



Morven South Offshore Wind Array Project

Environmental Impact Assessment Report

**Volume 3, Annex 15.2: Aviation (Military and Civil)
Shared IFP Assessment**

MVCNS-J1201-RPS-10149
May 2026

B01

Document status

| Version | Purpose of document | Authored by | Checker | Approved by | Date |
|---------|---------------------|-------------|---------|-------------|----------|
| FINAL | Application | Sagentia | TTRPSEL | MvOWL | May 2026 |

The report has been prepared for the exclusive use and benefit of our client and solely for the purpose for which it is provided. Unless otherwise agreed in writing by Tetra Tech RPS Energy Ltd, any of its subsidiaries, or a related entity (collectively 'Tetra Tech RPS Energy') no part of this report should be reproduced, distributed or communicated to any third party. Tetra Tech RPS Energy does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report.

The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. The report has been prepared using the information provided to Tetra Tech RPS Energy by its client, or others on behalf of its client.

To the fullest extent permitted by law, Tetra Tech RPS Energy shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by Tetra Tech RPS Energy, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to Tetra Tech RPS Energy without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

TTRPSEL

Prepared for:

Morven Offshore Wind Limited



Aberdeen Airport – Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project

Safeguarding of Instrument Flight Procedures

Date: 10/04/2025
Author: Chris Latus
Revision: Issue 1.2
Osprey Ref: 71757-006

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2025
Harston Mill, Royston Road, Harston, Cambridge, CB22 7GG
01172 422 533/ enquiries@ospreycl.co.uk
Registered in England and Wales under No: 06034579



Document Details

| Reference | Description |
|-----------------------|--|
| Document Title | Aberdeen Airport – Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project |
| | Safeguarding of Instrument Flight Procedures |
| Document Ref | 71757-006 |
| Issue | Issue 1.2 |
| Date | 10/04/2025 |
| Client Name | Tetra Tech RPS Energy Limited |
| Classification | Commercial in Confidence |

| Issue | Amendment | Date |
|-----------|--------------|------------|
| Issue 1 | Client Issue | 13/03/2025 |
| Issue 1.1 | Minor edits | 19/03/2025 |

Date: 10/04/2025
 Author: Chris Latus
 Revision: Issue 1.2
 Osprey Ref: 71757-006

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2025
 Harston Mill, Royston Road, Harston, Cambridge, CB22 7GG
 01172 422 533/ enquiries@ospreycl.co.uk
 Registered in England and Wales under No: 06034579



COMMERCIAL IN CONFIDENCE

| Issue | Amendment | Date |
|-----------|---------------------------------------|------------|
| Issue 1.2 | Final Version following client review | 10/04/2025 |

| Approval Level | Authority | Name |
|------------------|------------|-----------------|
| APD | Osprey CSL | Chris Latus |
| IAPD | Osprey CSL | Sam Shuttlewood |
| Design Authority | Osprey CSL | Mark Wakeman |

Date: Tetra Tech RPS Energy Limited

Author: Chris Latus

Revision: Issue 1.2

Osprey Ref: 71757-006

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2025

Harston Mill, Royston Road, Harston, Cambridge, CB22 7GG

01172 422 533/ enquiries@ospreycl.co.uk

Registered in England and Wales under No: 06034579



Executive Summary

Osprey CSL has been commissioned by Tetra Tech RPS Energy Limited to assess the potential impact of two proposed Offshore wind farm developments named Morven North Offshore Wind Array Project and Morven South Offshore Wind Array Project (hereafter, Morven North and Morven South) on the published Instrument Flight Procedures (IFPs) that serve Aberdeen Airport.

The findings are as follows:

IFPs

The proposed wind farms, Morven North and Morven South, will have no effect on the published IFPs for Aberdeen Airport.

Table of Contents

| | | |
|----------|---|-----------|
| 1 | Introduction | 7 |
| 1.1 | Background..... | 7 |
| 1.2 | Scope of the Assessment | 7 |
| 1.3 | Proposed Development Site Location & Details | 7 |
| 1.4 | Copyright..... | 9 |
| 2 | Instrument Flight Procedure Assessment | 10 |
| 2.1 | IFP Assessment | 10 |
| 3 | Summary | 20 |

Table of Figures

| | |
|--|----|
| Figure 1 – Combined Morven Windfarm | 7 |
| Figure 2 – Morven North Windfarm in relation to Aberdeen Airport | 8 |
| Figure 3 – Morven South Windfarm in relation to Aberdeen Airport | 8 |
| Figure 4 – ATCSMAC..... | 11 |
| Figure 5 – ILS/DME RWY 16..... | 12 |
| Figure 6 – VOR/DME RWY 16 | 13 |
| Figure 7 – ILS/DME RWY 34..... | 14 |
| Figure 8 – VOR/DME RWY 34 | 15 |
| Figure 9 – NDB(L)/DME RWY 34..... | 16 |
| Figure 10 – Circling..... | 17 |
| Figure 11 – Combined Morven North and Morven South Windfarm and MSA NDB(L) ATF | 18 |
| Figure 12 – Combined Morven North and Morven South Windfarm and MSA ARP | 18 |
| Figure 13 – Combined Morven North and Morven South Windfarm and MSA VOR ADN..... | 19 |

1 Introduction

1.1 Background

Osprey CSL has been commissioned by Tetra Tech RPS Energy Limited to assess the potential impact of two proposed Offshore Wind Farm developments named Morven North and Morven South on the published Instrument Flight Procedures (IFPs) that serve Aberdeen Airport.

1.2 Scope of the Assessment

This report assesses the development in relation to the IFPs and has been completed with the use of the Airport's AD 2 – EGPD sourced from the UK AIP, AIRAC 04/2025, effective date 17th April 2025.

1.3 Proposed Development Site Location & Details

1.3.1 Location

The array site boundaries for both Morven North and Morven South were provided to Osprey¹. The KML data was converted and imported into the AutoCAD WGS84 model.



Figure 1 – Combined Morven Wind Farm

¹ Via email provided by Tetra Tech RPS on 20/02/25 14:30

COMMERCIAL IN CONFIDENCE

The closest point of Morven North to the Aberdeen Airport Aerodrome Reference Point (ARP) is 74.29 kilometres (km) or 40.11 Nautical Miles (NM).

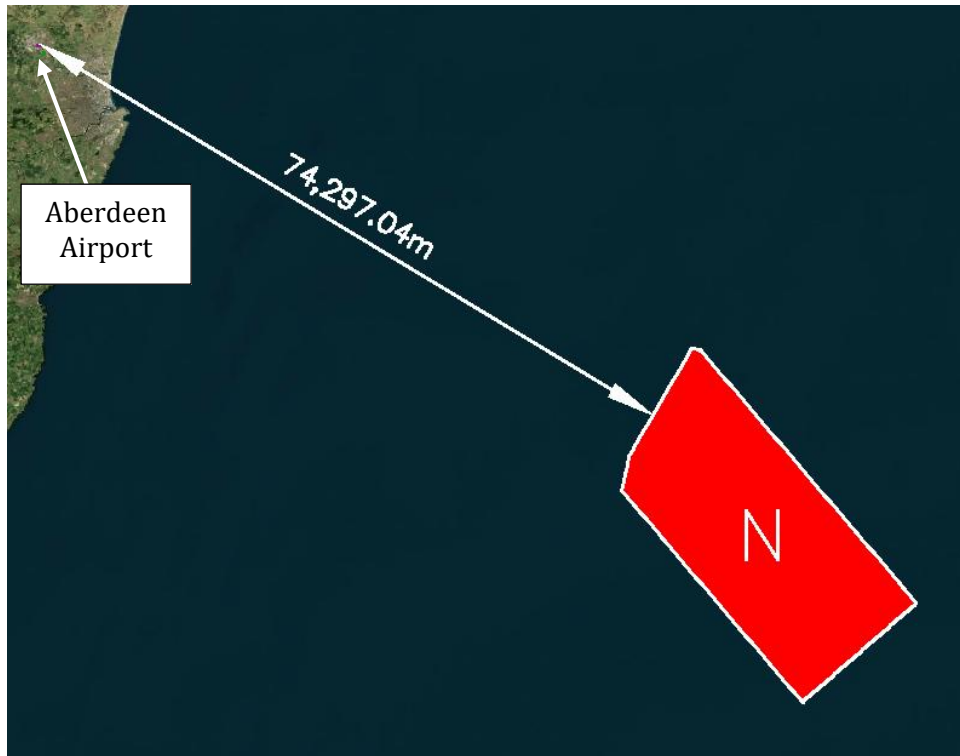


Figure 2 – Morven North Wind Farm in relation to Aberdeen Airport

The closest point of Morven South to the Aberdeen Airport ARP is 104.43 km or 56.39 NM.



Figure 3 – Morven South Wind Farm in relation to Aberdeen Airport

1.3.2 Elevation

The turbine array development boundaries for both Morven North and Morven South have a fixed elevation of 363m Above Mean Sea Level (AMSL) for the purpose of the IFP assessment. The accurate maximum tip height is confirmed to be 363m Lowest Astronomical Tide (LAT); however, as this equates to a value less than 363m AMSL, and as elevations in aviation are referenced to sea level, the value of 363m (1191ft) AMSL is used for assessment.

1.4 Copyright

All satellite background imagery shown in the Figures of this report are from Autodesk AutoCAD 2019 and copyrighted as follows:

© 2025 Microsoft Corporation.

© 2025 Maxar.

© CNES (2025) Distribution Airbus DS.

2 Instrument Flight Procedure Assessment

2.1 IFP Assessment

The ATCSMAC and IFPs assessed are as follows:

AIRAC 04/2025 Effective 17th April 2025

- AD 2.EGPD-5-1 ATC SURVEILLANCE MINIMUM ALTITUDE CHART (17 Apr 25);
- AD 2.EGPD-5-2 ATC SURVEILLANCE MINIMUM ALTITUDE TEXT (03 MAR 16);
- AD 2.EGPD-8-1 ILS/DME RWY 16 (26 Dec 24);
- AD 2.EGPD-8-2 LOC/DME RWY 16 (26 Dec 24);
- AD 2.EGPD-8-3 VOR/DME RWY 16 (26 Dec 24);
- AD 2.EGPD-8-4 ILS/DME RWY 34 (26 Dec 24);
- AD 2.EGPD-8-5 LOC/DME RWY 34 (26 Dec 24);
- AD 2.EGPD-8-6 VOR/DME RWY 34 (26 Dec 24);
- AD 2.EGPD-8-7 NDB(L)/DME RWY 34 (26 Dec 24).

2.1.1 ATCSMAC

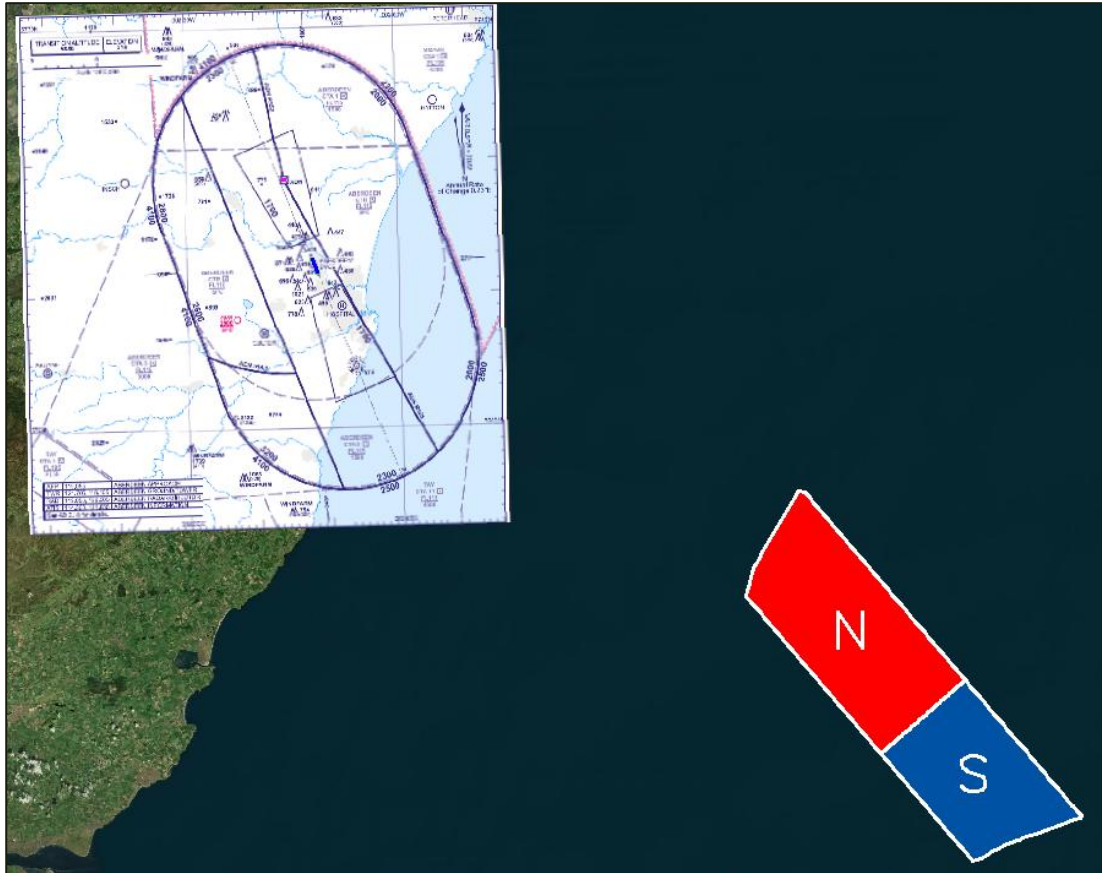


Figure 4 – ATCSMAC

Morven North and Morven South lie outside of the lateral buffer of the ATCSMAC, which is 5 Nautical Miles (NM).

Both wind farms need to be considered against the Minimum Sector Altitude (MSA) associated with the ATCSMAC.

As identified in Section 2.1.11, both wind farms lie outside the MSA predicated on the Aerodrome Reference Point (ARP).

Morven North – No Impact.

Morven South – No Impact.

2.1.2 ILS/DME RWY 16

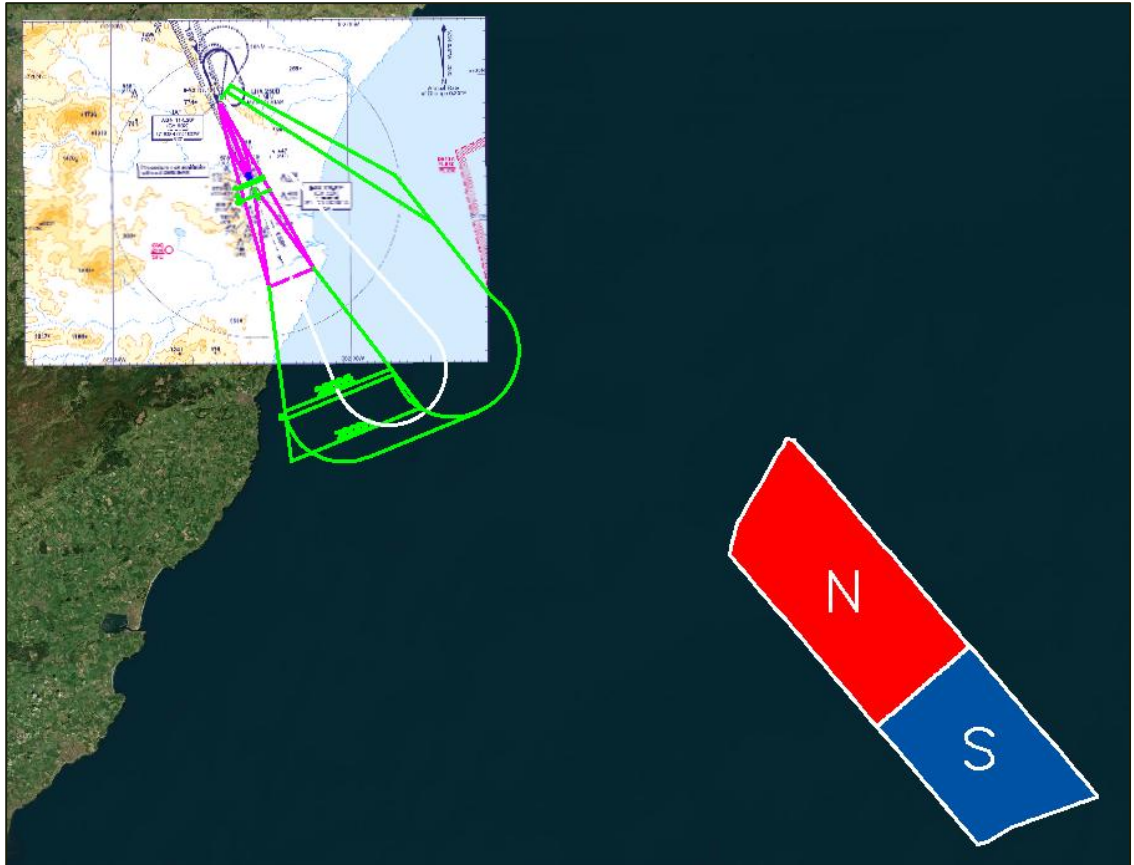


Figure 5 – ILS/DME RWY 16

Morven North and Morven South lie outside of the protection areas associated with the procedure, including the Initial and Intermediate Approach, the ILS Obstacle Assessment Surfaces (OAS), and the Missed Approach and Radio Communications Failure (RCF) procedure.

Morven North – No Impact.

Morven South – No Impact.

2.1.3 LOC/DME RWY 16

The LOC/DME procedure shares common and similar protection areas to that of the ILS/DME procedure which have previously been assessed, see Section 2.1.2.

Morven North – No Impact.

Morven South – No Impact.

2.1.4 VOR/DME RWY 16

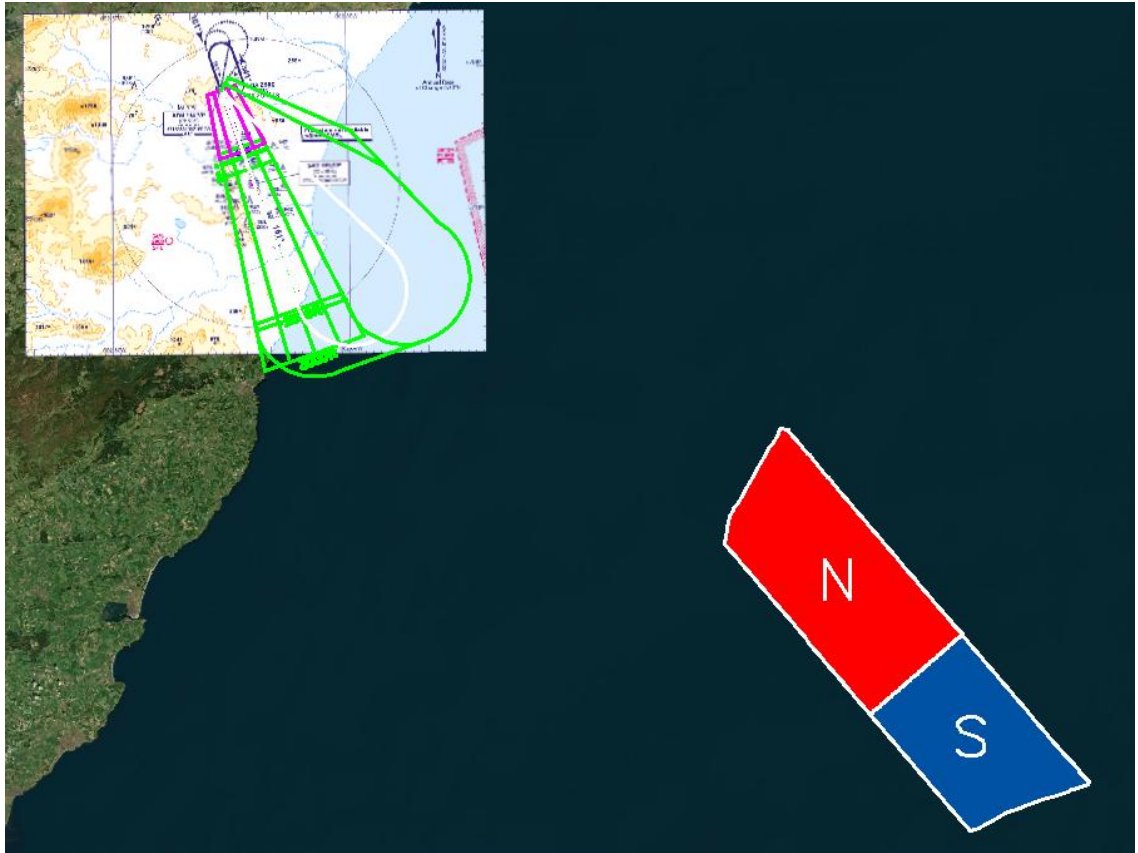


Figure 6 – VOR/DME RWY 16

Morven North and Morven South lie outside of the protection areas associated with the procedure, including the Initial Approach, Intermediate Approach, Final Approach and the Missed Approach and RCF procedure.

Morven North – No Impact.

Morven South – No Impact.

2.1.5 ILS/DME RWY 34

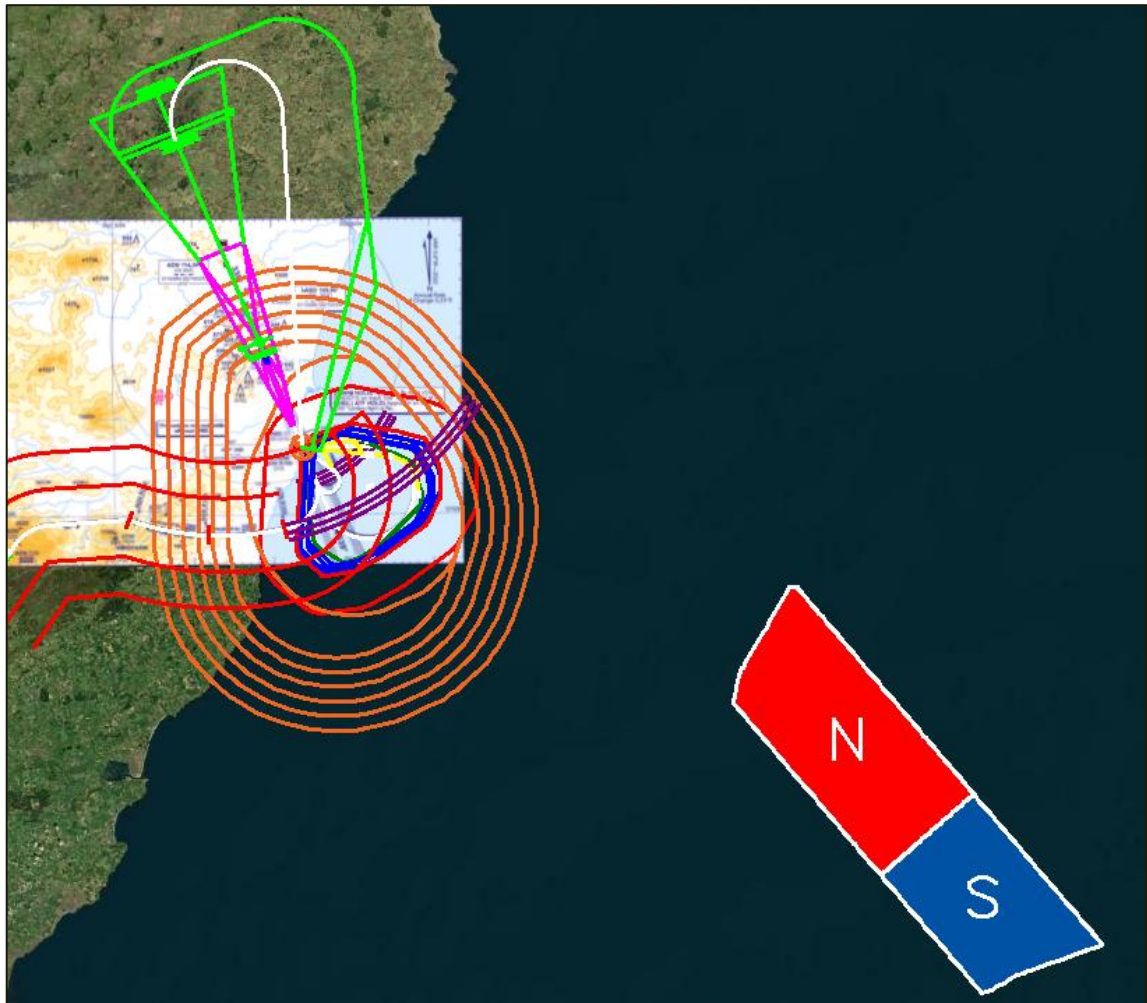


Figure 7 – ILS/DME RWY 34

Morven North and Morven South lie outside of the protection areas associated with the procedure, including the Direct Arrival, Initial and Intermediate Approach, ILS OAS, Missed Approach, RCF procedure and Hold*.

*Note: The Hold overhead the NDB(L) ATF is constructed and shown. The Hold at point 'DOWN1', ADN VOR R160/15D, is not shown but will be unaffected.

Morven North – No Impact.

Morven South – No Impact.

2.1.6 LOC/DME RWY 34

The LOC/DME procedure shares common and similar protection areas to that of the ILS/DME procedure which have previously been assessed, see Section 2.1.5.

Morven North – No Impact.

Morven South – No Impact.

2.1.7 VOR/DME RWY 34

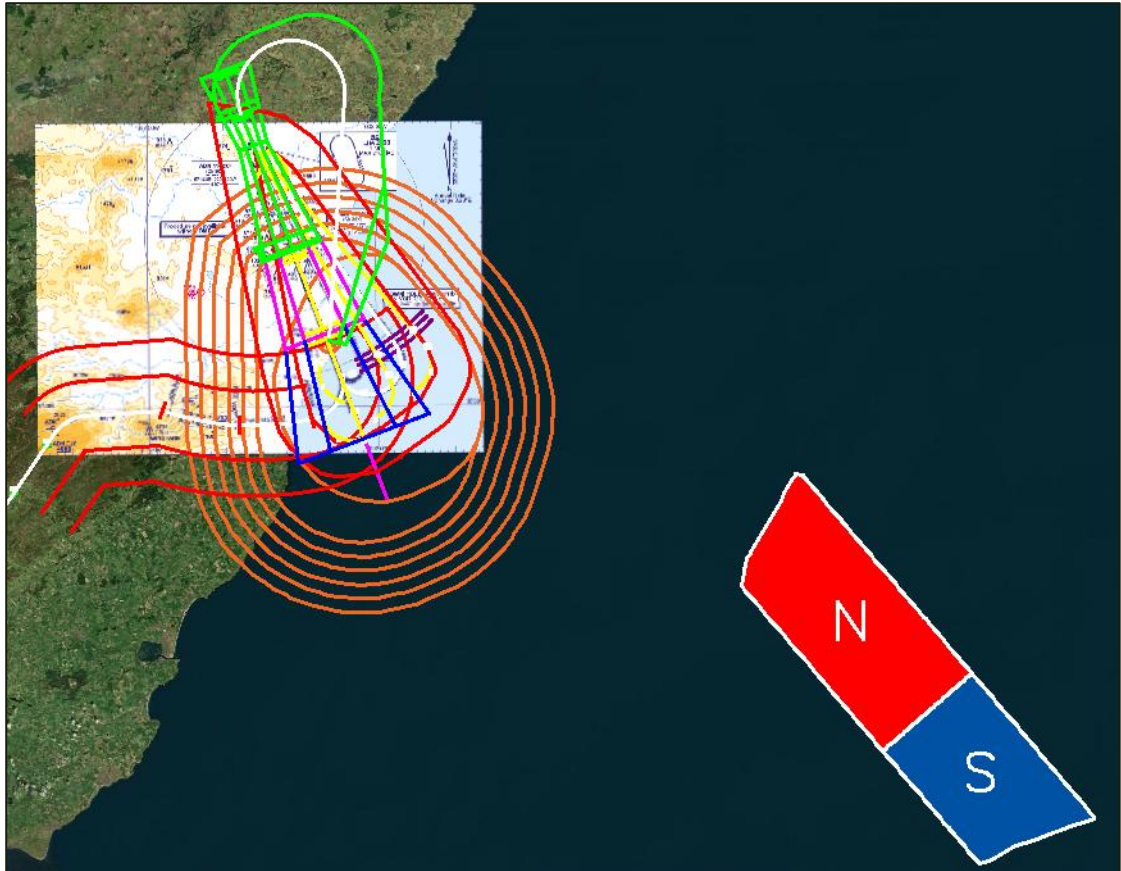


Figure 8 – VOR/DME RWY 34

Morven North and Morven South lie outside of the protection areas associated with the procedure, including the Direct Arrival, Initial Approach, Intermediate Approach, Final Approach, Missed Approach, RCF procedure and Hold*.

*Note: The Hold overhead the NDB(L) ATF is constructed and shown. The Hold at point 'DOWNI', ADN VOR R160/15D, is not shown but will be unaffected.

Morven North – No Impact.

Morven South – No Impact.

2.1.8 NDB(L)/DME RWY 34

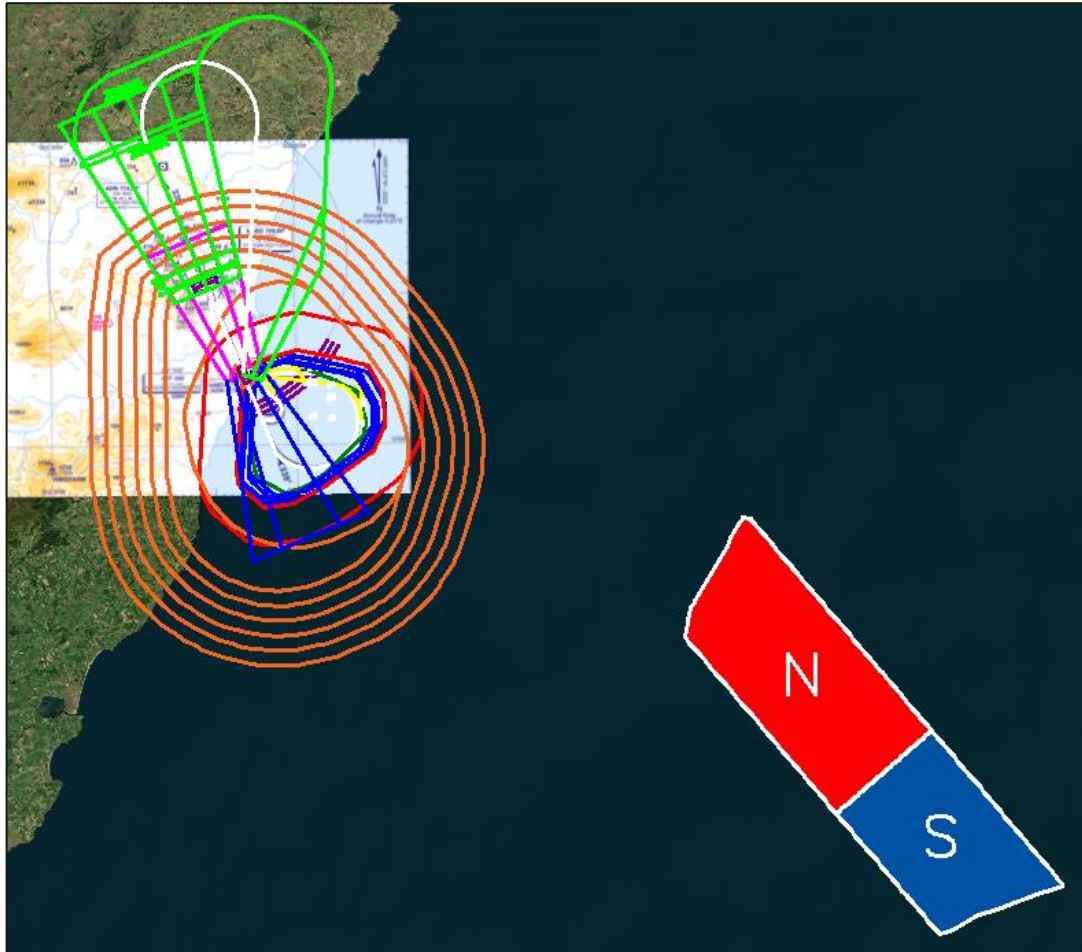


Figure 9 – NDB(L)/DME RWY 34

Morven North and Morven South lie outside of the protection areas associated with the procedure, including the Initial Approach, Intermediate Approach, Final Approach, Missed Approach, RCF procedure and Hold.

Morven North – No Impact.

Morven South – No Impact.

2.1.9 Circling

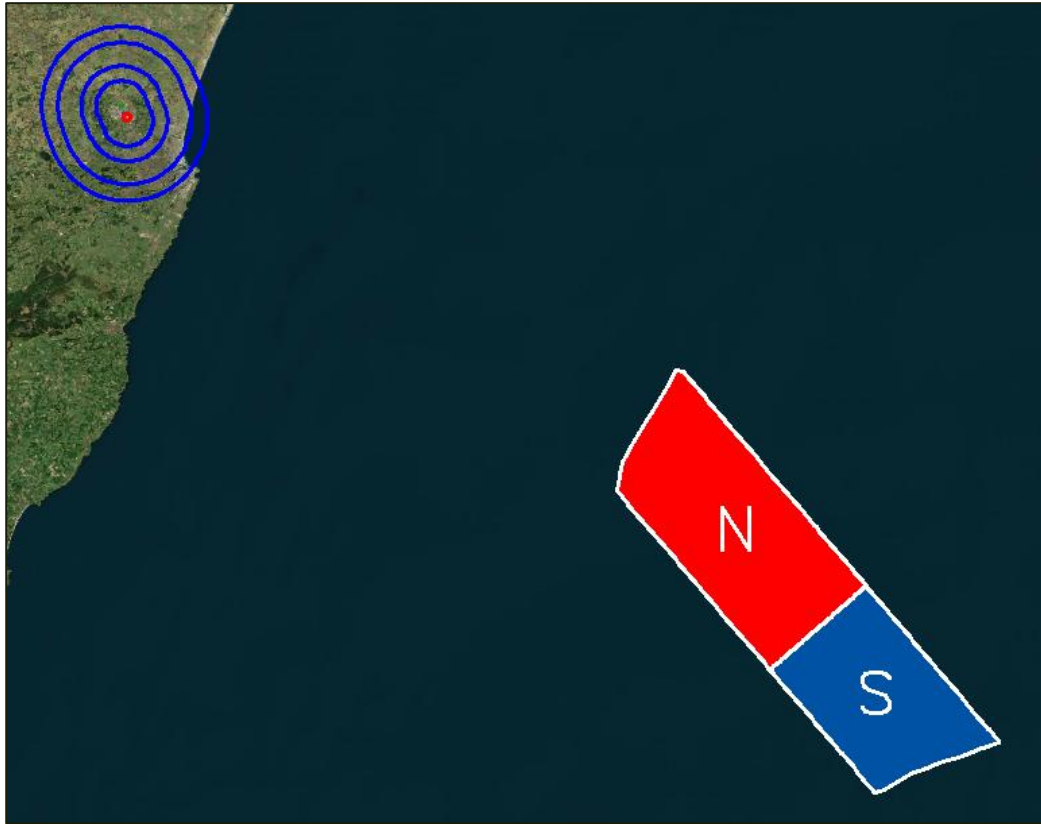


Figure 10 – Circling

Morven North and Morven South lie outside the lateral confines of the circling areas for Aircraft Categories A, B, C and D.

Morven North – No Impact.

Morven South – No Impact.

2.1.10 Holding

As analysed in the Instrument Approach Procedures, Morven North and Morven South lie outside all the holding / racetrack protection areas and their associated buffers – therefore would not affect any of the Holds for Aberdeen Airport.

Morven North – No Impact.

Morven South – No Impact.

COMMERCIAL IN CONFIDENCE

2.1.11 Minimum Sector Altitude (MSA)

Morven North and Morven South lie outside of the lateral extent of the MSA ARP, MSA NDB(L) ATF and MSA VOR ADN areas:

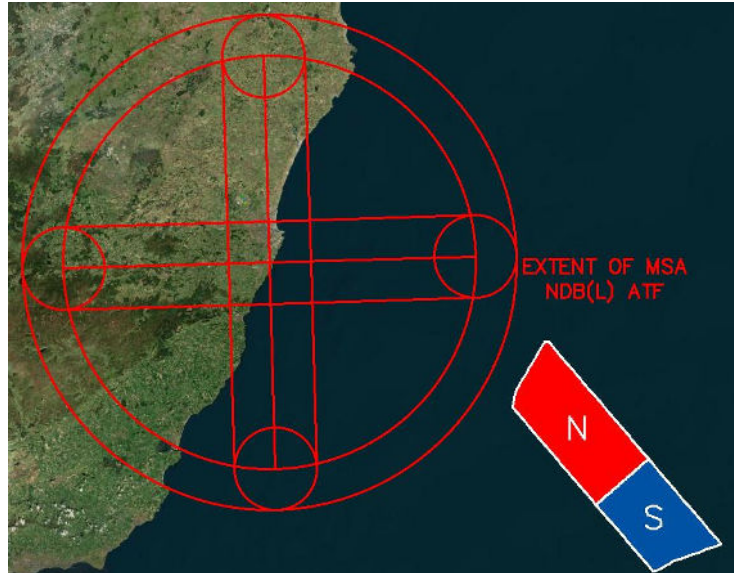


Figure 11 – Combined Morven North and Morven South Wind Farm and MSA NDB(L) ATF

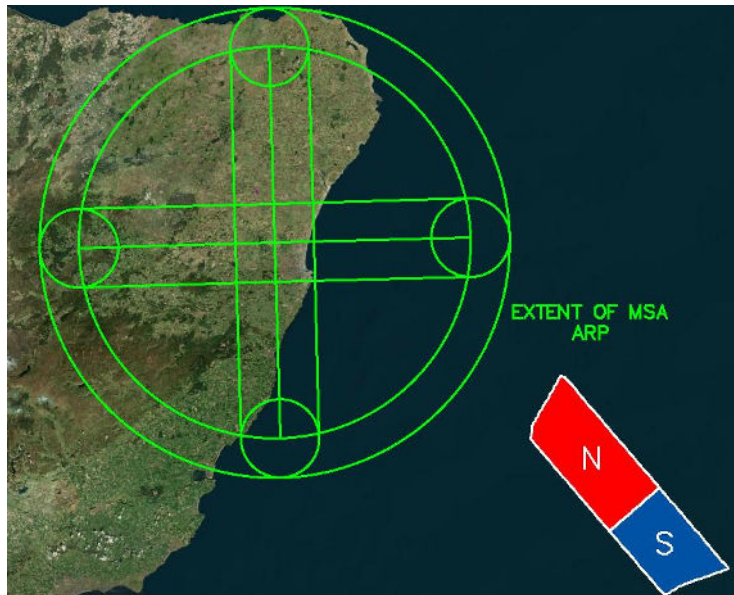


Figure 12 – Combined Morven North and Morven South Wind Farm and MSA ARP

COMMERCIAL IN CONFIDENCE

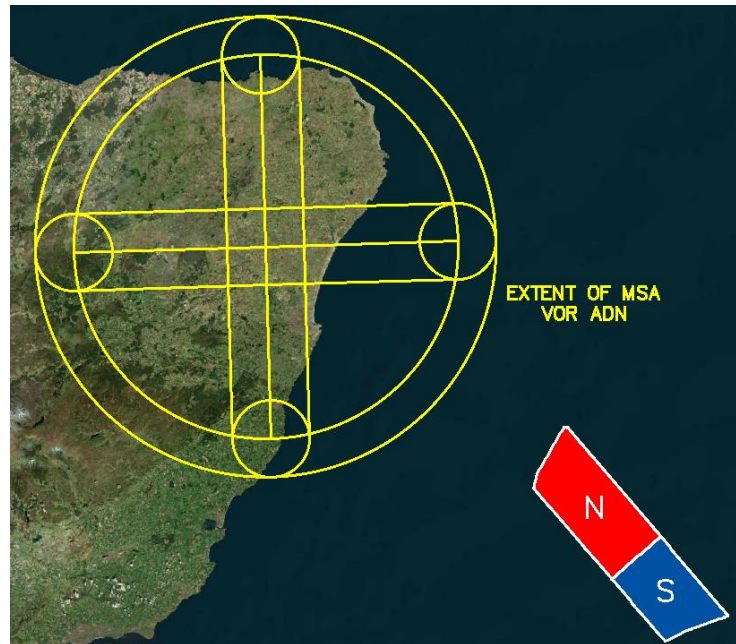


Figure 13 – Combined Morven North and Morven South Wind Farm and MSA VOR ADN

Morven North – No Impact.

Morven South – No Impact.

2.1.12 Visual Segment Surface

Morven North and Morven South lie outside the obstacle protection areas associated with the Visual Segment Surfaces.

Morven North – No Impact.

Morven South – No Impact.

COMMERCIAL IN CONFIDENCE

3 Summary

The proposed wind farms, Morven North and Morven South, will have no effect on the published IFPs for Aberdeen Airport.