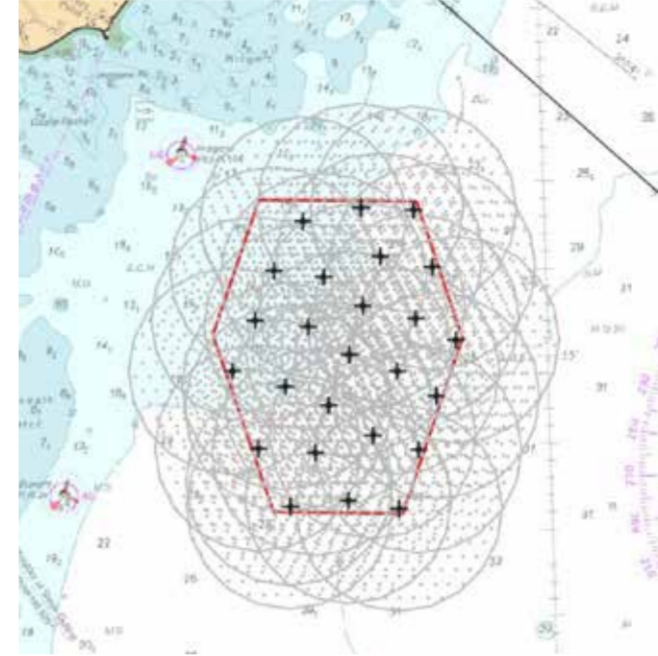


HOW WE LISTENED

KEY QUESTIONS RAISED DURING PREVIOUS CONSULTATIONS

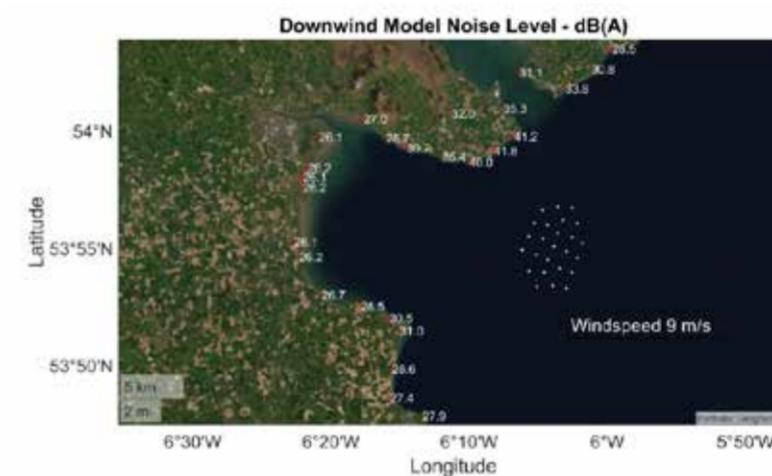
Shadow Flicker

- Shadow flicker can develop when the sun is low in sky and behind the turbines, particularly during periods of winter sun and at sunrise and sunset.
- To check if shadow flicker can effect coastal communities, a distance of 10 times the rotor diameter is used in planning guidance. (This is from wind energy development guidance 2006).
- For Oriel, 10 times the blade diameter (10 x 220m) results in a potential distance of 2.2km from a turbine. Radii of these distances are shown on the graphic on the right.
- Shadow flicker is the shadow cast on a surface by a rotating wind turbine.
- As the closest turbine is 6 km from the shoreline, there is no potential shadow flicker onshore.



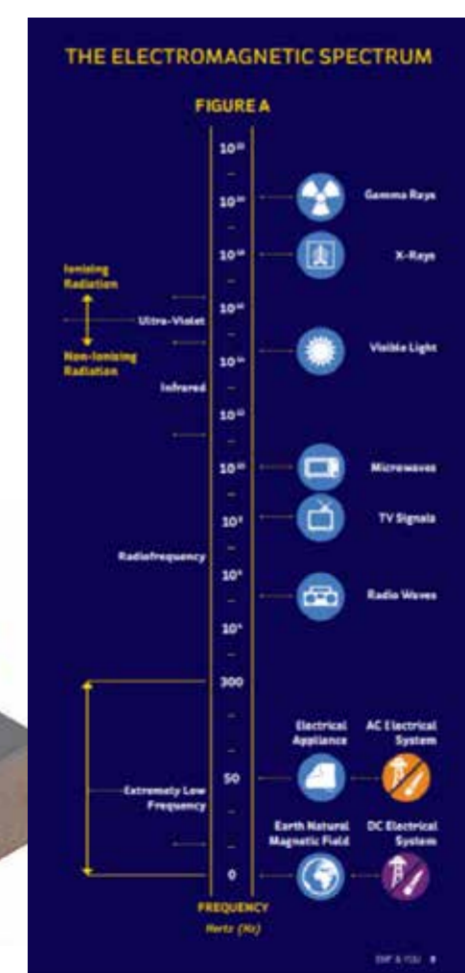
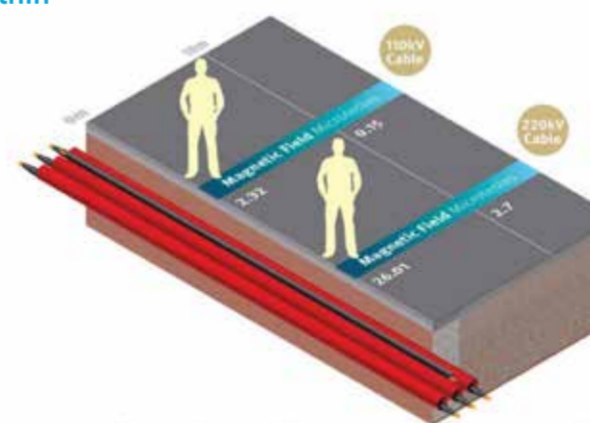
Noise

- Modelled noise levels are below background noise at all monitoring sites and in compliance with the Wind Energy Guidelines for night-time (43 dB).
- Background noise was measured at 16 coastal and inland locations.
- Downwind noise in the windiest conditions was modelled for Oriel Wind Farm and assessed against the measured background noise levels.
- Wind turbine noise was calculated for a range of wind speeds for 26 coastal locations, at wind speeds ranging from the lowest operating wind speed to the maximum noise level.



EMF/Electromagnetic Spectrum

- EMFs are produced in everyday situations by electrical wiring and electrical appliances.
- The proposed underground cables for the project have the same electromagnetic levels as a modern house. In many cases, domestic electrical appliances such as mobile phones, TVs and tools, can generate much higher EMF levels than can be experienced from underground cables.
- There are no external electric fields associated with underground cables. This is because the electric field produced is contained within the cable's steel armouring



For further information please refer to:



Eirgrid EMF brochure
(eirgridgroup.com)



emf-public-information_booklet_v9.pdf (esb.ie)



Non-ionizing Radiation, Part 1: Static and Extremely Low-frequency (ELF) Electric and Magnetic Fields (who.int)



Electric & Magnetic Fields (nih.gov)