

## Kai Frolic MPhys (Hons), MInstP

### Qualifications:

Masters in Physics (Hons) 1<sup>st</sup> Class, Member of the Institute of Physics

### Experience:

Identified optimal site for a new meteorological radar in order to enable construction of a large onshore wind farm on a Scottish island (2012)

Enabled construction of Loeriesfontein Wind Farm, South Africa, by addressing radio interference concerns from Transnet Freight Rail (2013)

Enabled planning permission for Ireland's first solar farm by giving evidence regarding solar glint and glare to the planning inspector (2015)

Overcame aviation glint and glare concerns for a proposed solar farm near Walney Island Aerodrome, in Barrow-in-Furness (2015)

Successfully investigated and resolved a wind farm an aviation radio navigation aid interference claim in Mauritius (2017)

Secured planning permission for the largest consented solar farm in Ireland by providing glint and glare analysis, addressing concerns of Transport Infrastructure Ireland (2018)

Undertaken a range of technical assessments, surveys and meetings including:

- Aviation
- Aviation Lighting
- Electromagnetic Emissions
- Navigation Beacons
- Radar
- Radio Telescopes
- Shadow Flicker
- Solar Reflections
- Technical Mitigations
- Telecommunications

Worked on projects in fifteen countries including the United Kingdom, India, South Africa and the USA.

Given technical presentations in:

- Amsterdam, Netherlands: International Energy Agency (2009)
- Cape Town, South Africa: South African Wind Energy Association (2011)
- Manchester, UK: University of Manchester Institute of Technology (2011)
- Copenhagen, Denmark: European Wind Energy Association (2015)
- Wachtberg, Germany: International Energy Agency, Topical Expert Meeting (2015)
- Gave technical seminars across the UK (2016-18)

### Research and Development

Addressed technical planning objections by developing tools for the following (2008-19):

- Buildings TV interference
- Radar coverage
- Secondary Surveillance Radar interference
- Shadow flicker
- Solar panel layout optimisation
- Targeted TV interference prediction
- Tidal effects on radio propagation
- Wind farms and broadband
- Wind farms radio telescope