



For and on behalf of
BAE Systems
Interested Party Reference No.
20053944

DEADLINE 1 WRITTEN REPRESENTATIONS

Morecambe and Morgan Offshore Wind Farms Transmission Assets DCO Examination

**Prepared by
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1.0 INTRODUCTION

1.1 This Statement sets out BAE Systems' written representations at Deadline 1. It provides comments on the Applicants' Response to BAE Systems' Relevant Representations (Examination Library Document: PDA-008) and builds on the oral submissions made by BAE Systems during the Preliminary Meeting and Issue Specific Hearing 1 (ISH1) which took place on 29 April 2025 and 30 April / 1 April 2025 respectively. The matters upon which this Statement will focus are as follows:

- The need for, and scope of, a Bird Strike Risk Assessment;
- Site selection process for the Applicants' Ecological Mitigation Sites and Biodiversity Benefit Areas
- Other Aviation Related Safeguarding Assessments
- Solar Farm at Barrows Lane, Warton

2.0 THE NEED FOR, AND SCOPE OF, A BIRD STRIKE RISK ASSESSMENT

2.1 BAE Systems' Relevant Representations (RR-208) set out the need for and importance of a Bird Strike Risk Assessment in order to understand the risk posed by bird strike to aircraft operating out of Warton Aerodrome and whether this risk could be increased or altered as a result of the proposed development, subject of the Applicants' DCO application. This remains BAE Systems' starting position. Absent a thorough assessment and a proper understanding of the nature and level of risk involved, we fail to see how a suitable, robust and effective mitigation strategy can be devised.

Factors to be Considered in a Bird Strike Risk Assessment

2.2 In their response to BAE Systems' Relevant Representations (PDA-008) (which was repeated during ISH1), the Applicants have stated that, in their view, they can provide mitigation for the existing bird population without consequently increasing the safety risk to BAE Systems. At page 7 of PDA-008, the Applicants reference their intention only to provide mitigation habitat for those birds which are already present in the area, that may otherwise be displaced during construction works for the proposed development and through the loss of habitats at the onshore substation sites.

2.3 However, BAE Systems takes little comfort from this statement and has a number of concerns regarding the Applicants' approach.

2.4 The Applicants are assuming that the Ecological Mitigation Sites will not increase overall

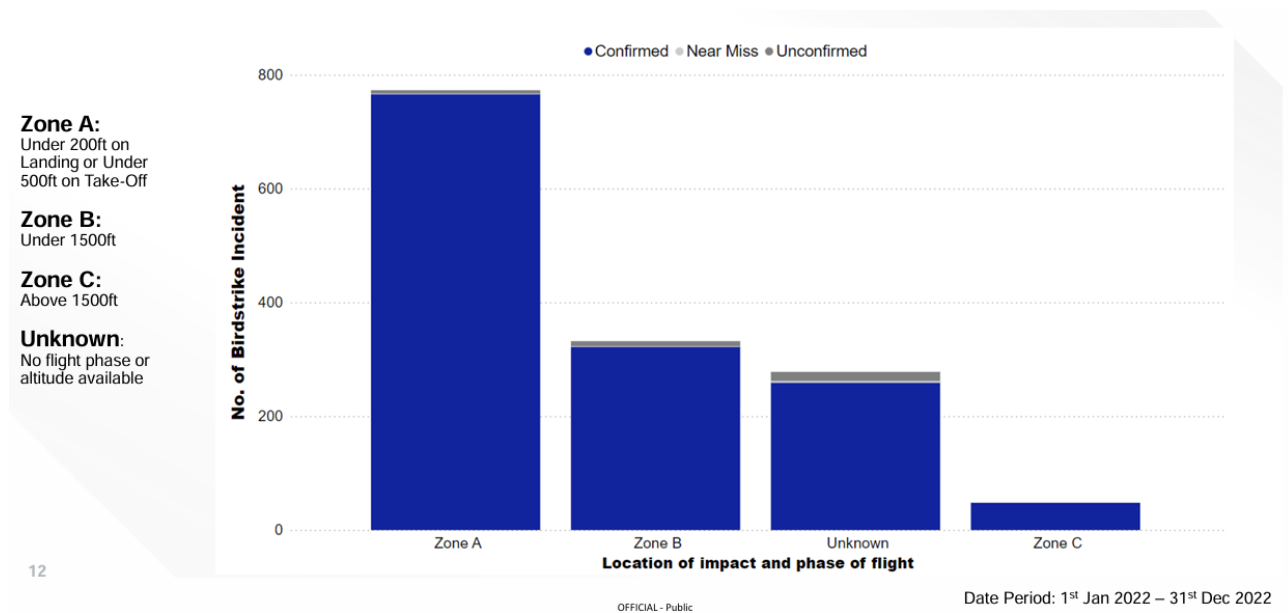
numbers of birds in the area. However, no evidence has been provided to demonstrate that this would be the case and no assessment of the baseline or the future development scenario has been undertaken. The Applicants' view is an extremely simplistic one – this being that bird numbers will not increase because only mitigation for what is being lost is proposed. It is feasible that the Ecological Mitigation sites could attract more birds to the area for reasons such as the habitat to be provided is of better quality (being specifically designed) than the existing habitat, or the Mitigation Sites may be more conveniently located for larger bird populations. However, it would appear as though the Applicants have not considered this.

2.5 Additionally, it is not the case that only mitigation for what is being lost by way of habitats is proposed. The Applicants are also proposing to provide areas of habitat creation – termed “Biodiversity Benefit Areas” – at the onshore substation sites and at Lea Marsh Fields. These areas are not proposed as mitigation, rather they are additional habitat proposed to deliver a voluntary biodiversity net gain. Whilst the Biodiversity Benefit Areas may not specifically be designed to attract birds, they could inadvertently do so. During ISH1, BAE Systems provided the example of otter habitat unintentionally attracting birds as a result of the presence of discarded fish carcasses, a food source for otters. At page 11 of PDA-008, the Applicants state that there are no proposals to increase the number of birds within the area as a result of habitat creation. Whilst this sentiment is acknowledged, BAE Systems has no visibility of the measures which the Applicants are proposing to implement at the Biodiversity Benefit Areas in order to prevent an increase in bird numbers from occurring.

2.6 It is not just an overall increase in bird numbers in the area that may worsen the bird strike risk to aircraft operating out of Warton Aerodrome – it is clear from the Applicants' Response to BAE Systems' Relevant Representations (PDA-008) that this is something which they fail to appreciate and consequently have not yet grappled with. The bird strike risk could change and potentially worsen if the proposed development results in birds being brought closer to the Aerodrome, thereby increasing bird concentrations in proximity of the Aerodrome, as well as flight paths and take-off and approach paths, even if overall bird numbers within the wider area don't increase. This underlines the critical need for detailed surveys and assessments to be undertaken in order to identify bird concentrations within the area of Warton Aerodrome and the regular movement patterns of local bird populations (particularly those species considered hazardous) at different times of the year.

2.7 Information collated by the Civil Aviation Authority shows that bird strike risk greatly increases

at lower altitudes. Over the period from 1 January 2022 to 31 December 2022 (latest data available), of all the reported bird strikes across the UK, we note that the largest number occurred at under 200ft or under 500ft, as shown by the graph below:



(source: Civil Aviation Authority, UK Reported Birdstrikes 2022¹)

- 2.8 Aircraft operating from Warton Aerodrome are at lower altitudes closer to the Aerodrome (for taking-off and landing). The proposed location of some of the Ecological Mitigation Sites and the Biodiversity Benefit Sites, being in close proximity to Warton Aerodrome, introduces the potential for increased concentrations of birds to be present in areas where aircraft is operating at lower altitudes. This is of significant concern to BAE Systems and is a potential adverse impact of the proposed development which simply must be assessed and properly understood.
- 2.9 Changes in the number and / or concentration of specific bird species also needs to be considered. Different types of birds present different levels of risk of bird strike, but also different levels of damage and seriousness of outcome should a bird strike occur.

¹ <https://www.caa.co.uk/media/xoqp1c4z/uk-reported-birdstrike-2022.pdf> (accessed on 16 May 2025)

Bird Strike Mitigation

- 2.10 During ISH1, the Applicants made oral submissions that they would work with BAE Systems to develop a mitigation and management plan for bird strike risk. Whilst BAE Systems welcomes this, we do not consider it appropriate, nor possible, to develop a robust and effective mitigation strategy until a detailed understanding of how bird strike risk could be altered and potentially worsened by the proposed development and what the specific contributory factors are to that change in risk.
- 2.11 The different contributory factors will necessitate different mitigation solutions. For example, it may be a specific type of habitat or a specific habitat feature that is contributing towards a change and/or increase in risk. The mitigation solution in that instance could be the redesign or removal of the habitat feature (such as a water feature). However, the Applicant's risk assessment could identify that it is the location of a specific Ecological Mitigation Site or Biodiversity Benefit Area that is driving a change and/or an increase in the baseline risk. In that instance, consideration may need to be given to relocating the site in question or to abandoning it all together. It's not at all clear whether the Applicant's site selection criteria for identification of the Ecological Mitigation Sites and Biodiversity Benefit Areas took account of bird strike risk and the potential for the Applicant's habitat re-provision and creation proposals to give rise to adverse impacts on aviation interests. Further information regarding the Applicants' site selection process the Ecological Mitigation Sites and Biodiversity Benefit Areas (and the criteria against which candidate sites were assessed) has been requested by BAE Systems and is awaited.
- 2.12 It is important that the mitigation strategy which is ultimately implemented by the Applicants comprises both preventative and reactionary/responsive measures.
- 2.13 Preventative measures will be those that seek to ensure that the proposed development does not result in a change to and/or worsening of the bird strike risk. As stated above, this may include designing the habitat areas created in such a way as to avoid or minimise bird attractants. It could also include the use of management and maintenance techniques which make sites unsuitable or less attractive to birds (such as regular mowing). As stated above, subject to the findings of a risk assessment, it may be that the only suitable form of preventative mitigation is the relocation of the relevant Ecological Mitigation Site and/or Biodiversity Benefit Area or its removal altogether from the project proposals.

- 2.14 Reactionary/responsive measures, which principally comprise adaptive management techniques, will require on-going monitoring— an example includes tactics to scare birds away from certain areas if numbers / concentrations on individual sites are understood to be increasing.
- 2.15 The Applicants accept the fact that mitigation is required – in the form of a “Bird Strike Mitigation Plan” which will be a new appendix to the Outline Ecological Mitigation Plan (Examination Library Document: APP-212). It follows therefore that the risk/adverse impact being mitigated against needs to be assessed and understood. The Ecological Mitigation Sites and Biodiversity Benefit Areas are within the Order Limits of the Applicant’s DCO application; they form part of the proposed development for which development consent is being sought. The likely environmental effects of the entirety of the proposed development, their significance and whether they are adverse or beneficial in nature, are required to be assessed. This is critical to the Secretary of State being able to make a sound decision in respect of whether or not to grant the Applicant’s DCO application. It is within this context that BAE Systems makes these written representations and repeats its request for the Applicants to undertake a Bird Strike Risk Assessment and to submit the results of the Assessment to the Examination.
- 2.16 BAE Systems consider that the scope of the above-mentioned Assessment and Mitigation Plan should be as follows:
- (i) Aims – an initial section that clarifies the overall aims of the document.
 - (ii) Methodology – details of how changes to bird strike risk have been identified / assessed and how mitigation / prevention options have been considered.
 - (iii) Baseline Analysis – in order to identify how the proposed development may change bird strike risk, it is essential that an assessment of current bird numbers, locations / concentrations and movements for a range of bird species is undertaken. The assessment will need to consider how these factors change over the course of a year as numbers and concentrations of birds are affected annually by factors such as migration and will also need to consider the potential implications of climate change (for example, are bird numbers increasing as migration routes change due to climate change).
 - (iv) Assessment of Effects – details of how the proposed development may alter the baseline scenario. In order to undertake this assessment, greater detail will be required on the proposals for the Ecological Mitigation Sites and Biodiversity Benefit Areas, including the types of habitat proposed, specific habitat features, and management regimes.

- (v) Consideration of Alternatives – if the Assessment of Effects identifies that risk will change and/or increase, it would first be appropriate to consider if alternative proposals would avoid or reduce that risk before moving on to consider mitigation measures.
- (vi) Mitigation and Monitoring Proposals – identification of both preventative and reactionary/responsive mitigation measures and details of monitoring which will be undertaken to assess if the mitigation measures being implemented are proving effective.

3.0 SITE SELECTION PROCESS FOR ECOLOGICAL MITIGATION SITES AND BIODIVERSITY BENEFIT AREAS

- 3.1 It is noted that the Examining Authority's (ExA) questions following ISH1 include a question to the Applicants about the site selection process for the Ecological Mitigation Sites and Biodiversity Benefit Areas. BAE Systems welcomes this question and would like the Applicants to confirm whether bird strike risk and the potential for the Applicant's habitat re-provision and creation proposals to give rise to adverse impacts on aviation interests were a factor in the site selection process and what (if any) alternatives were considered (including not delivering the Biodiversity Benefit Sites, noting that the provision of these sites is a voluntary commitment by the Applicants).

4.0 OTHER AVIATION RELATED SAFEGUARDING ASSESSMENTS

- 4.1 BAE Systems' Relevant Representations (RR-208) highlighted the need for other aviation safeguarding assessments to be undertaken in connection with the proposed development and submitted to the Examination (such as safeguarding assessments in respect of communication, navigation and surveillance (CNS) equipment at Warton Aerodrome). BAE Systems has yet to discuss these matters with the Applicants and any appropriate safeguarding requirements which may need to be secured within the provisions of the draft DCO (Examination Library Document: AS-004) but will seek to engage in the requisite dialogue.
- 4.2 In the meantime, BAE Systems welcomes the Applicants' commitment to providing the appropriate information to ensure that the proposed development does not affect the safe operation and development of Warton Aerodrome in relation to Obstacle Limitation Surfaces (OLS), Instrument Flight Procedures (IFP) and radar and transmitter/receiver aerial surfaces (see page 14 of PDA-008).

5.0 SOLAR FARM AT BARROWS LANE, WARTON

BAE Systems' Relevant Representations (RR-208) referred to a solar farm at Browns Lane in Warton, the cables for which are currently being installed to connect Warton Aerodrome to the solar farm. The route of the cables for the solar farm crosses the Applicants' proposed cable corridor at [X]. This interaction is required to be appropriately managed in order to ensure that the co-existence of the cable infrastructure for the solar farm and that of the proposed development can be achieved.

The Applicants' reference to Protective Provisions for the protection of electricity undertakers in the Applicants' Response to BAE Systems' Relevant Representations (see page 20 of PDA-008) (to be secured through Part 1 of Schedule 10 to the draft DCO (AS-004)) is noted. However, BAE Systems requires further dialogue with the Applicants in respect of this matter in order to be assured that the requisite protections are in place to ensure no adverse impact on operations at Warton Aerodrome and the ability of the Aerodrome to remain connected to and to draw power from the solar farm once it is operational.

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