



Lindsey Perks
Osprey Consulting, UK

In 2007, I became a founding member of Osprey. Using engineering principles, I developed an approach for the operational assessment of the impact of wind turbines on airports and radar that contributed to the consenting, construction or operation of over 700 windfarms, from large offshore developments, major onshore proposals, and single turbines providing power to farms. In 2014 alone, Osprey saw 6,200 MW of client projects gain planning consent, generating enough electricity to power 3.5 million homes per year.

My renewables clients had very different needs so I established an alternative version of Osprey's assessment methods in order to help smaller clients e.g. farmers erecting a single turbine to meet environmental aims of reducing reliance on fossil fuel derived power from the National Grid. Instead of presenting the information in the extensive evidence-based technical reports required by my larger clients, I provided the mathematical and operational assessment for negotiation in person with the affected airport owner.

Finding mitigation solutions for the impact of wind turbines on aviation assets and services has required me to continuously update my knowledge on advances in radar technologies. This allows me to provide due diligence support e.g. to the commercial sale of a wind farm where I report on the status, ROM costs and perceived effectiveness of existing and emerging technologies claiming to mitigate the impact of turbine originating interference (or clutter) appearing on the Air Traffic Control display system, and thus enable wind farms to contribute to UK renewable targets. More recently, I have been working with my clients to provide advice and support on how they can use aviation positively in their wind projects to enable safe and efficient operations. I conducted a risk assessment of Offshore Wind Farm Operations & Maintenance (helicopter refuelling operations), which was a first for regulatory acceptance and the first offshore wind farm to include the provision of offshore fuelling facilities at a non-permanently attended installation.

Having access to multi-disciplinary in-house engineering expertise at Osprey is key as it means we can solve such a wide range of aviation-related challenges including the assessment for the safe

operation of offshore helicopter operational support, assessment of offshore helicopter refuelling activities, changes to airspace requirements, radar impact, line of sight, procurement services for wind farm mitigation, assessment on how developments may impact Instrument Flight Procedures, the management of drones for inspection purposes and charging stations for drones and unmanned aircraft systems.– this allows Osprey to offer every wind project with a unique level of end-to-end aviation support.

Looking to the future, I'm enthused that the wind industry has so much Government backing and that projects will need to move forward at pace in order to meet ambitious renewable targets. At Osprey we're more than ready for the challenges ahead, and with our parent company tpgroup, we have the engineering capability to advise and provide hydrogen solutions for renewable energy storage and provide digital solutions for wind farm planning and logistics.

The wind industry has never been a more exciting place to be and I'm extremely proud of how I'm using my engineering skills on projects that will ultimately enable the wind industry to work towards the achievement of net zero targets to help create a greener future for us all.