CAA AIRSPACE CHANGE DECISION

INTRODUCTION OF THE NEART NA GOAITHE (NNG) AND INCH CAPE (IC) TMZs

Organisation proposing the change: Neart na Gaoithe Offshore Wind Limited (NNGOWL) and Inch Cape Offshore Limited (ICOL) - assisted by Osprey Consulting Services Limited (OCSL).

Date of Airspace Change Proposal: 5th October 2015

Documents considered by the CAA:

- Airspace Change Proposal dated 5th October 2015
- Consultation Report dated 1st October 2015
- CAA Operational Assessment
- CAA Consultation Assessment
- CAA Environmental Assessment

1. INTRODUCTION

2. On 5 Oct 15, the CAA Safety and Airspace Regulation Group (SARG) received a formal Airspace Change Proposal (ACP) from Osprey Consulting Services Ltd (OCSL). OCSL, working on behalf of Neart na Gaoithe Offshore Wind Limited (NNGOWL) and Inch Cape Offshore Limited (ICOL), aim to establish a Transponder Mandatory Zone (TMZ) encompassing the NNG and IC offshore wind farm complexes to mitigate objections raised by MOD to the planning application. Upon receipt of the proposal, SARG staff undertook a detailed analysis of the operational requirements, the environmental assessments and the consultation process. The purpose of this letter is to provide an overview of the proposal and related decision.

3. INFORMATION THAT HAS BEEN CONSIDERED

4. In making this decision, the CAA has considered a number of documents including the sponsor's consultation document, the change sponsor's original ACP, the subsequent redesign paper and the CAA's Operational Assessment, Consultation Assessment and Environmental Assessment. These documents will be published on the CAA's website shortly.

5. **PROPOSAL OVERVIEW**

- 6. The ACP has been developed to negate the impact of wind turbine-generated primary surveillance radar (PSR) clutter caused by the NNG and IC windfarm developments. In support of the ACP, OCSL has provided evidence indicating that proposed NNG and IC wind turbine generators (WTGs) will create clutter on the RAF Leuchars Primary Surveillance Radar (PSR). It is assessed that, when operational, the wind farms will collectively create a level of radar clutter that without mitigation would:
 - Affect a controller's ability to identify primary radar returns.
 - Diminish a controller's ability to provide the requisite Air Traffic Service (ATS).
 - Increase the risk of a controller not detecting a conflict between aircraft.
 - Saturate radar processing systems, causing degradation in processing times and false targets.
- 7. The proposed TMZ forms part of a 2-stage mitigation solution that includes the introduction of a TMZ covering the NNG and IC windfarm footprint and radar blanking of the wind farm-related PSR returns within the associated TMZ airspace. Following the original proposal,

CAA staffs worked with OCSL and MOD to reduce the originally proposed design to two smaller geographic areas, within the originally consulted larger area. These smaller TMZs reduce the size of the airspace that will be reassigned to appropriately minimise the impact on non-transponder equipped aircraft that might choose to operate in the area. The revised and agreed TMZ boundaries are shown at Annex A.

8. **CONSULTATION**

- 9. Sponsors must conduct their consultation exercise in accordance with the criteria set out in the Cabinet Office's Consultation Principles (2013 Update).
- 10. The Sponsor undertook a thorough consultation through 62 identified aviation and stakeholders between 15 June and 7 September 2015. The Stakeholder Consultation Document and Feedback report will be published on the CAA's website in due course.
- 11. The CAA has conducted its own assessment of the consultation process and consultation report. After careful consideration, the CAA is satisfied that the consultation was conducted in accordance with the requirements of CAPs 724 and 725 and the associated material met SARG requirements. It also notes that there were no objections to the proposed design. The CAA Consultation Assessment will be published on the website shortly.

12. STATUTORY DUTIES

- 13. The CAA's statutory duties are set out in Section 70 of the Transport Act 2000 (the Act), the CAA (Air Navigation) Directions 2001, as varied in 2004 (the Directions), and Guidance to the CAA on Environmental Objectives relating to the exercise of its air navigation functions.¹
- 14. In summary, the CAA's primary duty under section 70(1) of the Act requires that the CAA exercises its air navigation functions so as to maintain a high standard of safety in the provision of ATS. This duty takes priority over the remaining factors set out in section 70(2). Where an airspace change proposal satisfies all of the factors identified in section 70(2) and where there is no conflict between those factors, the CAA will, subject to exceptional circumstances, approve the airspace change proposal. Where an airspace change proposal satisfies some of the factors in section 70(2) but not others, this is referred to as a conflict within the meaning of section 70(3). In the event of a conflict, the CAA will apply the material considerations in the manner it thinks is reasonable having regard to them as a whole. The CAA will give greater weight to material considerations that require it to "secure" something than to those that require it to "satisfy" or "facilitate". The CAA regards the term to "take account of" as meaning that the material consideration in question may or may not be applicable in a particular case and the weight the CAA will place on such material considerations will depend heavily on the circumstances of the individual case. The analysis of the statutory duties in this case is set out below.

15. Safety

- 16. The CAA's primary duty is to maintain a high standard of safety in the provision of ATS and this takes primacy over all other duties.²
- 17. In this respect, the CAA is content that the current safe provision of ATS by RAF Leuchars will be at least maintained by the establishment of the NNG and IC TMZs, specifically in terms of minimising the impact of the windfarms on the Leuchars Primary Surveillance Radar displays.

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¹ Revised in 2014 by the DfT (the Guidance).

² Transport Act 2000, Section 70(1).

18. The most efficient use of airspace

19. The CAA is required to secure the most efficient use of the airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic.³ The CAA considers that the most efficient use of airspace is defined as:

"The most aircraft movements through a given volume of airspace over a period of time in order to make best use of the limited resource of UK airspace from a whole system perspective."

20. In this respect, the CAA is content the introduction of the NNG and IC TMZs will have a neutral impact on the efficient use of the airspace.

21. Requirements of aircraft operators and owners

- 22. The CAA is required to satisfy the requirements of operators and owners of all classes of aircraft.⁴
- 23. In this respect, the CAA is content that the re-assignment of this airspace as a TMZ will have no impact on aircraft operators and owners who are transponder capable and routinely operate in this area.
- 24. The CAA's Operational Assessment will be published on the CAA's website shortly.

25. Interests of any other person

- 26. The CAA is required to take account of the interests of any person (other than an owner or operator of an aircraft) in relation to the use of any particular airspace or the use of airspace generally. The CAA examined a number of anticipated impacts, some of which attracted feedback during the consultation process outlined above.
- 27. In this respect CAA is content that no other persons will be adversely affected by the TMZs outside those covered and acknowledged during the consultation.

28. Guidance on environmental objectives

- 29. In performing the statutory duties, the CAA is obliged to take account of the extant guidance provided by the Secretary of State,⁵ namely the 2014 Guidance to the CAA on Environmental Objectives.
- 30. The Environmental Research and Consultancy Department (ERCD) has undertaken an assessment of the environmental impact of this change, the findings of which will be published on the CAA's website.
- 31. Having carefully considered this information, the CAA has concluded that the change will have no significant environmental impact.

32. Integrated operation of ATS

33. The CAA is required to facilitate the integrated operation of ATS provided by or on behalf of the armed forces of the Crown and other ATS.⁶

⁴ Transport Act 2000, Section 70(2)(b).

³ Transport Act 2000, Section 70(2)(a).

⁵ Transport Act 2000, Section 70(2)(d)

34. In this respect, the CAA is content that the establishment of the TMZs will ensure the continued successful integration of ATS operations in UK airspace.

35. Interests of national security

- 36. The CAA is required to take into account the impact any airspace change may have upon matters of national security.⁷
- 37. In this respect the CAA is content that here are no impacts for national security as a result of the establishment of the NNG and IC TMZs.

38. International obligations

- 39. The CAA is required to take into account any international obligations entered into by the UK and notified by the Secretary of State.⁸
- 40. In this respect the CAA is content that are no international obligations as a result of the establishment of the NNG and IC TMZs as both of these areas lie wholly within UK sovereign airspace.

41. No conflicts

42. In accordance with section 70(3) of the Act and the CAA published policy, the CAA is required to consider whether the airspace change proposal produces any conflicts between the material considerations identified in section 70(2). For the reasons given above, the CAA does not consider that there are any conflicts between pertinent factors as a result of the establishment of the NNG and IC TMZs.

43. REGULATORY DECISION

- 44. The CAA is content that the proposed airspace design is safe, which satisfies our primary statutory duty. For the reasons given above, the CAA is also content that the proposed change has a positive or neutral impact on each of the other factors identified in section 70(2) of the Act. In such a case, and in the absence of exceptional circumstances, it is CAA policy to approve the airspace change proposal. There are no exceptional circumstances in the instant case to justify departing from the CAA's standard practice. However, if an economically viable technical solution is available prior to the date of implementation, this should be employed rather than the radar blanking and TMZ.
- 45. The revised airspace will become effective following separate notifications in 2017 and 2018. Any queries are to be directed to the SARG Project Leader,
- 46. In accordance with the CAA standard procedures, the implications of the change will be reviewed after one full year of operation, at which point, CAA staff will engage with interested parties to obtain feedback and data to contribute to the analysis.

Date: 6th May 2016 Civil Aviation Authority

Appendix:

Chart Showing NNG & IC TMZs.

⁷ Transport Act 2000, Section 70(2)(f).

⁸ Transport Act 2000, Section 70(2)(g).

APPENDIX A - AVIATION CHART SHOWING AREA OF NNG & IC TMZs

