

## Offshore Wind Accelerator:

Mesoscale Wake Modelling II

**Clarification Questions** 



#	Question	Response
1	Could you please clarify the definition of "industry standard tools" and "established engineering model" in relation to the tools that you want to see used in the project? (peer reviewed publications, validations, accessibility to industry, commercially supported, part of a design tool?)	We appreciate the terms used here are quite broad. We would expect tools/models to have been validated in some form, and be accessible to the OWA partners (whether open source or paid). Industry standard tools can be seen to those that are commonly used in the modelling workflow by a reasonable number of Developers, that have been validated in some form. Examples include the eddy viscosity model (e.g. within WindFarmer or Openwind), Jensen, FUGA, WindModeller.
2	Should established numerical field models (e.g. WakeBlaster) be included in the comparison under WP3 or offered as alternative work?	It should be made clear that this project is primarily focused on assessing the performance of wind farm parameterizations within WRF. We would be concerned if we just saw a comparison between WakeBlaster and WRF, since we do not have a reference point for WakeBlaster, we would be comparing between two unknowns. If there is a particular additional cost to running a proposed model then this should be costed separately, however we'd encourage this to remain within the budget of the work.
3	Is it a requirement to compare WRF against the FUGA model, or can we propose an alternative established engineering model per the clause below? <i>"any Alternative Work (i.e. substitute activities to take place instead of certain</i> <i>activities outlined in the Scope of Work in section 4). If Alternative Work</i>	We are looking for comparison of the WRF data to established engineering models for wind farm scale wake effects (e.g. Park, Eddy Viscosity, FUGA, TurbOPark, deep array). These models would be of particular interest to the OWA partners but alternatives would be considered and additions encouraged. As detailed in the response to question two we would be happy with WakeBlaster



forms part of the Approach to Work, the Bidder is expected to highlight, explain and justify the intended deviation from the Scope of Work. Alternative Work will be considered as non-optional when the tender is evaluated;" being included as one of the models used for the comparison so long as there are other industry models taking into consideration.