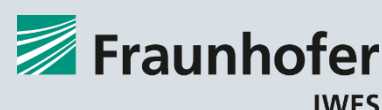




R&D Webinar - NEMO Project Outcomes

Improving turbulence assessment to optimise wind turbine design



With the financial support of:

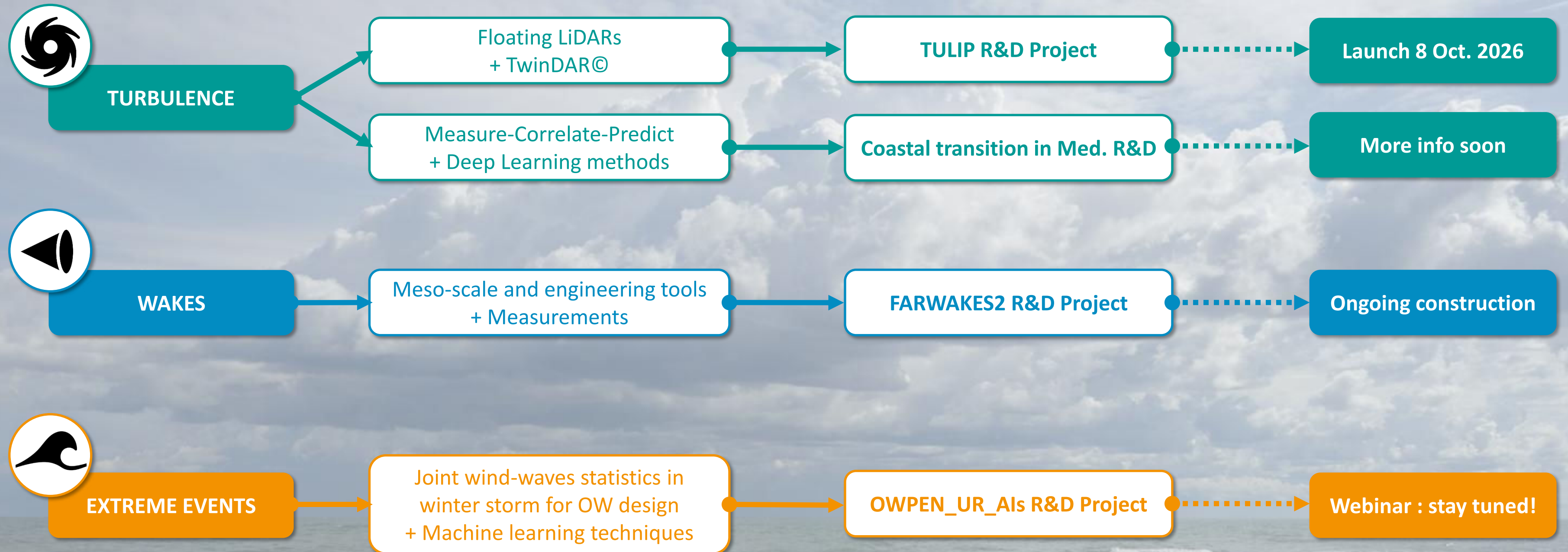


Wrap-up

An Effective Transfer to Industry

2 PROJECTS, 2 PATENTS!

France Energies Marines Wind Roadmap: What 's Coming Next?



TULIP Project - Turbulence with lidar profilers > Coming soon

3 YEARS
(2026-2029)

€1.850K
TOTAL BUDGET

OBJECTIVE

To get advanced TI measurement from fixed and floating wind lidar profilers towards industry-standard accuracy and bankable confidence levels

DELIVERABLES

- **Mitigation techniques** addressing instrumental noise and intra-beam averaging effects
- **Motion-compensation** methods for floating lidars
- **Validated** methods through acquisition of high-quality onshore datasets combining multi-lidar setups, controlled motions, and mast references
- **New version of TwinDAR© software** integrating newly developed methods

12 PARTNERS



3 YEARS (2027-2030)

R&D CHALLENGES

- Evaluation of **wind farm parametrization** in mesoscale solvers for external wake representation
- Enhancement of the **accuracy** of engineering wake models
- **Reduction of uncertainties** associated with the validation and benchmarking of farm-to-farm wake models
- Design and optimisation of a wake-dedicated **measurement campaign** combining remote sensing technologies

EXPECTED RESULTS

Tools

- Meso-scale models validated for farm-to-farm wake applications
- Guidelines for the use of engineering wake models in farm-to-farm wake assessments

Database:

- Wake-dedicated *in situ* observations relevant for farm-to-farm wake models validation

