

# Annex 4.1 to the Applicant's response to EXQ1 AR 1.3: Aviation mitigation progress report



Image of an offshore wind farm



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# Glossary

| Term   | Meaning   |  |  |  |  |
|--|---|--|--|--|--|
| Applicant  | Morgan Offshore Wind Limited.   |  |  |  |  |
| Development Consent Order (DCO)                    | An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).  |  |  |  |  |
| Morgan Array Area                                  | The area within which the wind turbines, foundations, inter-array cables, interconnector cables, scour protection, cable protection and offshore substation platforms (OSPs) forming part of the Morgan Offshore Wind Project: Generation Assets will be located. |  |  |  |  |
| Morgan Offshore Wind Project:<br>Generation Assets | This is the name given to the Morgan Generation Assets project as a whole (includes all infrastructure and activities associated with the project construction, operations and maintenance, and decommissioning).   |  |  |  |  |
| The Planning Inspectorate                          | The agency responsible for operating the planning process for applications for development consent under the Planning Act 2008.   |  |  |  |  |

# Acronyms

| Acronym | Description  |
|---------|--|
| ACP     | Airspace Change Procedure                                  |
| APDO    | Approved (Instrument Flight) Procedure Design Organisation |
| CAA     | Civil Aviation Authority                                   |
| DCO     | Development Consent Order                                  |
| DIO     | Defence Infrastructure Organisation                        |
| EIA     | Environmental Impact Assessment                            |
| ExA     | Examining Authority  |
| MOD     | Ministry of Defence  |
| MSA     | Minimum Sector Altitude                                    |
| NDA     | Non Disclosure Agreement                                   |
| PEIR    | Preliminary Environmental Information Report               |
| PSR     | Primary Surveillance Radar                                 |
| RNP     | Required Navigation Performance                            |
| SoCG    | Statements of Common Ground                                |

# Units

| Unit | Description |
|------|-------------|
| ft   | Feet        |
| m    | Metres      |



### 1 ANNEX 4.1 TO THE APPLICANT'S RESPONSE TO EXQ1 AR 1.3: AVIATION MITIGATION PROGRESS REPORT

#### 1.1 Introduction

1.1.1.1 This document has been prepared in response to the Examining Authority's (ExA's) first written questions (AR 1.3) addressed to the Applicant. The question is as follows:

#### Aviation and Radar Mitigation

A number of IPs have referred to the need for agreement on mitigation proposals including:

- BAE Systems [RR-004, REP1-029]
- Blackpool Airport [RR-006, REP1-028]
- DIO Safeguarding/MOD [PD1-019, REP1-032, REP1-042]
- Isle of Man Government Territorial Seas Committee (and Ronaldsway Airport) [RR-015, REP1-038, REP1-047]
- NATS En-Route plc [RR-025, REP1-037]

The ExA notes that the parties are actively engaging to agree solutions, but requests that a consolidated report with checklist of progress with all the above is submitted in relation to mitigation for aviation and radar effects for each location and how it is to be secured. This should include an indication of updates to the draft DCO where such mitigation should be secured.

This document provides a consolidated report with a checklist of progress with all identified stakeholders.

#### 1.2 Response

1.2.1.1 The aviation mitigation progress report is provided in Table 1.1, based on the latest Statements of Common Ground (SoCG) agreed between the Applicant and the relevant parties, as referenced. The reference number for each discussion point reflects that in the latest SoCG.



#### Table 1.1: Aviation mitigation progress report.

| IP and<br>SoCG<br>Reference<br>Number   | Applicant's Position  | Aviation IP Position   | Status                            | Means of securing  | Progress at Deadline 3  |
|---|---|--|-----------------------------------|--|---|
| BAE Systems<br>Marine<br>Limited at<br>Walney<br>Aerodrome<br>(BAE.AR.12)<br>(REP1-029) | The Applicant has undertaken<br>and IFP assessment but requires<br>information from BAE Systems<br>on their proposed Required<br>Navigation Performance (RNP)<br>IFP design for Walney<br>Aerodrome Runway 05 in order<br>to understand their concerns.<br>The Applicant is seeking further<br>discussion with BAE Systems on<br>this matter and will update the<br>Examining Authority at a future<br>Deadline.<br>The Applicant acknowledges the<br>need to procure an assessment<br>from NATS as Walney<br>Aerodrome's CAA APDO. | BAE Systems is awaiting the<br>commissioning and funding (by<br>the Applicant) of a NATS IFP<br>assessment based on the<br>revised tip height (NATS is<br>Walney Aerodrome's CAA<br>APDO). The outcome from this<br>could affect the magnitude of the<br>impact on the operation of<br>Walney Aerodrome. | Ongoing<br>point of<br>discussion | Matter may be resolved by<br>close of Examination, otherwise<br>a requirement that secures any<br>necessary mitigation be<br>approved and implemented<br>shall be committed to in DCO. | Meeting held on 01/11/2024.<br>at which the Applicant agreed<br>to commission NATS, the CAA<br>APDO for Walney Aerodrome,<br>as the appropriate ADPO to<br>carry out the IFP assessment,<br>including the unpublished RNP<br>Runway 05 procedure, on<br>behalf of BAE Systems Marine<br>and Walney Aerodrome. This<br>will inform subsequent actions.<br>The Applicant acknowledges<br>that if a mitigation solution is<br>required, then this will be<br>undertaken at the cost of the<br>Applicant. |
| BAE Systems<br>Marine<br>Limited at<br>Walney<br>Aerodrome<br>(BAE.AR.13)<br>(REP1-029) | The PEIR identified that at a<br>maximum tip height of 324 m,<br>the current MSA was sufficient.<br>However, it is agreed that<br>following the updated tip height<br>to 364 m, the MSA would need<br>to be increased to 2,200 ft to<br>provide safe coverage.<br>Updates to the MSA, if required,<br>will need to be started in<br>accordance with the aviation<br>regulatory process. The Project<br>Description chapter (APP-010)<br>identifies the earliest<br>construction could commence is<br>2026.                          | BAE Systems believes that an<br>update to the MSA will be<br>required based on a tip height of<br>364 metres. It needs more clarity<br>about the responsibility<br>(including funding) for updating<br>the MSA and implementing it.  | Ongoing<br>point of<br>discussion | Matter may be resolved by<br>close of Examination, otherwise<br>a requirement that secures any<br>necessary mitigation be<br>approved and implemented<br>shall be committed to in DCO. | Meeting held on 01/11/2024.<br>The Applicant acknowledges<br>that if a mitigation solution is<br>required, then this will be<br>undertaken at the cost of the<br>Applicant.   |



| IP and<br>SoCG<br>Reference<br>Number            | Applicant's Position  | Aviation IP Position  | Status                            | Means of securing  | Progress at Deadline 3   |
|--|---|---|-----------------------------------|--|--|
|  | The Applicant will know the exact<br>wind turbine dimensions post-<br>consent and will provide<br>confirmation to BAE Systems of<br>the final design at that juncture to<br>ensure the MSA can be<br>appropriately implemented.   |   |                                   |  |  |
| Aerodrome<br>(BAE.AR.13)<br>(REP1-029)           | Applicant's IFP assessment for<br>Warton Aerodrome indicates no<br>impact (APP-045).  | BAE Systems in respect of<br>Warton aerodrome has also<br>requested a review of the IFP<br>assessment undertaken by the<br>Applicant (APP-045) with a focus<br>on new prospective IFPs for<br>Warton Runway 07/25.  | Ongoing<br>point of<br>discussion | In respect of Warton IFP<br>concern, matter may be<br>resolved by close of<br>Examination, otherwise a<br>requirement that secures any<br>necessary mitigation be<br>approved and implemented<br>shall be committed to in DCO. | In respect of Warton IFP<br>concern, at meeting held on<br>01/11/2024 the Applicant<br>agreed to provide further<br>information.<br>Osprey, the CAA APDO for<br>Warton Aerodrome, as the<br>appropriate ADPO is to update<br>its IFP assessment. This will<br>include unpublished RNP<br>procedures provided on behalf<br>of BAE Systems Operations<br>and Warton Aerodrome. This<br>will inform subsequent actions. |
| Blackpool<br>Airport<br>(BA.AR.12)<br>(REP1-028) | No significant effects on aviation<br>assets operated by Blackpool<br>Airport were predicted in the EIA<br>(APP-015), however the<br>Applicant understands that<br>Blackpool Airport is currently<br>conducting a 5 year review of its<br>flight procedures and cannot<br>comment on the conclusion of<br>the Applicant's assessment or<br>any need for mitigation<br>measures until that process is<br>complete. | Blackpool Airport is undertaking<br>a safeguarding assessment<br>which is updating its five-year<br>review as requested by the CAA<br>and considering both the Morgan<br>Generation Assets and other<br>relevant projects.<br>This is anticipated to be<br>submitted to the CAA in<br>October/November 2024. At the<br>time of writing, it is difficult to<br>estimate when approval and<br>implementation of the finalised | Ongoing<br>point of<br>discussion | N/A  | The Applicant is still awaiting<br>the results of Blackpool<br>Airport's safeguarding<br>assessment and a related<br>cumulative assessment against<br>all operational, consented and<br>proposed Irish Sea wind farm<br>developments.  |



| IP and<br>SoCG<br>Reference<br>Number   | Applicant's Position   | Aviation IP Position  | Status                            | Means of securing   | Progress at Deadline 3  |
|---|--|---|-----------------------------------|---|---|
|   | The Applicant will work with<br>Blackpool Airport to ensure that<br>appropriate mitigation is in place<br>so that the Morgan Generation<br>Assets will not have a significant<br>effect on the Blackpool Airport<br>Minimum Sector Altitude (MSA).   | instrument approach procedures<br>(IAPs) will be received.  |                                   |   |   |
| Defence<br>Infrastructure<br>Organisation<br>(DIO)<br>(DIO.AR.15)<br>(REP1-032) | The parties are engaging on the<br>nature of the mitigation required.<br>BAE Systems Warton<br>Aerodrome are in the process of<br>implementing a new PSR at<br>Warton Aerodrome which is<br>expected to be online by the end<br>of 2024 subject to site<br>acceptance and flight trials. BAE<br>Systems have indicated that<br>mitigation is likely to include as a<br>minimum; optimisation of the<br>radar for the Morgan Generation<br>Assets, flight trials and a safety<br>case to the Civil Aviation<br>Authority.<br>BAE Systems anticipated being<br>in a position to provide further<br>information by mid-October<br>2024, but update currently<br>outstanding. The parties will<br>provide updates through<br>subsequent SoCG at future<br>Examination Deadlines. | Confirm that position set out by<br>the Applicant aligns with that of<br>the MOD.<br>Discussion of mitigation is<br>ongoing as set out in the<br>Applicants position. | Ongoing<br>point of<br>discussion | Agreement of the necessary<br>radar mitigation is considered<br>unlikely to be agreed prior to<br>the close of the Examination. A<br>requirement that secures any<br>necessary mitigation be<br>approved and implemented<br>shall be committed to in DCO. | BAE Systems Warton<br>undertook to discuss this item<br>with DIO; however, its<br>discussion has until recently<br>been restricted by commercial<br>Non Disclosure Agreement<br>(NDA). It is understood these<br>discussions have now<br>commenced. |



| IP and<br>SoCG<br>Reference<br>Number                                      | Applicant's Position  | Aviation IP Position  | Status                             | Means of securing   | Progress at Deadline 3   |
|--|---|---|------------------------------------|---|--|
| Isle of Man<br>(IoM) Airport<br>(Ronaldsway)<br>(IoMA.AR.13)<br>(REP1-038) | The mitigation measures and<br>conditions outlined in Volume 2,<br>Chapter 11: Aviation and radar<br>(APP-015) and the Mitigation<br>and Monitoring schedule (APP-<br>076) are appropriate and will<br>result in minor adverse residual<br>impacts, which are not significant<br>in EIA terms.<br>The Applicant is aware that IoM<br>Airport (Ronaldsway) are<br>undertaking a surveillance<br>strategy to manage air traffic<br>safeguarding which includes<br>consideration of the Morgan<br>Generation Assets and any<br>potential mitigation requirements.<br>An executive summary of this<br>report has been shared with the<br>applicant and meetings held to<br>discuss with both parties.<br>The Applicant will continue to<br>engage with IoM Airport<br>(Ronaldsway) regards the design<br>of the technical solution and will<br>update the Examining Authority<br>at the next opportunity. | Whilst the executive summary<br>identifies a viable path to<br>mitigation, the technical solution<br>is not yet prescribed, nor is the<br>commercial path to delivery<br>agreed. Both matters are<br>ongoing point of discussion. In<br>the meantime, the applicant has<br>provided draft wording for a DCO<br>requirement. Once this wording<br>is agreed it will be added to the<br>draft DCO. The Applicant and<br>IoM Airport (Ronaldsway) will<br>provide an update into the<br>Examination when available on<br>progress with technical solution. | Ongoing<br>point of<br>discussion. | Agreement of the necessary<br>mitigation is considered unlikely<br>to be agreed prior to the close<br>of the Examination. A<br>requirement that secures any<br>necessary mitigation be<br>approved and implemented<br>shall be committed to in DCO.<br>Wording of this draft<br>requirement has been shared<br>with Ronaldsway. | Meeting held 24/10/2024. IoM<br>Airport (Ronaldsway) provided<br>the Applicant with the outcome<br>of the surveillance strategy<br>review. Discussions held on<br>potential solution, means of<br>securing and next steps. |
| NATS En<br>Route plc<br>(NATS.AR.12)<br>(REP1-037)                         | The Applicant has received<br>details of preferred mitigation<br>solutions from NATS (Large<br>Blanking and an Airspace<br>Change Procedure (ACP) to<br>implement a Transponder<br>Mandatory Zone (TMZ)) and the  | Agreed in meeting 06/09/24,<br>ongoing discussion required to<br>finalise agreements.   | Ongoing<br>point of<br>discussion  | Draft Development Consent<br>Order (DCO) (REP2-011)<br>Requirement 4.   | N/A  |



| IP and<br>SoCG<br>Reference<br>Number | Applicant's Position   | Aviation IP Position | Status | Means of securing | Progress at Deadline 3 |
|---------------------------------------|--|----------------------|--------|-------------------|------------------------|
|                                       | parties are engaging on a<br>commercial agreement.   |                      |        |                   |                        |
|                                       | The draft Development Consent<br>Order (DCO) (REP2-011)<br>includes under Requirement 4,<br>restrictions on operation until the<br>appropriate mitigation for<br>Lowther Hill PSR and St Anne's<br>PSR is implemented. |                      |        |                   |                        |
|                                       | The parties will provide an<br>update on progress through<br>subsequent SoCG submissions.  |                      |        |                   |                        |