

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Aviation mitigation progress report

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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: 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 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.

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Table 1.1: Aviation mitigation progress report.

IP and SoCG Reference Number	Applicant's Position	Aviation IP Position	Status	Means of securing	Progress at Deadline 4	Next Steps	Expected timescales to resolve negotiation/ agreement of actions
<p>BAE Systems Marine Limited at Walney Aerodrome (BAE.AR.12) (REP1-029)</p>	<p>The Applicant has undertaken an IFP assessment but requires information from BAE Systems on their proposed Required Navigation Performance (RNP) IFP design for Walney Aerodrome Runway 05 in order to understand their concerns.</p> <p>The Applicant is seeking further discussion with BAE Systems on this matter and will update the Examining Authority at a future Deadline.</p> <p>The Applicant acknowledges the need to procure an assessment from NATS as Walney Aerodrome's CAA APDO.</p>	<p>BAE Systems is awaiting the commissioning and funding (by the Applicant) of a NATS IFP assessment based on the revised tip height (NATS is Walney Aerodrome's CAA APDO). The outcome from this could affect the magnitude of the impact on the operation of Walney Aerodrome.</p>	<p>Ongoing point of discussion</p>	<p>Matter may be resolved by close of Examination, otherwise a requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.</p>	<p>Meeting held on 04/12/2024.</p> <p>Applicant continues to await NATS report as the CAA APDO for Walney Aerodrome. This will inform subsequent actions.</p> <p>The Applicant acknowledges that if a mitigation solution is required, then this will be undertaken at the cost of the Applicant.</p>	<p>Receive report from NATS and agree acceptability of assessment with Walney.</p> <p>If all information is to hand and agreed by DL6, the Applicant is of the view that this is merely a commercial matter (commitment to costs of IFP change) and does not merit a requirement. If discussion continues to be ongoing as to merits of assessment, requirement may be necessary.</p> <p>A draft commercial agreement has been issued for BAE Systems consideration.</p>	<p>The Applicants preference is to resolve this matter through a commercial agreement.</p> <p>An update will be provided at Deadline 6. If the commercial agreement is not resolved a requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.</p>
<p>BAE Systems Marine Limited at</p>	<p>The PEIR identified that at a maximum tip height of 324 m, the</p>	<p>BAE Systems believes that an update to the MSA</p>	<p>Ongoing point of discussion</p>	<p>Matter may be resolved by close of Examination,</p>	<p>Meeting held on 04/12/2024.</p>	<p>Receive report from NATS and agree acceptability of</p>	<p>The Applicants preference is to resolve this matter</p>

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Walney Aerodrome (BAE.AR.13) (REP1-029)	<p>current MSA was sufficient.</p> <p>However, it is agreed that following the updated tip height to 364 m, the MSA would need to be increased to 2,200 ft to provide safe coverage.</p> <p>Updates to the MSA, if required, will need to be started in accordance with the aviation regulatory process. The Project Description chapter (APP-010) identifies the earliest construction could commence is 2026.</p> <p>The Applicant will know the exact wind turbine dimensions post-consent and will provide confirmation to BAE Systems of the final design at that juncture to ensure the MSA can be appropriately implemented.</p>	will be required based on a tip height of 364 metres. It needs more clarity about the responsibility (including funding) for updating the MSA and implementing it.		otherwise a requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.	The Applicant acknowledges that if a mitigation solution is required, then this will be undertaken at the cost of the Applicant.	<p>assessment with Walney.</p> <p>If all information is to hand and agreed by DL6, the applicant is of the view that this is merely a commercial matter (commitment to costs of MSA change) and does not merit a requirement.</p> <p>If discussion continues to be ongoing as to merits of assessment, requirement may be necessary.</p> <p>A draft commercial agreement has been issued for BAE Systems consideration.</p>	<p>through a commercial agreement.</p> <p>An update will be provided at Deadline 6. If the commercial agreement is not resolved a requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.</p>

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Warton Aerodrome (BAE.AR.13) (REP1-029)	Applicant's IFP assessment for Warton Aerodrome indicates no impact (APP-045).	BAE Systems in respect of Warton aerodrome has also requested a review of the IFP assessment undertaken by the Applicant (APP-045) with a focus on new prospective IFPs for Warton Runway 07/25.	Ongoing point of discussion	In respect of Warton IFP concern, matter may be resolved by close of Examination, otherwise a requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.	Further meeting held on 04/12/2024. Warton Aerodrome reiterated commitment to supply the Applicant further information to allow complete assessment to be undertaken to Warton's satisfaction. The Applicant acknowledges that if a mitigation solution (which is only procedural and requires no provision of new assets) is required, then this will be undertaken at the cost of the Applicant.	Osprey to amend assessment when Warton data provided by BAE.	DL6 – agreement of purely commercial position or acceptance of requirement to cover this matter.
Walney Aerodrome (BAE.AR.13) (REP1-029)	The stakeholder has recently raised concerns, prompted by engagement with CAA, that VHF comms may be materially degraded by the presence of the Morgan offshore array.	Walney Aerodrome have recently raised concerns regarding VHF communications.	Ongoing point of discussion		The Applicant is commissioning a communications assessment from NATS.	It is the Applicant's contention that it is on the aerodrome licence holder to undertake its VHF comms safeguarding assessment and continue to demonstrate the safety case is upheld.	DL6 – clarity as to whether an impact is to arise through development of Morgan OWF.

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	<p>The applicant has seen no evidence that this would be the case and notes that the existing windfarms in the Irish Sea have not been attributed to cause a degradation of service at the aerodrome.</p> <p>The Applicant understands that concern on this matter originates from the CAA and relates to specific impacts experienced at Prestwick. It is the Applicant's position that the topography and density, distribution and proximity of onshore windfarm development creates a unique circumstance at Prestwick which is not replicated in the Irish Sea. It is notable that Prestwick is not impacted by offshore development.</p>					<p>The Applicant will engage with the aerodrome on receipt of the report to further discuss the potential for impact.</p>	

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<p>Warton Aerodrome (BAE.AR.13) (REP1-029)</p>	<p>The stakeholder has recently raised concerns, at the behest of CAA, that VHF/UHF comms may be materially degraded by the presence of the Morgan offshore array.</p> <p>The applicant has seen no evidence that this would be the case and notes that the existing windfarms in the Irish Sea have not be attributed to causing a degradation of service at the aerodrome.</p> <p>The Applicant understands that concern on this matter originates from the CAA and relates to specific impacts experienced at Prestwick. It is the Applicant's position that the topography</p>	<p>Warton Aerodrome have recently raised concerns regarding VHF communications.</p>	<p>Ongoing point of discussion</p>		<p>The Applicant is commissioning a communications assessment from NATS.</p>	<p>It is the Applicants consideration that is on the aerodrome licence holder to demonstrate the safety case is upheld.</p> <p>The Applicant will engage with the aerodrome on receipt of the report to further discuss the potential for impact.</p>	<p>DL6 – clarity as to whether an impact is to arise through development of Morgan OWF.</p>

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IP and SoCG Reference Number	Applicant's Position	Aviation IP Position	Status	Means of securing	Progress at Deadline 4	Next Steps	Expected timescales to resolve negotiation/ agreement of actions
	and density, distribution and proximity of onshore development creates a unique circumstance at Prestwick which is not replicated in the Irish Sea. It is notable that Prestwick is not impacted by offshore development						
Blackpool Airport (BA.AR.12) (REP1-028)	No significant effects on aviation assets operated by Blackpool Airport were predicted in the EIA (APP-015), however the Applicant understands that Blackpool Airport is currently conducting a 5 year review of its flight procedures and cannot comment on the conclusion of the Applicant's assessment or any need for mitigation measures until that process is complete. The Applicant will work with Blackpool	Blackpool Airport is undertaking a safeguarding assessment which is updating its five-year review as requested by the CAA and considering both the Morgan Generation Assets and other relevant projects. This is anticipated to be submitted to the CAA in October/November 2024. At the time of writing, it is difficult to estimate when approval and implementation of the finalised instrument approach procedures	Ongoing point of discussion	N/A	The Applicant is still awaiting the results of Blackpool Airport's safeguarding assessment.	Given there is no certainty an impact will arise, the applicant does not consider a requirement to be appropriate or necessary.	The Applicant is keen to understand the outcomes of Blackpool Airport's safeguarding assessment by Deadline 6.

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	<p>Airport to ensure that appropriate mitigation is in place so that the Morgan Generation Assets will not have a significant effect on the Blackpool Airport Minimum Sector Altitude (MSA).</p>	<p>(IAPs) will be received.</p>					
<p>Blackpool Airport (BA.AR.12) (REP1-028)</p>	<p>The stakeholder has recently raised concerns, at the behest of CAA, that VHF comms may be materially degraded by the presence of the Morgan offshore array.</p> <p>The applicant has seen no evidence that this would be the case and notes that the existing windfarms in the Irish Sea have not be attributed to causing a degradation of service at the aerodrome.</p> <p>The Applicant understands that</p>	<p>Blackpool Aerodrome have recently raised concerns regarding VHF communications.</p>	<p>Ongoing point of discussion</p>		<p>The Applicant is commissioning a communications assessment from NATS.</p>	<p>It is the Applicants consideration that is the responsibility of the aerodrome licence holder to demonstrate the safety case is upheld.</p> <p>The Applicant will engage with the aerodrome on receipt of the report to further discuss the potential for impact.</p>	<p>DL6 – clarity as to whether an impact is to arise through development of Morgan OWF.</p> <p>The Applicant does not consider an impact on VHF comms to be likely.</p>

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	concern on this matter originates from the CAA and relates to specific impacts experienced at Prestwick. It is the Applicant's position that the topography and density, distribution and proximity of onshore development creates a unique circumstance at Prestwick which is not replicated in the Irish Sea. It is notable that Prestwick is not impacted by offshore development						
Defence Infrastructure Organisation (DIO) (DIO.AR.15) (REP1-032)	The parties are engaging on the nature of the mitigation required. BAE Systems Warton Aerodrome are in the process of implementing a new PSR at Warton Aerodrome which is expected to be online by the end of 2024 subject to site acceptance and flight trials. BAE Systems	Confirm that position set out by the Applicant aligns with that of the MOD. Discussion of mitigation is ongoing as set out in the Applicants position.	Ongoing point of discussion	Agreement of the necessary radar mitigation is considered unlikely to be agreed prior to the close of the Examination. A requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.	Discussion of the mitigation (and the potential for this to be delivered by the existent wind farm tolerant radar that is being installed at Warton) continues to be restricted by commercial Non Disclosure Agreement (NDA).	A requirement for this matter has been provided to DIO for inclusion in the DCO.	DL5 - Matter to be closed through inclusion of requirement wording in DCO; remaining actions to deliver mitigation will continue post closure of the examination.

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	<p>have indicated that mitigation is likely to include as a minimum: optimisation of the radar for the Morgan Generation Assets, flight trials and a safety case to the Civil Aviation Authority.</p> <p>BAE Systems anticipated being in a position to provide further information by mid-October 2024, but update currently outstanding. This process is constrained by the presence of an NDA that prevents transparent communication regarding the parameters of the new PSR.</p> <p>The parties will provide updates through subsequent SoCG at future</p>						

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	Examination Deadlines.						
Isle of Man (IoM) Airport (Ronaldsway) (IoMA.AR.13) (REP1-038)	<p>The mitigation measures and conditions outlined in Volume 2, Chapter 11: Aviation and radar (APP-015) and the Mitigation and Monitoring schedule (APP-076) are appropriate and will result in minor adverse residual impacts, which are not significant in EIA terms.</p> <p>The Applicant is aware that IoM Airport (Ronaldsway) are undertaking a surveillance strategy to manage air traffic safeguarding which includes consideration of the Morgan Generation Assets and any potential mitigation requirements.</p> <p>An executive summary of this</p>	<p>Whilst the executive summary identifies a viable path to mitigation, the technical solution is not yet prescribed, nor is the commercial path to delivery agreed. Both matters are ongoing point of discussion. In the meantime, the applicant has provided draft wording for a DCO requirement. Once this wording is agreed it will be added to the draft DCO. The Applicant and IoM Airport (Ronaldsway) will provide an update into the Examination when available on progress with technical solution.</p>	Ongoing point of discussion.	<p>Agreement of the necessary mitigation is considered unlikely to be agreed prior to the close of the Examination. A requirement that secures any necessary mitigation be approved and implemented shall be committed to in DCO.</p> <p>Wording of this draft requirement has been shared with Ronaldsway.</p>	Further meeting held 05/12/2024, where IoM Airport (Ronaldsway) provided the Applicant with additional consideration of how mitigation could be commercially delivered.	Wording for requirement provided for review 06/12/2024.	Matter to be resolved with DCO requirement by DL5.

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	<p>report has been shared with the applicant and meetings held to discuss with both parties.</p> <p>The Applicant will continue to engage with IoM Airport (Ronaldsway) regards the design of the technical solution and will update the Examining Authority at the next opportunity.</p>						
<p>NATS En Route plc (NATS.AR.12) (REP1-037)</p>	<p>The Applicant has received details of preferred mitigation solutions from NATS (Large Blanking and an Airspace Change Procedure (ACP) to implement a Transponder Mandatory Zone (TMZ)) and the parties are engaging on a commercial agreement.</p> <p>The draft Development Consent Order (DCO)</p>	<p>Agreed in meeting 06/09/24, ongoing discussion required to finalise agreements.</p>	<p>Agreed</p>	<p>Draft Development Consent Order (DCO) (REP2-011) Requirement 4.</p>	<p>N/A</p>	<p>No further actions.</p>	<p>Matter resolved by DCO requirement.</p>

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	<p>(REP2-011) includes under Requirement 4, restrictions on operation until the appropriate mitigation for Lowther Hill PSR and St Anne's PSR is implemented.</p> <p>The parties will provide an update on progress through subsequent SoCG submissions.</p>						