggested EU budget: €20m).
 - New life-time extension and decommissioning strategies (EWI Component 2.3.2 - suggested EU budget: €10m).

2013 – 2014 EWI funding recommendations (II)

- ❑ EWI Strand 3, grid integration, recommendations are (in order of importance):
 - Technical options, control methods and operational concepts to provide ancillary services to the power system (EWI Component 3.2.2 - suggested EU budget: €10m).
 - Wind power plant models (EWI Component 3.2.1 - suggested EU budget: €10m).
 - Impact of wind power on market prices (EWI Component 3.3.1 - suggested EU budget: €10m).
 - Control and coordination of wind power plans and HVDC networks (EWI Component 3.1.1 - suggested EU budget: €10m).
 - Optimal configuration of power collection grids (EWI Component 3.1.2 - suggested EU budget: €10m).
- ❑ EWI Strand 4, resource assessment, spatial planning and social acceptance, recommendations are (in order of importance):
 - Wind energy synergies with other economic sectors, including impact on growth (EWI Component 4.4.2 - suggested EU budget: €1m).
 - Analysis of the EU wind power sector competitiveness in the global energy market (EWI Component 4.2.1 - suggested EU budget: €0.5m).
 - Offshore wind power clusters (EWI Component 4.3.1 - suggested EU budget: €1m).
 - Minimisation of underwater noise (EWI Component 4.2.1 - suggested EU budget: €5m).
 - Protection of bats (EWI Component 4.2.4 - suggested EU budget: €2m).

Next steps (I)

- ❑ Nine funding recommendations were put forward in the EWI 2011 Work Programme and eleven in 2012. There are seventeen in 2013 due to:
 - the revision of the R&D priorities for the 2013–2015 cycle (see the new EWI 2013–2015 Implementation Plan)
 - the absence of a new round of EEPR funding, which had a significant impact over the 2010–2012 period (and considerably reduced the budgets of the 2011 and 2012 Work Programmes)
- ❑ Their inclusion in the first Horizon 2020 Energy call (to be published towards the end of 2013 / beginning of 2014) was discussed with the EC on different occasions between January and August
- ❑ Horizon 2020 is very likely to have more general, less prescriptive topics than the FP7, which will therefore leave more freedom to applicants
- ❑ They are, however, expected to follow TPWind's funding recommendations anyway

Next steps (II)

- ❑ According to the current information, it seems that the following R&D priorities will be funded in 2014:
 - Technology development:
 - control strategies and systems for new and very large rotors
 - innovative integrated offshore systems with a significant lower mass
 - new innovative substructure concepts, including floating platforms, to reduce production, installation and O&M costs for water depths of more than 50m
 - Technology demonstration and supply-side market readiness:
 - demonstration and testing of new nacelle and rotor prototypes, with a significant lower mass and material intensity and applicable to several types of large-scale wind turbines
 - demonstration of innovative bottom-fixed substructure concepts for water depths of 30 to 60m capable of reducing costs
 - demonstration of innovative floating wind turbine concepts

Next steps (III)

- ❑ In terms of wind energy studies (former IEE Programme), Horizon 2020 is likely to fund the following:
 - Wind energy synergies with other economic sectors, including impact on growth (EWI Component 4.4.2)
 - Analysis of the EU wind power sector competitiveness in the global energy market (EWI Component 4.4.3)
 - Offshore wind power clusters (EWI Component 4.3.1)
 - Protection of bats (EWI Component 4.2.4)
 - Analysis of several energy technologies' LCOE and methods to benchmark on- and offshore wind energy to other energy technologies (EWI Component 4.4.1)
- ❑ Some of these priorities might be merged and / or rephrased by the E
- ❑ The Secretariat will keep the SC updated on the developments

The new Integrated Roadmap

- ❑ The most notable recent policy development is the EC's initiative of drafting a new SET-Plan Integrated Roadmap
- ❑ This Roadmap will adopt a system approach to the development of the EU energy system, as opposed to the technology approach of the current EIs
- ❑ It will be developed by a Working Group (joined by Mr. Kruse and Mr. Villanueva on behalf of TPWind, together with Mr. Madsen from EERA) under the supervision of a Coordination Group (joined by Mr. Moccia on behalf of TPWind)
- ❑ The first meeting of the Coordination Group was held in September. The new Roadmap should be finalised by the end of the year (even though this is an ambitious goal)
- ❑ It is still not clear how the new Roadmap will interact with the existing ones, how it will actually be drafted and how it will be implemented (starting in 2014 or 2015)
- ❑ In principle however, it should mainly look at the R&D issues that different technologies share (such as grid integration, spatial planning, materials and so on)
- ❑ The Secretariat will keep the SC updated on the developments

Thank you for your attention!



<http://www.windplatform.eu/>

secretariat@windplatform.eu