



Networking activities



Marinos Manolesos
Grand Opening Event, Athens, 24-26 January 2023



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*EAWWE is an **international non-profit organization** that promotes and supports the development of wind energy science. As an international alliance of **more than 55 universities in Europe and the US...***

Wake and Wind farm aerodynamics Committee

Members:

Stefan Ivanell (Chair), Uppsala University, Sweden

Sandrine Aubrun, École Centrale de Nantes, France

Carlo Luigi Bottasso, TUM, Germany

Philippe Chatelain, UCLouvain, Belgium

Johan Meyers, KU Leuven, Belgium

Joachim Peinke, Carl von Ossietzky University Oldenburg, ForWind, Germany

Jens Nørkær Sørensen, DTU, Denmark

Oguz Uzol, Middle East Technical University, Turkey

Liu Yongqian, North China Electric Power University, China

Franz Muehle, Marinos Manolesos from TWEET-IE
also attended meeting on 10/02/23

Outcomes

- TC is **keen on participating** in the blind test
- They are **keen to promote** the activity through EAWE
- Happy to **contribute to test case definition**
 - (what they would need measured, best data format etc)
- **Suggestion:** First to have a benchmark test (i.e. with open data) on a single turbine (e.g. from the tests in Athens) and then have a blind test for the farm interaction (from Milano).
- Case definition to be discussed during GOE. **I will then contact them regarding the case and the timings** and ask for feedback

Other activities

Review Paper on *State of the art in Wind Energy Wind Tunnel testing?*

ABL, Turbine models, airfoils, wake interactions, measurement techniques, Flow/wake control?, wind farm tests

MM to draft a structure and circulate to consortium, then decide if/who is invited to contribute.

Inform TC after there is a main structure / author list.

Propose two test cases.

1. Turbine interaction from Munich test (Autumn 23)
2. Near wake flow details (Athens or Delft)

Actions: MM to contact TC and get feedback on suggestion (share existing plan for measurements, check if it suffices)

If accepted, agree on a timeline/ way to share data.

MM happy to collect/analyze submissions arrange for submission to torque 2024???????

INFO:

Inflow profile (incl mean flow, turbulence, location)

Wind turbine geometry and profile polars

Wind tunnel test section size

Control details

Decide on comparison metrics (Turbine performance, thrust , torque?)

Provide any geometry data beforehand?

Ask for numerical tool specific requirements

Present Blind Test in Torque 2024

Present low turb inflow Experiment in Torque (a reference case)

Then call for submissions on the control case. (announce blind test during torque)

Thank you!

Questions?