

# Addressing the challenges presented by windfarms

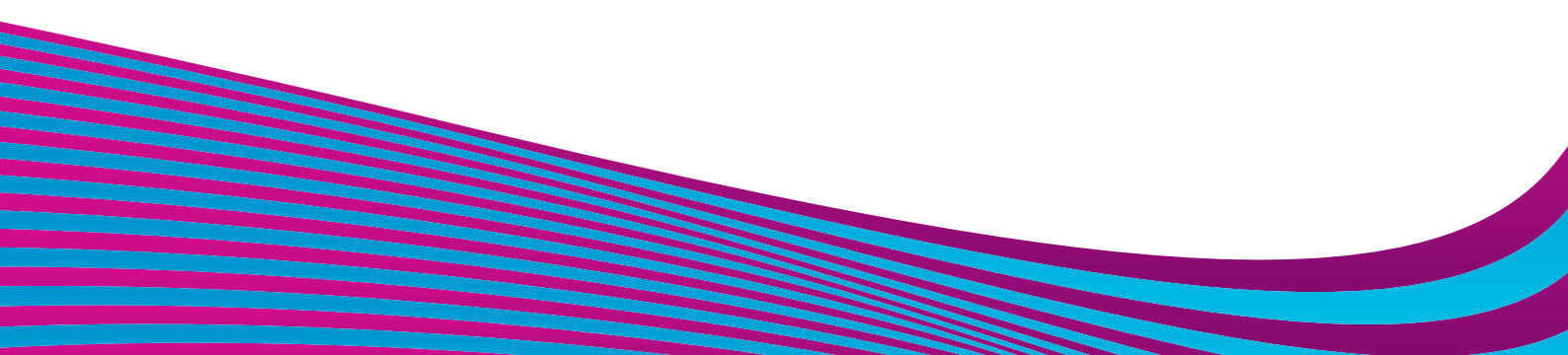
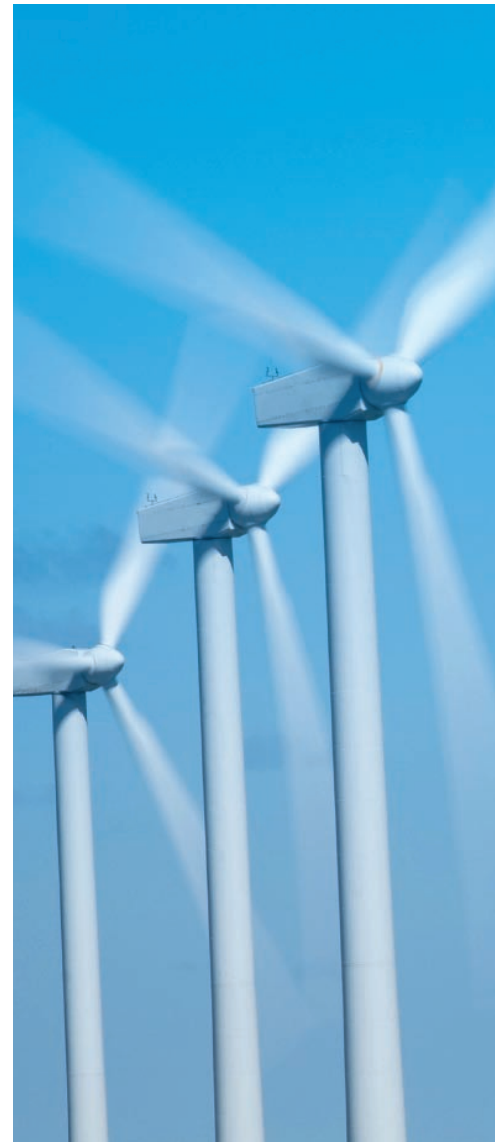
The effects of wind turbines on radar systems are well documented and widely accepted by the aviation and renewable energy industries. Often, it is these safety and capacity issues which prevent windfarm developments from progressing and so threaten to restrict the Government's renewable energy plans.

NATS Services has been leading the way in addressing such issues for many years, building up a wealth of experience and expertise both in the UK and overseas. Whether you're a air navigation services provider or responsible for an airport's development or operations, we can support you in tackling these increasingly important issues.

## Overcoming barriers to consent for Europe's biggest windfarm

In 2006 ScottishPower was granted final planning consent for Whitelee Windfarm, Europe's largest onshore windfarm, but bringing the project to the construction stage presented major challenges for the development team. Despite gaining positive recommendations from the local authorities, ScottishPower had to overcome significant objections relating to the potential effects of the windfarm on aviation and weather radar systems.

NATS Services worked with Scottish Power to introduce an innovative radar data fusion solution for Whitelee. This ground breaking technology, which enables data from a new radar at Kin cardine to be merged with that from an existing radar to give air traffic controllers a clear radar picture of the airspace, has enabled the continuation of a safe and efficient air traffic control service at Glasgow.



## A wide range of capabilities

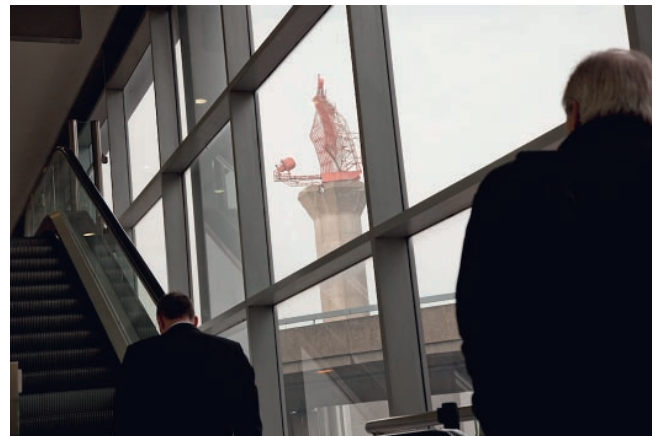
NATS Services offers flexible, tailored solutions for airports, governments, air navigation service providers and windfarm developers. We provide trusted, independent advice and by effectively engaging with all the key stakeholders have a proven track record for delivering optimum solutions. Our capabilities include:

- Pre-planning services
- Radar line-of-sight analysis
- Turbine positioning strategies
- Aviation operational impact assessments
- Mitigation strategies
- Mitigation implementation
- Regional solution planning and implementation
- Support for airport authorities in inquiry submissions and preparation
- Advisory services to regions, governments and planning authorities
- Windfarm and aviation radar awareness training tailored to stakeholder needs
- In-fill radar feasibility studies
- End-to-end project management of mitigation solutions
- Aviation input to windfarm environmental impact assessments

## Delivering benefits

NATS Services can offer a wealth of windfarm, radar, technical, project management and operational expertise. We're a trusted and respected partner within the renewables industry and can play an important role in helping companies to overcome the aviation radar issues that can hinder renewable energy projects, whilst protecting the interests of airports and air navigation service providers.

With our background in air traffic control we can provide you with an in-depth operational impact assessment, whether you operate a small, medium or large airport or control a large and complex airspace. Our services can equally be used by developers, planners and government bodies.



For more information on how NATS Services can help with windfarm projects, please contact:

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