

**MEMORANDUM OF UNDERSTANDING****AVIATION RADAR AND WIND TURBINES (MITIGATION ISSUES)**

1. The EU Heads of State and Government adopted the target for 20% of energy use from renewable sources by 2020 at the 2007 Spring European Council. The UK needs to dramatically increase the amount of energy from renewable sources in a very limited amount of time. The Government is committed to increase the deployment of electricity from renewable energy sources and recognises that wind energy will play a major role to delivering this. However, wind turbines can have significant effects on aviation, specifically radar, which can in turn impact on its deployment. This in turn poses a significant risk to the UK's commitment to meeting its fair share of the EU target whilst also acting as a constraint on aviation's ability to meet its commitment to Government policies, international obligations and licence conditions.

2. BERR, DfT, MoD, aviation bodies including CAA and NERL and BWEA are working together to identify solutions to mitigate these impacts and an Aviation Plan<sup>1</sup> has been developed. The Aviation Plan will pull together work-streams needed to develop and implement workable solutions and its use as a management tool was endorsed on the 5 March 2008 by the BERR-chaired Aviation Steering Group (ASG), which includes representatives of all relevant aviation stakeholders in the radar issue<sup>2</sup>.

3. Recognising that the Aviation Plan will continue to evolve, four key areas of the Aviation Plan require attention. These are:

- a. The establishment of a new senior-level Aviation Management Board (AMB) to:
  - (1) oversee, monitor and review the progress of all work-streams;
  - (2) approve any further work-streams and, with the Fund Management Board (FMB), allocate appropriate resources to work-streams; and
  - (3) periodically report to Ministers on the progress of all work-streams.

The AMB will receive reports from an Advisory Panel which will continue to bring aviation stakeholders together at a working level. The Advisory Panel in turn will have working groups taking forward work on particular work-streams;

- b. The establishment of a Fund, and a FMB to administer the Fund, to provide financial support for the work-streams;
- c. The recruitment and allocation of staff resource to the work streams; and
- d. The formalisation of project information, such as costs, programmes and risk to the work-streams with a commitment to agree and finalise costs as far as possible and time frames of the key work-streams by 30 September 2008.

4. The Aviation Plan is a valuable tool for enabling the development of measures which offer the opportunity to mitigate the impacts of turbines on aviation. Such potential impacts will be identified and mitigations developed wherever practicable as work-streams within the plan.

5. Within the Aviation Plan it is recognised that some work-streams can be progressed within foreseeable time scales subject to the availability of financial and staff resources. Other work-

<sup>1</sup> The Aviation Plan is a living and evolving concept which will require formal agreement by the Aviation Management Board.

<sup>2</sup> In recognition of NERL's commercial status, MOU parties acknowledge NERL's commitments under the Aviation Plan will be consistent with its license obligations, business strategies and obligations to shareholders.

streams which depend on the development of technological and related outputs cannot be guaranteed to deliver mitigation solutions within particular timescales.

6. We, the signatories to this Memorandum of Understanding (MOU), commit to fully implement the Aviation Plan approach to ensure the timely and effective delivery of solutions to reduce the effect of wind turbines on aviation. Recognising that this MOU is not a legally-binding document but represents best endeavours by its participants we accept that the following improvements are necessary:

a. Subject to the availability of funding and other resources being approved by the AMB and FMB, the participants to this MOU accept that improvements to pre-planning and planning consultation processes are necessary. These will include:

- (1) MoD shortening pre-planning consultation timescales;
- (2) MoD continuing to work with developers on a site by site basis to identify appropriate mitigation measures where possible;
- (3) CAA facilitating resolution of site specific issues between stakeholders based on a revised CAA remit as directed by DfT pursuant to Section 16(1) of the Civil Aviation Act 1982; and
- (4) the introduction of a web-based screening tool for pre-planning consultation.

The aspiration is that these improvements will be in place by the end of 2008. For its part BWEA commits to working with its members to reduce the level of speculative pre-planning consultations to the relevant authorities (MoD, CAA and NERL). In relation to non-BWEA members, BERR will work with industry to address the issue.

b. In addition, the participants to this MOU accept that other priority areas identified in the Aviation Plan need to be addressed. These include:

- (1) establishing the feasibility of defining performance criteria for radar specifications;
- (2) development of technical mitigation solutions for Air Defence and Air Traffic Control radar;
- (3) development of radar absorbent wind turbine technology; and
- (4) the introduction of mandatory transponder carriage zones.

Wind energy industry financial support will be required and funding in these areas will be dependent on the agreement of a business case by the AMB and FMB.

c. BERR, MoD, DfT, CAA, NERL and BWEA are committed to full engagement with the development and implementation of the Aviation Plan. All will allocate appropriate staff resource using best endeavours within available staff capacity and, subject to AMB and FMB business case approval, with additional staff resource, to ensure the completion of work-streams.

d. BERR will establish an AMB with senior representatives being appointed from Cabinet Office, BERR, MoD, DfT, CAA, NERL, BWEA and Renewables Advisory Board (RAB). The first meeting of the Board will take place as soon as practicable after agreement and signing of this MOU.


e. BWEA will lead in the establishment of a Fund and its Management Board to support the costs of work-streams. Financial contributions to the Fund will initially be sought from wind farm

development companies. When possible and where appropriate, Government will aim to contribute to the Fund. The Fund will be established in June. Funding streams will be managed to avoid conflicts of interest for appropriate signatories in respect of their impartiality and independence.

f. BERR will establish an Aviation Advisory Panel to advise both the AMB and the FMB on technical issues relating to aviation and wind turbines. The first meeting will take place a week before the 1<sup>st</sup> meeting of the AMB.

Signed:

BERR



Willie Rickett, Head of Energy

DfT



Peter Griffiths, Director General of Civil Aviation

MoD




Air Vice-Marshal Tim Anderson, Assistant Chief of Air Staff

CAA



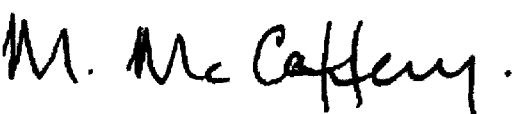
John Arscott, Director, Airspace Policy

NERL



Simon Hocquard, General Manager NERL Operations Strategy & Investment

BWEA



Maria McCaffrey, CEO

Wednesday 11<sup>th</sup> June 2008

**GLOSSARY**

AMB	Aviation Management Board
ASG	Aviation Steering Group
BWEA	British Wind Energy Association
BERR	Business, Enterprise and Regulatory Reform
CAA	Civil Aviation Authority
DfT	Department for Transport
FMB	Fund Management Board
MoD	Ministry of Defence
NERL	NATS En Route Limited
MOU	Memorandum of Understanding
RAB	Renewables Advisory Board