



# Delivering value to customers for growth outside the UK

## Helping the French Government plan new wind farms with confidence

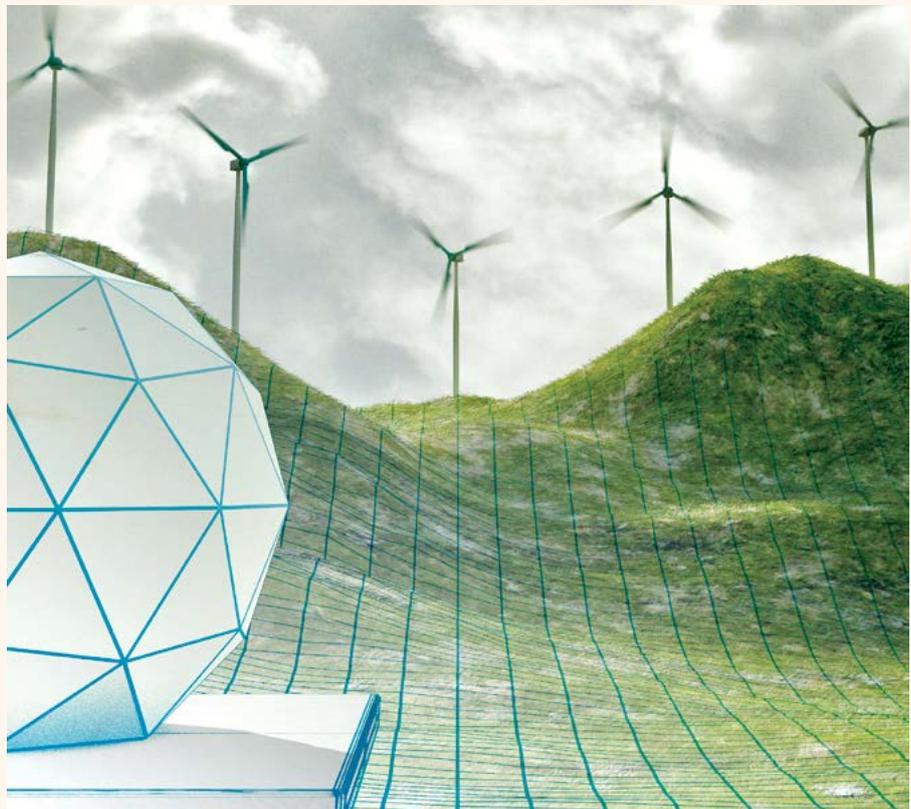
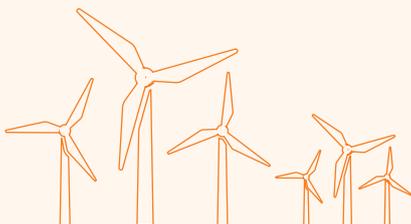
### Our plan for change

By integrating our expertise in multiple disciplines, including stealth technology, we are able to help customers solve complex problems in civil markets.

When it came to building wind farms as part of its renewable energy plans, France faced a dilemma. New sites couldn't be approved until their impact on nearby weather radar systems had been explored yet no satisfactory method existed to predict those impacts – until we brought our world-class expertise across multiple disciplines.

### Breaking the deadlock

"Planning applications for wind farms were often rejected due to concerns by France's national meteorological service Météo-France about their effects on radar," says Dr Thierry Le Gall, Technology Exploitation Manager, Research Services. As a result, the Government passed a law allowing private companies to conduct independent impact assessments. Crucially, a contractor can only be validated once it has proven the accuracy of its predictions, so that



any recommendations can be legally recognised during planning applications. QinetiQ successfully modelled interference caused by an existing wind farm in a blind test. Accurately predicting if wind turbines would interfere with weather radars, we became the first company authorised to help the French Government cut planning red tape for new sites.

### Helping France deliver renewables

The Radar Impact Assessment method was developed through close collaboration between teams across QinetiQ, combining expertise and experience of stealth technology, air traffic management and radar development. Using a classified code

to generate predictive data, test results were compared with real-life measurements taken by Météo-France from two existing wind farms in Normandy. Results confirmed that our method predicted the interference caused by the turbines to the high degree of accuracy demanded by the Government. Dr Le Gall says, "This is an example of using technologies we originally developed for military use in civilian and commercial applications. This work is a big step forward in helping France to increase adoption of renewable energy, while offering Météo-France an assurance this will not harm its ability to make forecasts. We're already talking about applying the same technology for other countries."