



POW'WOW - a coordination action on the prediction of waves, wakes and offshore wind

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This poster describes a new project trying to harmonise approaches to wave and wind modelling offshore, helping the short-term forecasting and wake research communities by establishing virtual laboratories, offering specialised workshops, and setting up expert groups with large outreach in the mentioned fields.

Currently, a good number of research projects is underway on the European and national level in the fields of short-term forecasting of wind power, offshore wind and wave resource prediction, and offshore wakes in large wind farms. The purpose of this Action is to co-ordinate the activities in these related fields, to spread the knowledge gained from these projects among the partners and colleagues, and to start the work on some roadmaps for the future. Therefore, the leaders of research projects are assuming the function of a multiplier towards the larger research and user community. Additionally, in the fields of short-term forecasting and offshore energy resource, Expert Groups will be formed to act as the central focus point for external stakeholders (eg the EU commission). The liaison with other groups will also include groups outside of Europe.

To facilitate the spread of knowledge, a number of workshops is planned, being smaller and more focused on their topics than the usual conferences.

One issue hampering the progress in our fields is the difficulty of getting access to good data. In most cases, data on offshore wind or power is strictly confidential, and also data on onshore wind power, especially in conjunction with numerical weather predictions, is not easy to come by. One example of a good testing procedure comes from the Anemos project, where in all 6 test cases were defined, to be run by all involved institutes. This idea is taken to the next level with the set-up of two Virtual

Laboratories, one for offshore wake modelling, the other one for short-term forecasting.

Two guides on best practices will be written, one on short-term forecasting (bringing the experiences of high wind penetration countries to those with little wind power) and for wake modelling.

In the end, this Coordination Action will also support preparation of next actions such as a Network of Excellence or an Integrated Project, connecting many additional partners within the European Research Area. The project is funded by the European Commission.