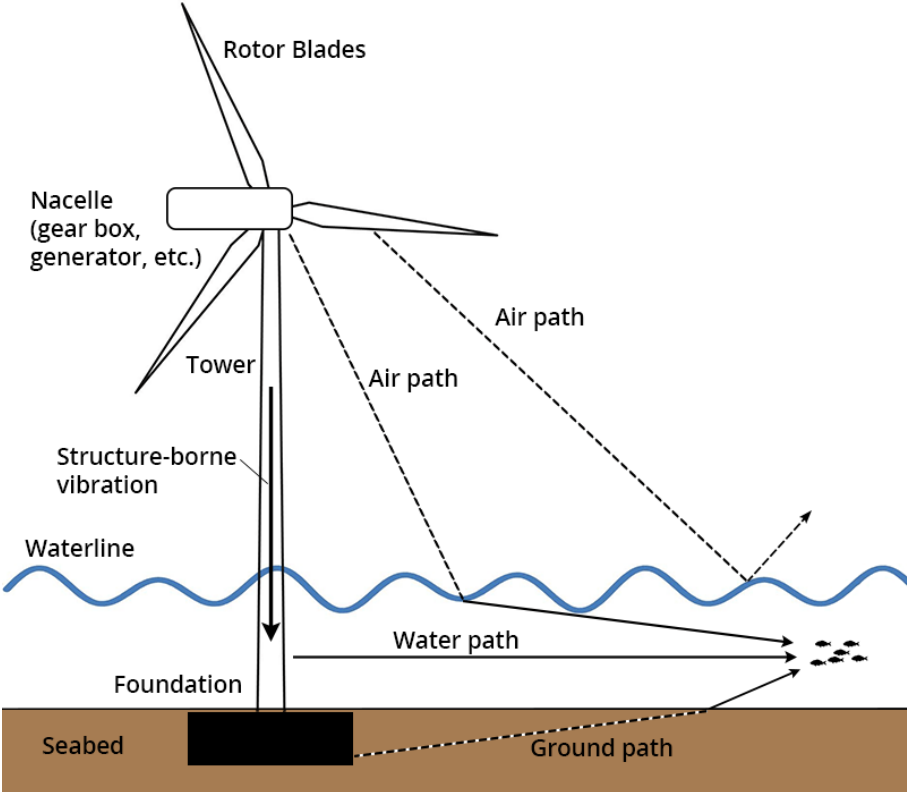


Progress update on characterising underwater noise from floating offshore wind turbines: the FORTUNE* project

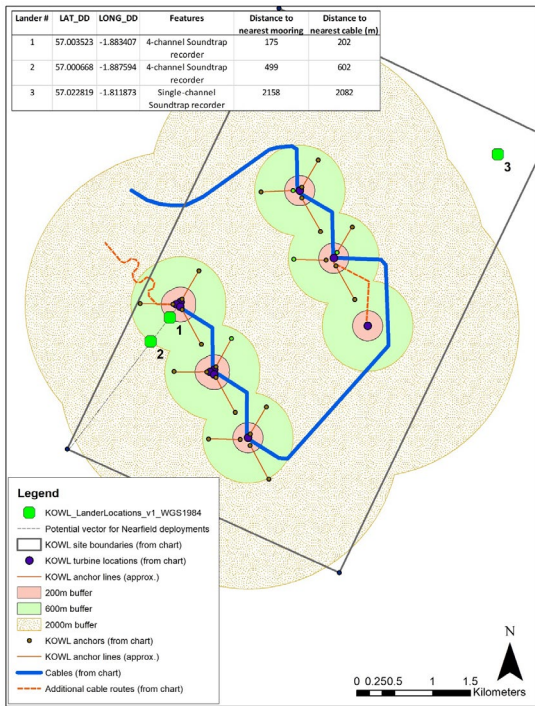
*Floating Offshore Wind Turbine Noise

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1. Aerodynamic noise
 - Interaction between spinning blades and wind (500-1000 Hz)
 - Mostly reflected at water surface
2. Mechanical noise
 - Gearbox and generator noise carried down the tower
 - Tower vibration at higher windspeeds
 - Flexible mooring systems and midwater interconnector cables
3. Service and maintenance vessels





Kincardine

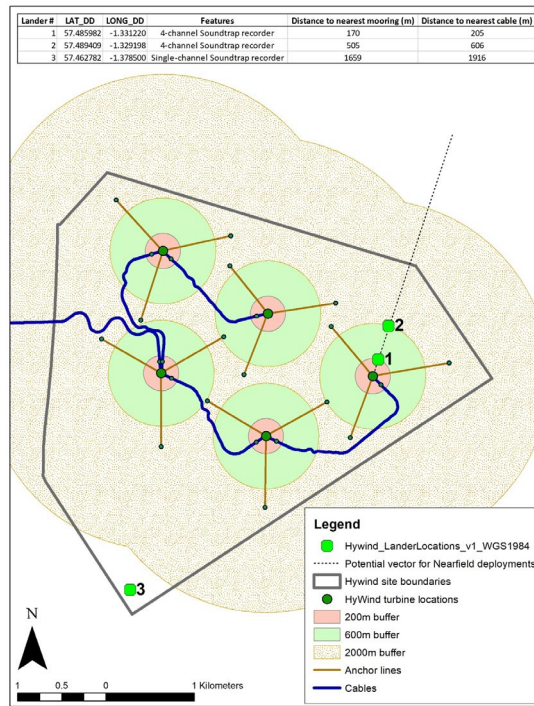
(5 x 6 MW, spar-buoy)

1. Kincardine:

- Deployed: November 12th 2021
- Recovery of far-field lander: December 12th 2021
- Recovery of near-field landers planned for end of January 2002

2. Hywind:

- Deployment planned for late February/early March
- Recovery planned for late March/early April



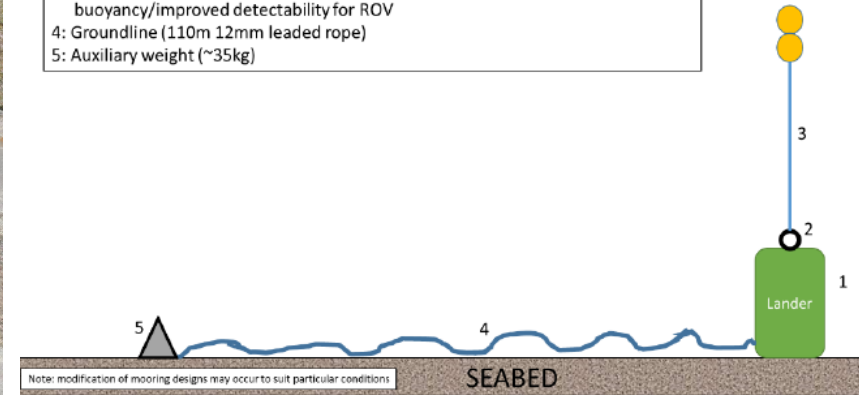
Hywind

(5 x 9.5 MW and 1 x 2 MW turbine, semi-submersible platforms)



Near-field Landers (200 & 600m)

- 1: Lander unit (18kg) with primary instrument (4-channel SoundTrap FBW recorder)
- 2: Ring atop Lander, for recovery by ROV
- 3: Riser (~4m 12mm non-lead rope) with small (20cm) pellet floats at top, for buoyancy/improved detectability for ROV
- 4: Groundline (110m 12mm lead rope)
- 5: Auxiliary weight (~35kg)



Far-field Lander (>2000m)

