

Moray Offshore Wind Farm (West) Ltd

Moray West

Gateway Documentation:

Stage 3

3D: Collate and Review Responses

(Incorporating Step 4A Update Design)



Authorship

Action	Role	Date
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Reviewed Approved	██████████ - Aviation Consultant ██████████	January 2021

References

Ref No	Description	Hyperlinks
1	Moray Offshore Windfarm (West) Ltd Phase 1 CAA web page – progress through CAP1616	link
2	Stage 1 Assessment Meeting Presentation	link
3	Stage 1 Assessment Meeting Minutes	link
4	Stage 1 Design Principles	link
5	Stage 2 Design Options	link
6	Stage 2 Design Principle Evaluation	link
7	Stage 2 Options Appraisal (Initial) & Safety Assessment	link
8	Stage 3 Consultation Strategy	Link
9	Stage 3 Full Options Appraisal	Link
10	Stage 3 Consultation Document	Link

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1. Introduction

- 1.1 This document forms part of the document set required in accordance with the requirements of the CAP1616 airspace change process.
- 1.2 This document aims to provide adequate evidence to satisfy:
Stage 3, Step 3D Categorisation of Responses
Stage 4, Step 4A Update Design.

2. Consultation

- 2.1 MOWWL has completed a consultation focused on the introduction of the TMZ in the proposed area of the wind farm, including a 2 NM buffer zone.
- 2.2 The timeline for this proposed airspace change is fixed by an agreed target implementation date of AIRAC 01/2024 which is the target AIRAC implementation date prior to the hanging of the first blades. This has been determined by the programmed construction of the wind farm commencing Q2 2022, with the first turbine hanging and rotation Q1 2024.
- 2.3 The consultation strategy document (Ref 8) describes the focus of the consultation including previous engagement activities completed, the audience of the consultation and justification behind the consultation strategy.
- 2.4 A consultation document (Ref 10) was written for the proposed airspace change and provided to stakeholders. This included a description of the current airspace, the proposed changes and the impact of the proposal.
- 2.5 A targeted group of stakeholders were specifically engaged for this consultation. These included appropriate Air Navigation Service Providers (ANSPs), five offshore helicopter operators, relevant members of the NATMAC and the MOD. These are all listed in Annex A: List of Stakeholders. A description of engagement activities and reasoning behind why these specific stakeholders were targeted can be found in the Consultation Strategy Document (Ref 8).
- 2.6 The consultation targeted all the stakeholders listed in Annex A: List of Stakeholders but was not exclusive to this list. Any individual or organisation could submit a response; however, we only specifically targeted the organisations listed. One response was received from a non-targeted stakeholder.
- 2.7 MOWWL followed up, by telephone, stakeholders which had actively engaged with stages 1 and 2 of this ACP in the final week of the consultation if they had not already responded.
- 2.8 Stakeholders which had actively engaged with stages 1 and 2 of this ACP were sent a personalised email notifying them the consultation was closing if they had not responded by the 15th January.
- 2.9 The targeted stakeholders were sent a notification email to inform them when the consultation was live. This included information on how to respond via the online portal and that the consultation document was available to download from the portal.
- 2.10 The consultation has been conducted via an online portal which included an overview into the proposed changes, the consultation document available for download and a survey which

allowed users to submit feedback through. Stakeholders could also download and print or request a form from us to return via post. No responses were received by post.

- 2.11 A link to the consultation portal was shared on the MOWWL and NATS websites.
- 2.12 A list of the questions used in the online portal can be found in Annex C: Online Portal Questions.
- 2.13 The consultation commenced on Monday 9th November 2020 and closed on Sunday 17th January 2021; a period of ten weeks.
- 2.14 Responses have been managed and uploaded to the portal by the CAA.
- 2.15 One response, from Highlands and Islands Airports Ltd. required an email follow up which was sent on 18th January 2021.
- 2.16 Reminder emails were sent to all stakeholders, who had not submitted a consultation response, at the mid-point and at the start of the final week of consultation which included a link to the online consultation portal. This was to prompt stakeholders who wished to respond and had not done so.

3. Summary of Consultation Responses

- 3.1 A total of 13 responses were received in the 10-week consultation period. 12 of the responses were submitted via the online portal, one, the British Gliding Association, by emailing directly to the consultation mailbox which was manually uploaded to the online portal. There were no postal responses.
- 3.2 The categorisation of responses has been split into those which may impact final proposals and those which would not. This is summarised later, in Section 4 of this document.
- 3.3 Responses were received from the following targeted stakeholders: British Helicopter Association, NHV Helicopters, Bristow Helicopters- UK SAR, MCA, British Gliding Association, Defence Airspace and Air Traffic Management, NATS Aberdeen (Offshore, NATS Aberdeen (Airport), Babcock Offshore, GATCO, GAMA Aviation (for SAS), NATS (Prestwick and NERL) and Highlands and Islands Airports Ltd.
- 3.4 One response was received from a non-targeted stakeholder, PDG Aviation.
- 3.5 When asked if they supported the proposed TMZ described within the consultation document, eight of the 13 responses received specified that they SUPPORTED the ACP (62%), and five indicated that they had NO COMMENT (38%) (i.e. neither support or object). The responses are summarised below in Table 1 and Figure 1.

<i>Response ID</i>	<i>Organisation</i>	<i>Position Title</i>	<i>Do you support the airspace changes in this proposal</i>
<i>Response-1</i>	<i>British Helicopter Association</i>	<i>CEO</i>	<i>SUPPORT</i>
<i>Response-2</i>	<i>NHV Helicopters Ltd</i>	<i>UK Flight Operations Manager</i>	<i>NO COMMENT</i>
<i>Response-3</i>	<i>PDG Aviation</i>	<i>Chief Pilot</i>	<i>SUPPORT</i>
<i>Response-4</i>	<i>Bristow Helicopters/ UK SAR</i>	<i>Search and Rescue Captain</i>	<i>SUPPORT</i>
<i>Response-5</i>	<i>Bristow Helicopters/ UK SAR on behalf of MCA</i>	<i>Search and Rescue Captain</i>	<i>SUPPORT</i>
<i>Response-6</i>	<i>British Gliding Association</i>	<i>Chief Executive</i>	<i>NO COMMENT</i>
<i>Response-7</i>	<i>Defence Airspace and Air Traffic Management</i>	<i>SO2 Airspace Plans</i>	<i>NO COMMENT</i>
<i>Response-8</i>	<i>Babcock Offshore UK</i>	<i>Head of Flight Operations</i>	<i>SUPPORT</i>
<i>Response-9</i>	<i>GATCO</i>	<i>VPP</i>	<i>SUPPORT</i>
<i>Response-10</i>	<i>Gama Aviation (for SAS)</i>	<i>Head of Training (Rotary)</i>	<i>NO COMMENT</i>
<i>Response-11</i>	<i>NATS Aberdeen (Offshore and Airport)</i>	<i>Manager ATC</i>	<i>SUPPORT</i>
<i>Response-12</i>	<i>NATS (NERL and Prestwick)</i>	<i>Airspace Change Manager</i>	<i>SUPPORT</i>
<i>Response-13</i>	<i>Highlands and Islands Airports Ltd.</i>	<i>Aerodrome Operations Manager</i>	<i>NO COMMENT</i>

Table 1: Responses Overview

Do you Support the Airspace Change Described in this Proposal?

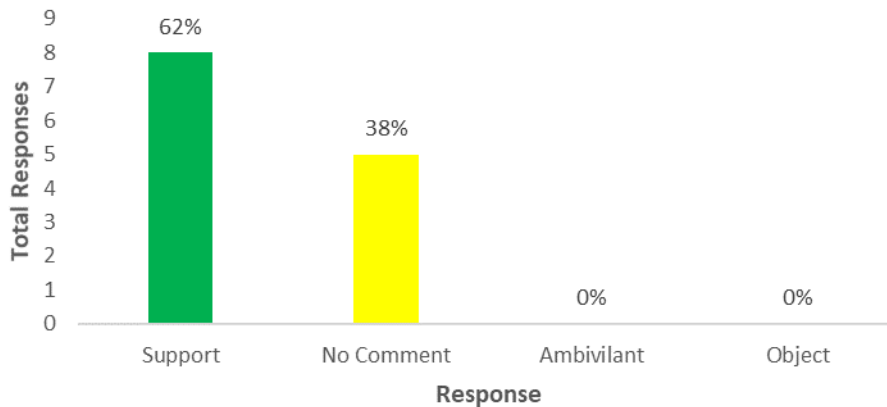


Figure 1: Consultation Responses to Proposed Airspace Change

3.6 Overall, the airspace change is supported:

- 62% of responses Support the proposed change;
- 38% have No Comment (neither support or object);
- No responses were ambivalent (have mixed feelings)
- There were no objections made to the proposal.

3.7 The online portal invited comments on the proposed changes. These have been reviewed and are summarised in Section 4.

4. Categorisation of Consultation Responses and Themes

4.1 The responses received have been reviewed; some comments had several different elements.

4.2 The responses and associated elements have been broken down into two types: those which may lead to changes of the proposed design and those which do not. These have been split out in Sections 4.6 and 4.7 below.

4.3 One response element was identified as having a potential impact on the final proposed design. This is summarised in Table 2, Section 4.6 overleaf along with MOWWL's response.

4.4 Twelve responses were evaluated as not having an impact on the final proposed design. These are summarised in Table 3, Section 4.7.

4.5 This consultation complies with the CAP1616's "We asked, you said, we did" approach.

4.6 Responses which may impact the final proposal

The following response had the potential to impact on the proposed design. Table 2 below summarises MOWWL's response to this feedback:

<i>Element Number</i>	<i>Response ID</i>	<i>Summary</i>	<i>Themes of comment</i>	<i>Potential impact on the proposal</i>	<i>MOWWL response/ action</i>
1	Response-2	Supports the proposal but questions the size of the TMZ	Size of TMZ	TMZ could cover a smaller area	<p>The size of the TMZ is the minimum size which incorporates a 2 NM buffer for ATC awareness and aligns with the boundaries of existing Moray Firth TMZ. This produces an easy to define polygon which is preferable from a human factor perspective whilst giving ATC the time to spot and react should a non-transponding aircraft infringe the ATZ. The proposed 2NM buffer is also compatible with the adjoining TMZ, which also uses a 2NM buffer. Two options featuring smaller TMZs, either not incorporating the buffer or not aligning with the existing TMZ were eliminated as options during Stage 2 of the CAP1616 process.</p> <p>This Element has been considered and will not impact on the final design.</p>

Table 2: Responses which may impact the final proposal

The response, Response-2, had the potential to impact the final design. The response was considered, and discounted. Hence it will not change the final design.

There are no changes to the final design as a result of consultation feedback.

4.7 Responses which do not impact the final proposal

The following twelve responses do not contain any new information or suggestions that could lead to an adaptation in the final proposed design. Additional relevant feedback is captured, including any actions or considerations arising. Table 3 below summarises these responses.

	<p>mitigation until an enduring technical mitigation solution is found and implemented. For NATS we understand it is an enduring solution hence, we believe, why the application is for the Allanshill radar with MOD being a consultee.</p> <p>[REDACTED]</p>		<p>relevant to the design of the PRMS.</p>	
Response-8	<p>No comments. All our company aircraft are transponder equipped.</p>	<p>General</p>	<p>No comments containing new information or suggestions relevant to the design of the PRMS.</p>	<p>N/A</p>
Response-9	<p>GATCO feels the use of a TMZ in regards to wind farm interference is suitable mitigation to the issues they cause to identifying aircraft in the vicinity. We have no objection.</p>	<p>General</p>	<p>No comments containing new information or suggestions relevant to the design of the PRMS.</p>	<p>N/A</p>
Response-10	<p>This TMZ will have no real impact on the GAMA SAS Air-ambulance Helimed02 service delivery out of Inverness.</p>	<p>General</p>	<p>No comments containing new information or suggestions relevant to the design of the PRMS.</p>	<p>N/A</p>
Response-11	<p>The view of NATS Aberdeen (Offshore and Airport), is that we are happy with the proposal to mitigate the effect on our surveillance systems by the introduction of this TMZ.</p>	<p>General</p>	<p>No comments containing new information or suggestions relevant to the design of the PRMS.</p>	<p>N/A</p>
Response-12	<p>NATS considers that the proposed TMZ with RAG blanking as described is a suitable primary radar mitigation scheme against the issues the proposed development will cause with our radar surveillance capability. The incorporation of the 2nm buffer surrounding the RAG blanked area is</p>	<p>General</p>	<p>No comments containing new information or suggestions relevant to the design of the PRMS.</p>	<p>N/A</p>

essential to maintain controller awareness of (and ability to react to) potential infringements.

Response-13

• What do you believe will be the impact of the TMZ on your operation?

Requirement for impact assessment against unit documents. Likely to be no additional impact to current operations at Wick Airport not already mitigated and catered for under provisions within the Letter of Agreement between HIAL (Wick Airport) and the MOD (RAF Lossiemouth). As before, the recommendation simply builds on the CONOPs of the MOREL and BOWL turbine RAG blanking/TMZ, therefore, both parties will need to extend the scope within the LoA to include MOWL transits etc
Potential increased workload coordinating aircraft unable to comply with TMZ requirements

• How often do you think these impacts will occur?

Infrequent workload issue, likely at most single digit occasions per month

• Do you have any suggested mitigations or design changes you think should be considered?

Will the current requirements for entering a TMZ be retained? (ie Mode S compliant transponder) ATC units that can receive ADS-B data are few and far between, even if ADS-B compliant kit were fitted in an aircraft
In the future, HIAL will have installed surveillance capability, under the auspices of the HIAL ATMS 2030 strategy, for the purposes of providing an approach radar service rather than a procedural approach service into Kirkwall and Wick. Furthermore, it is also the intention of the HIAL ATMS strategy to adjust the level of service at Wick Airport from ATC to AFIS. The MOWWL development team should consider the impact of these changes on service provision and airspace sharing agreements in the vicinity of the MOWWL, as will HIAL and the MOD in respect of any LoA agreements currently in place.

• Do you think there may be any unintended consequences of the TMZ?

General

No comments containing new information or suggestions relevant to the design of the PRMS.

N/A

Potential for increase in aircraft routing west and south of EGD703 if unable or unwilling to comply with TMZ entry requirements.

Table 3: Responses which do not impact the final proposal

5. Step 4A Update Design

- 5.1 Sections 1-4 of this document complete the CAP1616 “we ask, you said” approach.
- 5.2 This section completes the CAP1616 “you said, we did” approach.
- 5.3 One response was received, see Table 2, which might have impacted the final design of this ACP.
- 5.4 This response was considered, and it was decided that no modification to the design was required as a result of this feedback.
- 5.5 Thus, this proposal remains the same as it was described in the consultation document (Ref 10).

6. Conclusion and Next Steps

- 6.1 This document will be published onto the Moray Offshore Wind Farm (West) Ltd. CAA web page alongside the documents referenced on Page 3.
- 6.2 Sections 1-4 completed the Sep 3D “we ask, you said”. Section 5 completed the Step 4A “you said, we did”.
- 6.3 With Steps 3D and 4A completed by this document, the next step will be to publish the formal Airspace Change Proposal and submit this to the CAA.
- 6.4 Should this proposal be approved, it would be implemented in AIRAC 01/2024.

7. Reversion Statement

- 7.1 MOWWL considers this consultation to be the ‘do minimum’ option. A ‘do nothing’ option would not provide mitigation against radar clutter. Should the proposal be approved and implemented, it would not be possible to revert to the pre-implementation state without affecting NATS ATC operations. The proposed changes would permanently change the airspace structure.
- 7.2 In the unlikely event that there are unexpected issues caused by this proposal, then short notice changes could be made via NOTAM. For a permanent reversion, the changes would have to be reversed by incorporating this into an appropriate future AIRAC date to align with NATS’ engineering updates; of which there are only four a year

8. Annex A: List of Stakeholders

Type	Stakeholder
NATMAC	Aircraft Owners and Pilots Association (AOPA)
	Airlines UK
	Airport Operators Association (AOA)
	ARPAS - Association of Remotely Piloted Aircraft Systems
	Aviation Environment Federation (AEF)
	BAe Systems
	BBAC - British Balloon & Airship Club
	BHPA - British Hang gliding & Paragliding Association
	BMAA - British Microlight Aircraft Association
	BMFA - British Model Flying Association
	British Sky Diving
	British Airline Pilots Association (BALPA)
	British Business and General Aviation Association (BBGA)
	British Helicopter Association (BHA)
	BGA- British Gliding Association
	GAA- General Aviation Alliance
	Guild of Air Traffic Control Officers (GATCO)
	Heavy Airlines
	Helicopter Club of Great Britain (HCGB)
	Light Aircraft Association (LAA)
Low Fare Airlines	
MOD DAATM	
PPL/IR (Europe)	
British Airways (BA)	
Helicopter Operators	Babcock Helicopters
	Bristow Helicopters
	CHC Scotia
	NHV Helicopters
	Maritime and Coastguard Agency (MCA)
	PDG Aviation
ATC	Aberdeen ATC
	Highlands and Islands Airports Ltd (HIAL)
	NATS En Route Limited (NERL)
	NATS Prestwick
Airports	AGS Airports Limited, Aberdeen
	Wick Airport
	Inverness Airport

9. Annex B: Stakeholder Engagement Evidence

9.1 Email sent to Stakeholders Informing them of Consultation Launch 9th November 2020

Dear colleague,

Introduction of a New Transponder Mandatory Zone in the Moray Firth

Moray Offshore Wind Farm (West) Ltd. would like to invite you to respond to the above consultation, regarding the introduction of a new Transponder Mandatory Zone in the Moray Firth.

The consultation is open for 10 weeks from 9th November 2020 to 17th January 2021.

The consultation material is available, including the consultation document, on the CAA's Airspace Change portal using the following link:

<https://airspacechange.caa.co.uk/PublicProposalArea?PID=197>

Please take the time to consider this proposal and complete the short questionnaire provided on the portal. If you need to provide additional documents as part of your response there is the facility to do this. All feedback is valuable, even if you support, object or ambivalent to these proposed changes.

Kind regards



NATS Airspace Change Team

9.2 Email reminder sent to Stakeholders midway through Consultation 7th December 2020

Dear Colleague,

Please see the email below relating to a consultation Moray Offshore Wind Farm (West) Ltd. is currently undertaking regarding **Introduction of a New Transponder Mandatory Zone in the Moray Firth** which opened on the 9th November.

If you have already responded thank you for your time. If not, this consultation closes on the 17th January, in 5 weeks' time. If you would like to provide feedback please do so before this date. We would value any input you provide.

Kind regards



NATS Airspace Change Team

From: Airspace Consultation <[REDACTED]>

Sent: 09 November 2020 09:21

Subject: Introduction of a New Transponder Mandatory Zone in the Moray Firth Consultation

Dear colleague,

Introduction of a New Transponder Mandatory Zone in the Moray Firth

Moray Offshore Wind Farm (West) Ltd. would like to invite you to respond to the above consultation, regarding the introduction of a new Transponder Mandatory Zone in the Moray Firth.

The consultation is open for 10 weeks from 9th November 2020 to 17th January 2021.

The consultation material is available, including the consultation document, on the CAA's Airspace Change portal using the following link:

<https://airspacechange.caa.co.uk/PublicProposalArea?PID=197>

Please take the time to consider this proposal and complete the short questionnaire provided on the portal. If you need to provide additional documents as part of your response there is the facility to do this. All feedback is valuable, even if you support, object or ambivalent to these proposed changes.

Kind regards

[REDACTED]

NATS Airspace Change Team

9.3 Final Email reminder sent to Stakeholders 11th January 2021

Dear Colleague,

Please see the email below relating to a consultation Moray Offshore Wind Farm (West) Ltd. is currently undertaking regarding **Introduction of a New Transponder Mandatory Zone in the Moray Firth** which opened on the 9th November.

If you have already responded thank you for your time. If not, this consultation closes on the 17th January, in 7 days time. If you would like to provide feedback please do so before this date. We would value any input you provide.

Kind regards

[REDACTED]

NATS Airspace Change Team

From: Airspace Consultation <[REDACTED]>
Sent: 09 November 2020 09:21
Subject: Introduction of a New Transponder Mandatory Zone in the Moray Firth Consultation

Dear colleague,

Introduction of a New Transponder Mandatory Zone in the Moray Firth

Moray Offshore Wind Farm (West) Ltd. would like to invite you to respond to the above consultation, regarding the introduction of a new Transponder Mandatory Zone in the Moray Firth.

The consultation is open for 10 weeks from 9th November 2020 to 17th January 2021.

The consultation material is available, including the consultation document, on the CAA's Airspace Change portal using the following link:

<https://airspacechange.caa.co.uk/PublicProposalArea?PID=197>

Please take the time to consider this proposal and complete the short questionnaire provided on the portal. If you need to provide additional documents as part of your response there is the facility to do this. All feedback is valuable, even if you support, object or ambivalent to these proposed changes.

Kind regards

[REDACTED]

NATS Airspace Change Team

9.4 Follow up Final Email to CHC Scotia 15th January 2021

Dear [REDACTED],

I am writing as you have previously engaged with us relating to the Moray West Windfarm ACP. I am sure you are aware that the closing date for the consultation is this weekend, 17th January.

If you would like to respond a link to the consultation material is below:

<https://airspacechange.caa.co.uk/PublicProposalArea?PID=197>

Kind regards

[REDACTED]

NATS

[REDACTED]

Airspace Change Specialist

E: [REDACTED]
[REDACTED]

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

9.5 Email responding to HIAL Feedback 18th January 2021

Dear Safeguarding,

Thank you for your neutral (NO COMMENT) feedback to our Consultation on the implementation of a new TMZ in the Moray Firth.

With regards to the points you raised, we are cognisant that the LOA between yourself and Lossiemouth will need to be updated prior to the implementation of this change. It would be beneficial if you could provide us with a copy of the current LOA so that we can review and inform the CAA of the changes that will be required as part of the ACP submission.

With regards to your question on the entry requirements, the new TMZ will be an extension of the existing Moray Firth TMZ. As such it will have identical entry requirements.

Thank you for advising us of the HIAL ATMS 2030 strategy. We envisage that the Moray West TMZ will be an integral part of the airspace environment and will be fully compatible with your aspirations.

Kind regards

[REDACTED]

10. Annex C: Online Portal Questions

The following questions were included in the online portal for users to complete. Imposed answers have also been shown below, alongside whether the question was mandatory or not.

1. What is your name? (*Mandatory*)
2. What is your email address? (*Mandatory*)
3. Please enter your postcode, UK only. (Most relevant to your response home/ work/ organisation etc.) (*Optional*)
4. If responding from outside the UK, please supply an address or location description. (*Optional*)
5. Who are you representing? - Representing (*Mandatory*)
 - a. I am responding as an individual (If the user selects this, Q6–8 will not be provided)
 - b. I am responding on behalf of an organisation (If the user selects this, Q6–8 will be provided)
6. In accordance with the UK Civil Aviation Authority's CAP 1616 airspace change process, consultation responses will be published on Citizen Space via the Airspace Change Portal. Responses will be subject to moderation by the Civil Aviation Authority. If you wish your response to be published anonymously your personal details (Name, Address & Position) will be redacted and only be seen by the Civil Aviation Authority? (*Mandatory*)
 - a. Yes – I want my response to be published with my details
 - b. No – I want my response to be published anonymously
7. What is your organisation name? (*Mandatory* – if answered "b" to Q4)
8. What is your position/ title? (*Optional*)
9. Do you support the introduction of the TMZ described in this proposal? (*Mandatory*)
 - a. SUPPORT – I support the proposed changes
 - b. NO COMMENT – I neither support or object
 - c. AMBIVALENT – I have mixed feelings
 - d. OBJECT – I object to the proposed changes
10. Please give your feedback comments on the overall proposal.
Please Consider:
 - What do you believe will be the impact of the TMZ on your operation?
 - How often do you think these impacts will occur?
 - Do you have any suggested mitigations or design changes you think should be considered?
 - Do you think there may be any unintended consequences of the TMZ?(Optional) Blank text box
11. Upload a document. (*Optional*)
12. Do you have any comments on the consultation content? (*Optional*) Blank text box