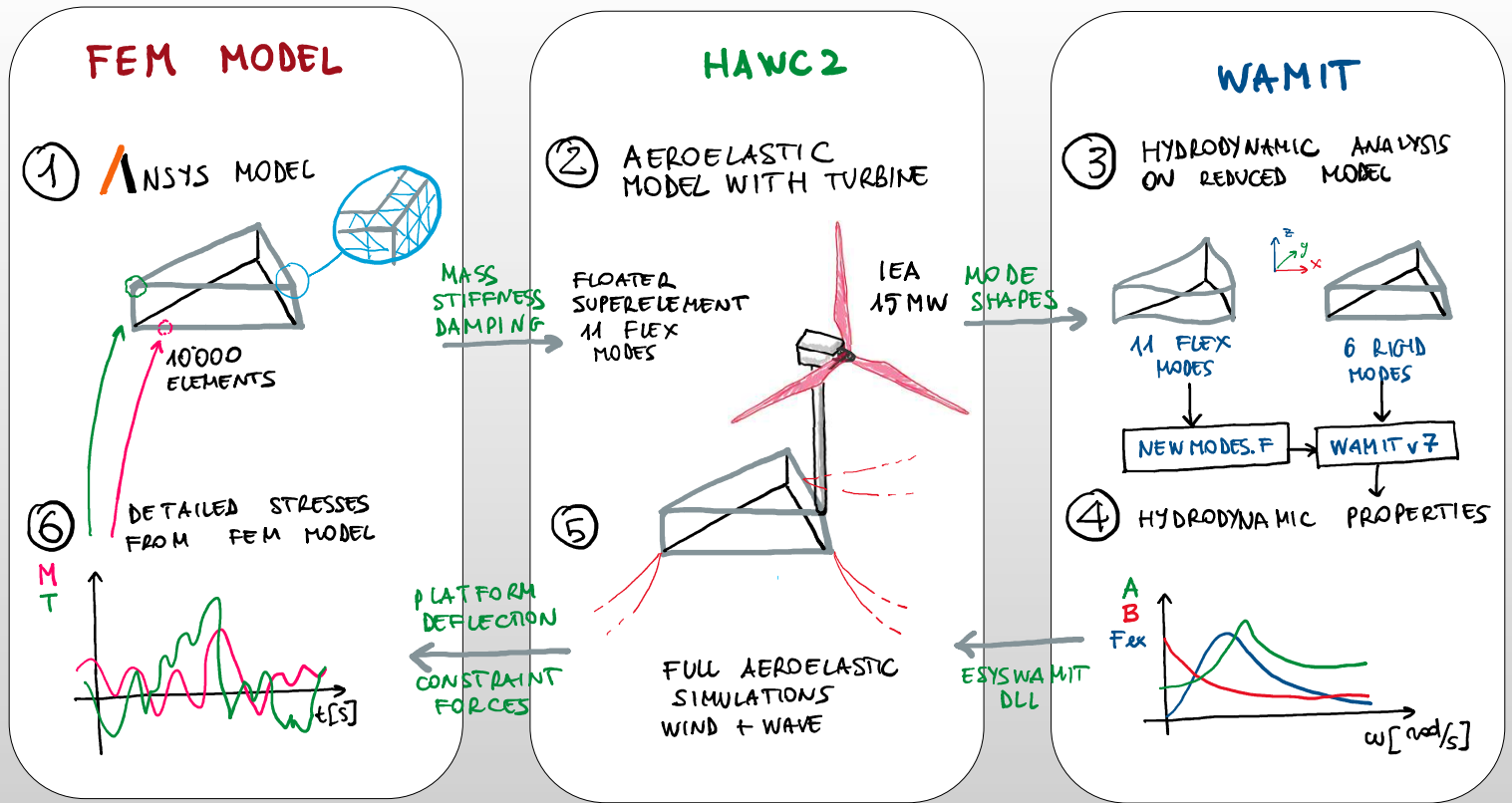




GRAPHICAL ABSTRACT



THE PROJECT - EMULF2

- The new generation of +20MW wind turbines requires large platforms
- The flexibility of the system increases the dynamic loading
- Flexible modes also excited by linear and nonlinear hydrodynamic loads
- COWI Fonden research project (2023-2024)
- Open platform design to be published by COWI

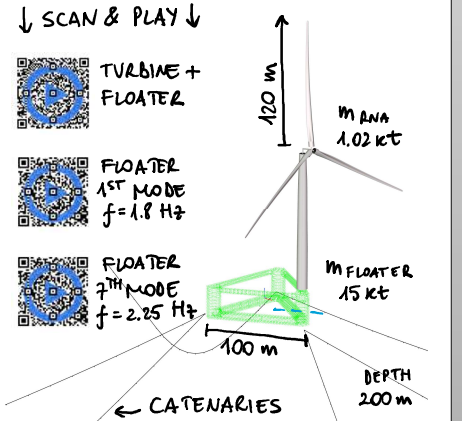
COWI



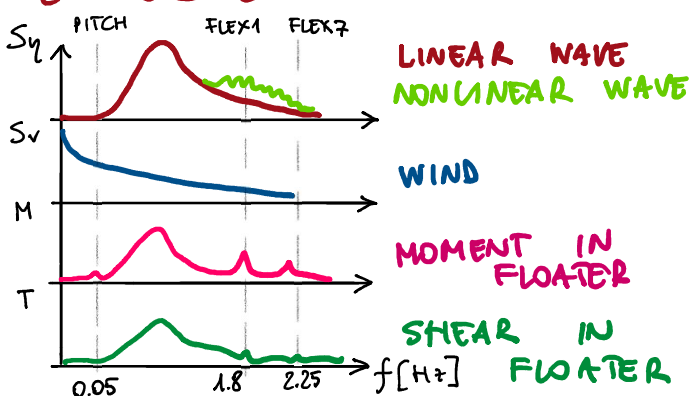
NTNU



THE TURBINE



EXPECTED RESULTS



CONCLUSIONS + PLANS

- Workflow under development
- Step 4: Second-order hydrodynamics: higher likelihood of excitation of floater flex modes
- Step 6: Stress recovery based on aeroelastic results by multiplication with transformation matrix

REFERENCES

Lee, Chang Ho, and John Nicholas Newman. "Wamit v7 user manual." WAMIT, Inc (2013), Chapter 9