

dynamic development solutions $^{\mathsf{TM}}$

Re: 1733 Date: 22 January 2025

Application by Morecambe Offshore Wind Limited for Morecambe Offshore Windfarm Generation Assets

The Examining Authority's written questions and requests for information (ExQ1)

Issued on 18 December 2024

Representations on behalf of BAE Systems (BAE Systems Marine Limited – Walney and BAE Systems (Operations) Limited – Warton)

Responses are due by Deadline 3: Wednesday 22 January 2025.

EXQ1	Question to	Question	Response
Civil and Military Aviation and Radar (CAR)	The Applicant	Mitigation Paragraph 16.161 of	BAE Systems (Operations) Limited,
	Applicant BAE Systems (Operations) Ltd BAE Systems Marine Ltd Blackpool Airport DIO NATS	Paragraph 16.161 of ES Chapter 16 [REP1-036] sets out that CAP764 Policy and Guidelines on Wind Turbines (published by CAA) Outlines other mitigation options that could be used either singly or in combination. To the Applicant: a) Could the Applicant please set out what mitigation options it considers would be most suitable to ensure that the adverse effects of the Proposed Development caused by permanent interference with civil and military PSRs are fully mitigated? Other parties:	Warton In relation to the Primary Surveillance Radar (PSR) the interests of BAE Systems at Warton Aerodrome are being channelled through the DIO. Currently there is not an identified mitigation that has been proven to effectively fully mitigate all adverse effects nor has one been proposed by the Applicant for consideration. Any proposed mitigation will need to ensure that it does not adversely affect BAE System's current or future operations. BAE Systems understands that the Civil Aviation Authority document CAP764 is out of date and pending a review by the CAA. Issues not covered by this document are provided to aerodromes as matters arise and appropriate mitigation is required against any potential matters found.



DLP Group Services Do relevant IPs have

dynamic development solutions $^{\mathsf{TM}}$

		Do relevant IPs have	
		any views on whether	
		the identified adverse	
		effects can be fully	
		mitigated?	
1CAR10	The	Warton Aerodrome –	BAE Systems (Operations) Limited,
	Applicant	Radar mitigation	Warton
	BAE	In the Ørsted IPs WR	a) BAE Systems is unable to
	Systems	[REP1-112] they have	comment on the progress of other
	(Operations	advised mitigation for	windfarm developments. Some
) Ltd	the Warton PSR is	temporary mitigation measures in
	DIO	currently being	relation to earlier windfarm projects
		implemented and that	were agreed, including radar
		they require	blanking, transponder mandatory
		assurances that the	zones and a shutdown protocol.
		Project will not impact	These were only agreeable due to
		on the effectiveness or	the geographical location of these
		cost of this already	developments. However, these
		agreed radar solution.	temporary solutions are not
		For this Project we	suitable for the Proposed
		note that discussions	Development and will not be
		between the Applicant	implemented as the Proposed
		and DIO/ BAE Systems	Development is situated within a
		have commenced to	critical operational area for
		identify potential	Typhoon test flights. This is still
		mitigation solutions to	subject to further internal review
		Warton's PSR and at	and operational assessment.
		D2 a new Requirement	b) No significant discussion has yet
		relating to this has	taken place on any potential
		been added to the	mitigation solutions nor has a
		dDCO [<u>REP2-002</u>].	mitigation been proposed by the
		To BAE Systems/ DIO:	Applicant.
			c) As above, these discussions have
		a) Can BAE Systems/ DIO confirm what	not yet taken place between BAE
			Systems and the Applicant. Any
		radar mitigation solution has been	mitigation solution for the
			Proposed Development will need
		agreed/ secured in	to be distinct and separate.
		relation to the Burbo Bank	d) Discussion on the wording of the
			DCO Requirement which relates to
		Extension and	the Primary Surveillance Radar at
		Walney Extension	Warton is being led by the DIO. In
		OWFs and whether	relation to more general potential
		this is now active or	impacts and implications on air
		when it is due to	traffic services at Warton
		become active? If	Aerodrome we have suggested
		the mitigation has	without prejudice wording for a
		not been	
		implemented, how	further DCO Requirement at Appendix 2.
		have impacts on	Αμμετιαίλ Δ.
		the radar system	
		been managed in	
	1	1	



dynamic development solutions TM

- the intervening period?
- b) What potential mitigation solution(s) are being discussed with the Applicant for the Proposed Development and are BAE Systems/DIO content that any such mitigation is realistically achievable?
- c) Having regard to the answers to (c) above, is the mitigation being discussed in relation to this Project distinct and separate from that already agreed/ secured and as such are the solutions and costs associated with each of these independent of one another?
- d) Having regard to Schedule 2, Req 8 of the latest version of the dDCO [REP2-002], are BAE Systems/ DIO in agreement with the drafting? If amendments are sought, please provide alternative drafting.

To all parties:

Can all parties provide an update as to any progress made towards agreement on the proposed mitigation identified and likely timeframe for this mitigation solution to be secured/implemented?



Marine Ltd

NATS

dynamic development solutions TM

1CAR12 The Applicant BAE Systems Walney Aerodrome – Minimum Sector Altitude (MSA) Paragraph 2.10.3.2 of

Paragraph 2.10.3.2 of Appendix 16.2 [APP-078] indicates that the published MSA for Walney Aerodrome would need to be increased to maintain the necessary 300m obstacle clearance protection. In its RR **BAE Systems Marine** Ltd [RR-007] has indicated that the gap must be 305m and that BAE needs the height of the wind turbines to be verified by NATS. The Applicant's response ([PD1-011], RR-007-005) states that NATS has been commissioned to carry out an Instrument Flight Procedure (IFP) assessment on behalf of BAE and Walney Aerodrome and the results of this are expected in late 2024. To BAE Systems

a) Please clarify and confirm what the published MSA for Walney Aerodrome is and provide evidence to support this – i.e. is this 300m or 305m?

Marine Ltd:

To the Applicant and NATS:

Please provide a copy of the NATS IFP assessment and its findings or, if this is not yet available, an update and likely timeframe for when this will be completed?

BAE Systems Marine Limited, Walney

The Cyrrus report which was conducted for the Applicant incorrectly stated 300m as the required separation.

The minimum figure required by CAA Regulation is 1000ft (305m).

AIP shows the sector safe height is currently 1800ft (aviation height is measured in feet not metres). https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/Current-AIRAC/graphics/368877.pdf

For the required 1,100ft tip height a sector safe altitude of 2,100ft would be required with associated change to approaches and MSA.



dynamic development solutions TM

1CAR13

The
Applicant
Blackpool
Airport
BAE
Systems
(Operations
) Ltd
BAE
Systems
Marine Ltd
DIO
NATS

Instrument Flight Procedures (IFPs)

IFPs for Warton, Walney, Lowther and **Blackpool Airport** would require revision. In the Applicant's response to Blackpool Airport's Relevant Representation ([PD1-011], RR-013-02) it is stated IFP mitigation is predicated on revisions to Blackpool Airports IFPs following the CAA five-year audit review. This review is stated to be ongoing and due for completion by November 2024. If necessary, the IFP assessment may need to be reassessed.

To the Applicant:

- a) Can the Applicant clarify and explain whether the CAA five year audit applies to all airports/ aerodromes or just Blackpool Airport?
- b) Can the Applicant please advise if this audit has been completed, summarise its findings (if known) and advise whether an update to the IFP assessment submitted as part of the application is required? If an update is required. please can the Applicant set out a likely timeframe for submission of such an assessment?
- c) Can the Applicant explain who would

BAE Systems (Operations) Limited, Warton

This is subject to ongoing review. In relation to more general potential impacts and implications on air traffic services at Warton Aerodrome (including impacts on IFPs) we have suggested without prejudice wording for a DCO Requirement at Appendix 2.

BAE Systems Marine Limited, Walney

The possible issue with regard to the sector safe altitude and changes to the approach for Walney are dependent on the results of the Morgan Wind Project IFP assessment, and the other IFP assessments for the other windfarms proposed and anticipated. As of 14 January 2025, BAE Systems Marine Limited understands that NATS, the approved APDO for Walney Aerodrome, had I not been contracted by the Morgan Project Team. The possible change in height required for that development has a direct impact on the Morecambe IFP requirements for the Walney approach. As the developments in the Irish Sea are being treated independently for the same section of airspace, it is difficult to confirm what is required by one would be the same for the others. This is causing the aerodrome a lot of extra work and expense to resolve.

The NATS IFP assessment commissioned by the Applicant and undertaken on behalf of BAE Systems Marine Limited and Walney Aerodrome has now been received and discussion on proposed mitigation solutions are now underway with the Morecambe Project Team. Proposed, without prejudice, wording for a DCO Requirement that relates to potential impacts and implications for air traffic services at Walney Aerodrome is included at Appendix 1.



dynamic development solutions $^{\mathsf{TM}}$

		be responsible for making the changes to IFPs and the likely timeframe for completion? Would the timeframes differ for each airport or would these be the same?	
		All Parties: d) Is there any reason or identifiable impediment why the required changes to the IFPs would not be agreed/ achieved?	
		Having regard to Schedule 2, Requirements 5, 6 and 7 of the latest version of the dDCO [REP2-002], do parties agree with the drafting or are any amendments sought? If amendments	
104010	The	sought, please can all parties explain and provide any alternative drafting by Deadline 3?	DAT Customs (Onessations) Limited
1CAR18	The Applicant BAE Systems (Operations) Limited BAE Systems Marine Ltd Blackpool Airport Ronaldsway Airport	Very High Frequency (VHF) and Direction Finding (DF) Communications In the draft SoCG submitted at Deadline 1 (BA 14, [REP1-070]) it is noted that Blackpool Airport has identified impacts to VHF radio and DF communications and stated that an assessment is required and needs to take into account other adjacent offshore wind farm projects. No such assessment is	BAE Systems (Operations) Limited, Warton a) The Civil Aviation Authority (CAA) and the Safety and Regulation Group (SARG) identified issues with VHF radio communications that had been experienced by another airfield due to wind turbines. This issue had not been previously considered in their guidance. BAE Systems at Warton has been instructed by its SARG inspector to consider these implications when approving any new developments. This is not limited to offshore developments and BAE Systems will be incorporating this into the assessment of all applications



dynamic development solutions TM

currently contained within the application documents, having previously been agreed to be scoped out.

To Blackpool Airport/
BAE Systems:

a) Please can Blackpool Airport/ **BAE Systems** explain why the concerns about potential impacts to VHF and DF communications were not identified earlier or whether something has changed since the Application was submitted which gives rise to these concerns?

To BAE Systems (Operations) Limited, BAE Systems Marine Ltd and Ronaldsway Airport

 b) Do any of the operators of other aerodromes/ airports have any comments or concerns in relation to impacts on VHF and DF communications? If so please can summarise these concerns.

To the Applicant:

c) Discussions have commenced with Blackpool Airport about its concerns on VHF and DF communications and that an update will be given at a future deadline. Please can the

received.

 BAE Systems does not share this data or concerns with other aerodromes. Each aerodrome is responsible for its own operation and the mitigation of any adverse effects.

BAE Systems Marine Limited, Walney

The CAA highlighted the issue to Walney and Blackpool Aerodromes on the back of evidence from Prestwick airport, that additional wind generation assets installed are blocking communications between aircraft and ground stations and vice-versa. This was only notified as an issue to Walney Aerodrome by the CAA at the Air Navigation Service Providers Audit in November 2024. Ronaldsway airport has undertaken a survey with NATS to look at the possible interference to communications arising from the Mooir Vannin wind project, and BAE Systems Marine Limited understands that the report showed a significant issue for traffic at low level. Guidance documents from the CAA have not vet been updated, but aerodromes that could be impacted by developments of this nature are being told that this is a serious flight safety issue.

In summary, VHF assessments are due to be carried out for Walney, Warton and Blackpool aerodromes. An assessment of Mooir Vannin has already been undertaken by NATS, and BAE Systems Marine Limited understands that and has shown that there will be a problem with low level radio communications to/from aircraft.



dynamic development solutions TM

21 . С С ар	
	Applicant provide
	an update by no
	later than Deadline
	3 which includes:
	i) confirmation
	of whether
	an .
	assessment
	is to be
	carried out
	and
	whether this
	is only
	required for
	Blackpool
	Airport or
	will include
	other
	aerodromes
	/ airports in
	the study
	area (and if
	so which
	ones);
	ii) if an
	assessment
	is to be
	undertaken,
	the
	timeframe
	for carrying
	out such an
	assessment
	and when it
	will be
	submitted
	into the
	Examinatio
	n (albeit this
	must be
	received no
	later than
	D4 in order
	that parties
	have an
	opportunity
	to comment
	upon it).
	if it is considered an
	assessment is not
	required, an
	explanation and



dynamic development solutions $^{\mathsf{TM}}$

Effects on		justification to support the position and how the concerns raised by IPs will be addressed.	
Shipping and Navigatio n			
ISN12	The Applicant	Submarine Nautical Paths	BAE Systems Marine Limited, Walney
	MoD/ DIO BAE Systems Marine Ltd	BAE Systems Marine Ltd [RR-007] has commented that there appears to have been no consideration regarding potential impacts on submarine nautical paths. Submarines are part of national defence and national security and so BAE requires further and more in-depth consultation with the Royal Navy/ MoD on the matter of submarine nautical paths.	BAE Systems Marine Limited have held internal discussions and can confirm no impact to boat exit through the Walney Channel.
		In its response [PD1- 011] the Applicant indicates that previously no concerns had been raised, by the MoD and ABP.	
		Could all parties please set out their latest understanding of the situation.	



dynamic development solutions TM

Appendix 1 – Without prejudice proposed DCO wording for Walney Aerodrome.

Operation of Walney Aerodrome (Air Traffic Services)

- (1) No construction of any wind turbine generator (or part thereof) forming part of the authorised development shall commence until the Secretary of State, having consulted with the Operator and the CAA, has confirmed in writing that it is satisfied that:
 - (i) Appropriate Mitigation will be implemented and maintained throughout the lifetime of the authorised development; and
 - (ii) appropriate arrangements have been put in place with the Operator to ensure that such Appropriate Mitigation is agreed and implemented, prior to construction of the authorised development, and maintained.
- (2) For the purposes of this requirement—
 - "Appropriate Mitigation" means all appropriate mitigation measures required to prevent or remove, throughout the lifetime of the authorised development, and for as long as the windfarms and any above waterline structures remain in situ, all risks and adverse impacts which the authorised development will have on the operation of Walney Aerodrome's operations and/or future operations, including but not limited to its ability to provide and/or deliver (1) sovereign defence capabilities: (2) safe and efficient air traffic services that are fit for purpose for Walney Aerodrome during the lifetime of the authorised development, (3) any other requirements identified by the Operator from time to time, this includes mitigation which enables the Operator to provide uninterrupted safe and efficient airport operational and air traffic services (including but not limited to mitigations arising from any impacts on IFP's, MSA's, & VHF communication systems for Walney Aerodrome);
 - "Approved Mitigation" means the Appropriate Mitigation agreed with the CAA and the Operator and approved by the Secretary of State in accordance with subparagraph (1).
 - "CAA" means the Civil Aviation Authority constituted by the Civil Aviation Act 1982; and
 - "Operator" means BAE Systems Marine Limited (incorporated in England and Wales with company number 00229770, Victory Point, Lyon Way, Frimley, Camberley, Surrey, England, GU16 7EX), or such other organisation as is licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services Walney Aerodrome.
- (3) The undertaker at its sole costs shall implement and thereafter comply with all obligations contained within the Approved Mitigation throughout the lifetime of the authorised development.



dynamic development solutions TM

Appendix 2 – Without prejudice proposed DCO wording for Warton Aerodrome.

Operation of Warton Aerodrome (Air Traffic Services)

- (1) No construction of any wind turbine generator (or part thereof) forming part of the authorised development shall commence until the Secretary of State, having consulted with the Operator, the CAA and the Ministry of Defence, has confirmed in writing that it is satisfied that:
 - (i) Appropriate Mitigation will be implemented and maintained throughout the lifetime of the authorised development; and
 - (ii) appropriate arrangements have been put in place with the Operator and the Ministry of Defence to ensure that such Appropriate Mitigation is agreed and implemented, prior to construction of the authorised development, and maintained.
- (2) For the purposes of this requirement—
 - "Appropriate Mitigation" means all mitigation measures required to prevent or remove, throughout the lifetime of the authorised development, and for as long as the windfarms and any above waterline structures remain in situ, all risks and adverse impacts which the authorised development will have on the operation of Warton Aerodrome's operations and/or future operations, including but not limited to its ability to provide and/or deliver: (1) sovereign defence capabilities; (2) safe and efficient air traffic services that are fit for purpose for Warton Aerodrome during the lifetime of the authorised development; (3) the PSR at Warton Aerodrome and Ministry of Defence's air surveillance and control operations; and (4) any other requirements identified by the Operator or Ministry of Defence from time to time, this includes mitigation which enables the Operator to provide uninterrupted safe and efficient airport operational and air traffic services (including but not limited to mitigations arising from any impacts on IFP's, MSA's, and VHF and UHF communication systems for Warton's Aerodrome);
 - "Approved Mitigation" means the Appropriate Mitigation agreed with the CAA and the Operator and approved by the Secretary of State in accordance with subparagraph (1).
 - "CAA" means the Civil Aviation Authority constituted by the Civil Aviation Act 1982.
 - "Ministry of Defence" means the Ministry of Defence as represented by Defence Infrastructure Organisation Safeguarding, St George's House, DIO Head Office, DMS, Whittington, Lichfield, Staffordshire, WS14 9PY or any successor body; and
 - "Operator" means BAE Systems (Operations) Limited incorporated under the Companies Act 2006 (Company Number 01996687) whose registered office is Victory Point, Lyon Way, Frimley, Camberley, Surrey, England, GU16 7EX, or such other organisation as is licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services Warton Aerodrome.



dynamic development solutions TM

(3) The undertaker at its sole costs shall implement and thereafter comply with all obligations contained within the Approved Mitigation throughout the lifetime of the authorised development.