



Spiorad na Mara Offshore Wind Farm

Offshore Project

Environmental Impact Assessment Report

Appendix 14.6: EIA Ornithology Consultation, Volume 2c

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Contents

1	Introduction.....	1-1
1.1	Overview	1-1
1.2	Purpose of this appendix.....	1-2
2	Glossary of terms and abbreviations.....	2-48
3	References	3-52

List of Tables

Table 1-1	Summary of consultation for Marine and Nearshore Ornithology	1-4
Table 2-1	Acronyms and abbreviations.....	2-48
Table 2-2	Glossary	2-49

1 INTRODUCTION

1.1 OVERVIEW

1.1.1.1 This appendix of the Environmental Impact Assessment Report (EIAR) presents the EIA Ornithology consultation of the proposed Spiorad na Mara Offshore Wind Farm (hereafter referred to as the 'Offshore Project') with respect to Marine and Nearshore Ornithology. This appendix accompanies **Chapter 14: Marine and Nearshore Ornithology, Volume 2a** of the EIAR.

1.1.1.2 This appendix should be read in conjunction with the project description provided in **Chapter 3: Offshore Project Description, Volume 1a** and the relevant parts of the following chapters and appendices:

- **Chapter 14, Volume 2a;**
- **Appendix 14.1: Ornithology Baseline Report, Volume 2c;**
 - **Annex 14.1.1: Apportioned Abundance Estimates Turbine Area Plus Buffers;**
 - **Annex 14.1.2: Unapportioned Abundance Estimate Turbine Area Plus Buffers;**
 - **Annex 14.1.3: Survey Distribution Figures;**
 - **Annex 14.1.4: MRSea Modelling Report;**
 - **Annex 14.1.4.A: MRSea Unapportioned and Uncorrected Abundance and Density Estimates;**
 - **Annex 14.1.4.B: Apportioned and Corrected Abundance and Density Estimates;**
 - **Annex 14.1.4.C: MRSea Model Abundance Confidence Limits and Coefficient of Variation;**
 - **Annex 14.1.4.D: MRSea Model Diagnostics;**
 - **Annex 14.1.5: Colonies in Regional Breeding Population;**
- **Appendix 14.2: Displacement Report, Volume 2c;**
 - **Annex 14.2.1: Ornithology Displacement Data;**
 - **Annex 14.2.2: SeabORD Report;**
- **Appendix 14.3: Collision Risk Modelling Report, Volume 2c;**
- **Appendix 14.4: Migratory Collision Risk Modelling Report, Volume 2c; and**
- **Appendix 14.5: EIA Population Viability Analysis Report, Volume 2c.**

1.1.1 PROJECT BACKGROUND

1.1.1.1 Spiorad na Mara Limited (hereafter referred to as 'the Applicant') is proposing to develop the Project. The Project is an offshore wind farm (OWF) that will consist of up to 60 fixed-bottom wind turbine generators (WTGs).

- 1.1.1.2 The Project will include both offshore and onshore infrastructure. This Offshore EIAR supports the application for the offshore components of the Project as outlined in **Chapter 1: Introduction, Volume 1a**. The offshore components of the Project (the Offshore Project) includes all infrastructure and activities located seaward of Mean High Water Springs (MHWS) within the Array Area and Offshore Cable Area of Search (OCAS) (**Figure 1.2: Offshore Project Location, Volume 1b**). Further detailed information is provided in **Chapter 3, Volume 1a**.
- 1.1.1.3 The Offshore Project is situated off the northwest coast of Isle of Lewis/*Eilean Leòdhais* and the Array Area is located approximately 5-13 km offshore and is approximately 161 km² in size. It will comprise WTGs, foundations, Offshore Cables, Offshore Substation Platform (OSP) (if required), and Landfall. The Array Area combined with the OCAS is defined as the Offshore Project Boundary. The water depths across the Array Area range from 37-67 m with the southwest corner of the Array Area reaching 72 m. The proposed WTGs, OSP (if required), and fixed foundations will be located within a Turbine Area of approximately 140 km², within the Array Area.

1.2 PURPOSE OF THIS APPENDIX

- 1.2.1.1 This Appendix presents the consultation relating specifically to **Chapter 14, Volume 2a**, as presented in **Table 1-1**.
- 1.2.1.2 Consultation that predated issue of the **Habitats Regulations Appraisal – Screening Report** (Spiorad na Mara Ltd, 2024) is addressed within that report, with the exception of a limited number of comments that are specifically highlighted within that report to be addressed within the Offshore RIAA. Consultation relevant to the Environmental Impact Assessment Report (EIAR) and associated technical reporting is addressed separately and not repeated here. In some instances, comments are relevant to both the EIAR and the Offshore RIAA, with those included in both – noting that the response provided here is specific to the Offshore RIAA.

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Table 1-1 Summary of consultation for Marine and Nearshore Ornithology

Consultee	Date and Forum	Comment	Applicant's Response
NatureScot	Comment on the Spiorad na Mara Method Statement (APEM, 2023) 7 November 2023	"Given the location of this site (and its proximity to various Special Protection Areas (SPAs) protected for shearwaters and petrels) we advise that you will have to consider how to assess the presence abundance of these species [shearwaters and petrels] in the development area, given that Digital Aerial Survey (DAS) is unlikely to detect them".	Shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a) and lighting impacts (Sections 14.9.2 and 14.10.6 of Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results.
NatureScot	Advice on the Environmental Impact Assessment (EIA) Scoping Report December 2023	NatureScot agree that the identified data sources are sufficient to inform the Marine and Nearshore Ornithology baseline for the EIA, although they advise that third-party data should be used for context only, and up-to-date sources should be used, for example Seabirds Count (Burnell <i>et al.</i> , 2023).	Section 14.5.1 of Chapter 14, Volume 2a provides a full breakdown of the baseline sources used within the assessment. The example Seabird Count data (Burnell <i>et al.</i> , 2023) is used extensively within the assessment as the primary source for population counts.
		NatureScot support the use of Woodward <i>et al.</i> , 2019) for defining foraging ranges, and advise the use of mean max + 1 Standard Deviation (SD) from Woodward <i>et al.</i> , 2019) to screen in connectivity to colony SPAs, with the following exceptions: For guillemot [<i>Uria aalge</i>] and razorbill [<i>Alca torda</i>], use mean max + 1SD, including data from Fair Isle for all Northern Isles designated sites; For all designated sites south of the Pentland Firth, use of mean max + 1SD discounting the Fair Isle values; For gannet [<i>Morus bassanus</i>], use mean max + 1SD for all colonies without site-specific maximum values. The site-specific maximum should	The foraging ranges and exceptions noted in the comment have been applied in the assessment (see Appendix 14.1: Baseline Characterisation Report, Volume 2c).

Consultee	Date and Forum	Comment	Applicant's Response
		<p>be used for SPA colonies where site-specific evidence exceeds this value (509.4km), namely: Forth Islands SPA, Grassholm SPA, St Kilda SPA; For species with insufficient data to calculate mean max + 1SD, the closest metric is to be used in the following order of preference: mean max; max; mean.</p>	
		<p>NatureScot advise that no potential receptor species should be scoped out based on a single year of data. All survey work must be completed before deciding which species are taken forward for assessment</p>	<p>No receptor species were excluded following the first year of surveys and the EIA Report (EIAR) draws upon the full two years' worth of DAS for inclusion or exclusion of specific receptor species. Species considered within this assessment were clarified within Appendix 14.1, Volume 2c and presented in Section 14.4.4 of Chapter 14, Volume 2a.</p>
		<p>NatureScot agree with the proposed approach to assessment and the modelling tools set out in the Scoping Report. They note that Option 3 for Stochastic Collision Risk Model (sCRM) is no longer required.</p>	<p>Agreement with proposed methodology is noted. Band (2012) Option 2 has been applied.</p>
		<p>NatureScot, in general, agree with the model-specific parameters presented in the EIA Scoping Report. Their following detailed advice notes some exceptions.</p>	<p>Agreement noted. Exceptions are expanded upon later in this table.</p>
		<p>NatureScot advise that the embedded mitigation measures presented are suitable. However, there is scope for additional mitigation measures, described in their detailed advice below.</p>	<p>Advice is noted. Responses to the detailed advice is provided later in this table.</p>
		<p>NatureScot are not aware of any anticipated changes or additions to the Scottish SPA network. They are still considering how to take into account</p>	<p>The updated avoidance rates for CRM, and the mCRM tool have been used to</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>the effects of Highly Pathogenic Avian Influenza (HPAI) in relation to development proposals.</p> <p>NatureScot are aware of the following relevant tools or reports that are likely to be published in the next 12 months (from the date of consultation): the publication of the Cumulative Effects Framework (CEF), the development and publication of the Migratory Collision Risk Modelling (mCRM) tool, an update to demographic rates (Horswill and Robinson) expected in spring 2024, and an update to NatureScot CRM advice on avoidance rates.</p>	<p>inform this EIAR (see Section 14.10.1 of Chapter 14, Volume 2a).</p> <p>The CEF and updated demographic rates have not been published at the time of drafting the EIAR.</p>
		<p>NatureScot do not support the use of an arbitrary buffer when defining the regional 'Wider Marine and Nearshore Study Area', which is defined in the EIA Scoping Report as using an arbitrary 150 km buffer around the Array Area.</p> <p>NatureScot advise against the proposed approach to developing a regional SPA list based on a 150 km arbitrary buffer approach. Using the 150 km buffer results in the scoping in of SPAs with features which are unlikely to have any biological connectivity and does not reflect biological realism. Consequently, it should not be used to underpin the screening of SPAs.</p> <p>The map presented in Figure 6.7-2 of the Scoping Report omits Priest Island SPA which is both within the 150 km arbitrary boundary and also within foraging range for storm petrel [<i>Hydrobates pelagicus</i>].</p>	<p>The HRA Screening Report does not apply an arbitrary buffer and instead identifies connectivity to SPAs through the use of foraging ranges (Woodward <i>et al.</i>, 2019) and Biologically Defined Minimum Population Scales (BDMPS) regions (Furness, 2015). Priest Island (Summer Isles) SPA is included within the HRA Screening Report.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>NatureScot cannot provide advice on the suitability of the DAS surveys for the assessment as no additional details of the DAS methodology have been provided.</p> <p>NatureScot support the approach to use the data sources presented in Table 6.7-2 of the Scoping Report for context only. However, NatureScot note that Mitchell <i>et al.</i>, 2004) is presented to be used for distribution maps and regional population estimates and advise that this source has been superseded by the recently published Seabirds Count (Burnell <i>et al.</i>, 2023) which should be used instead.</p> <p>NatureScot advise that caution should be applied when interpreting the results of some of the surveys in the additional data sources. For example, NatureScot advise that Spaceport 1 data was collected by walk over surveys and so would not be expected to have robustly surveyed divers or European shag [<i>Gulosus aristotelis</i>], and that interpretation of these results should therefore be carefully considered.</p> <p>In addition, NatureScot recommend that the following sources should be consulted: Woodward <i>et al.</i> (2023) migratory bird review, WWT & MacArthur Green (2014) for those species not covered by the Migratory review, and Buckingham <i>et al.</i> (2022).</p> <p>NatureScot note it is not clear from the EIA Scoping Report section 6.7.3.8 how impacts on migratory birds will be assessed, either alone or in-combination with existing terrestrial and offshore wind farms (OWFs) which must be considered.</p>	<p>Further details of the DAS methodology are provided in Appendix 14.1, Volume 2c.</p> <p>The advice and references provided by NatureScot are noted and agreed. Section 14.5.1 of Chapter 14, Volume 2a provides information on the data sources used within the EIAR.</p> <p>The impacts to migratory birds have been considered in the assessment of barrier effects (Section 14.10.4 of Chapter 14, Volume 2a) and collision risk (Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4: Migratory Collision Risk</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>NatureScot list the species which show overlap with the Study Area on their migratory routes; these species are: whooper swan [<i>Cygnus cygnus</i>], Greenland white-fronted goose [<i>Anser albifrons albifrons</i>], Icelandic greylag goose [<i>Anser anser</i>], and great northern diver [<i>Gavia immer</i>]. Consideration of these species should take account of the recently published Scottish Marine Energy Research (ScotMER) report on birds on migration in Scottish waters. NatureScot are also aware of an additional work package undertaking migratory species sCRM, and the results from this report should be used if published prior to undertaking any assessment.</p> <p>Greenland white-fronted goose: NatureScot advise that the population is subject to an Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) Flyway International Plan and as such must be considered a highly important and sensitive receptor, and that any impacts on this population requires thorough assessment using latest population data.</p> <p>Icelandic greylag goose: NatureScot advise that the conservation status of this species has been changed and an AEWA single species management plan is being developed. This is primarily to manage sustainable hunting take in the United Kingdom (UK) but recent associated satellite tagging has shown birds pass through Lewis/<i>Eilean Leòdhais</i>, therefore any assessment of migratory greylag goose impacts will relate to this population.</p>	<p>Modelling Report, Volume 2c). These sections and the Appendix cover all the species (and subspecies) which are mentioned by NatureScot.</p> <p>In addition, great northern diver were recorded in the DAS and identified as a Valued Ornithological Receptor (VOR) and are therefore considered throughout this EIAR.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>Great northern diver: NatureScot advise that this species occurs along the west coast of the Outer Hebrides/<i>Na h-Eileanan Siar</i> as a migrant, sometimes in quite large numbers. These are likely to be additional birds to those wintering in the West of the Outer Hebrides SPA.</p>	
		<p>NatureScot advise that the impact pathways scoped in (displacement and disturbance, collision risk, habitat loss, and impacts to prey species, as well as impacts from artificial lighting) are appropriate and those scoped out (entanglement) can be sufficiently managed with embedded mitigation.</p>	<p>Agreement with the proposed methodology is noted. This methodology has been used in the EIAR. (see Sections 14.9, 14.10 and 14.11 of Chapter 14, Volume 2a)</p>
		<p>NatureScot note that their Guidance Note 2 covering baseline characterisation is not listed in the section 6.7.6.3 of the EIA Scoping Report covering relevant guidance, and that Guidance Note 10 covering apportioning is listed but is not currently available. If it is not available within application timescales, the interim guidance on apportioning should be used in its place. Additionally, NatureScot advise that Thaxter <i>et al.</i>, 2012) has been superseded by the Woodward <i>et al.</i>, 2019) report, and therefore should not be used to underpin foraging ranges.</p>	<p>The guidance documents provided by NatureScot have been extensively used and followed within Chapter 14, Volume 2a as noted in Section 14.7. The foraging ranges of all species have been taken from Woodward <i>et al.</i>, 2019.</p>
		<p>The approach presented in the worked example approach to apportioning (Table 6.7-9 of the EIA Scoping Report) is broadly appropriate.</p> <p>However, NatureScot note that in the example provided, some birds identified to the common guillemot/razorbill level have been incorrectly apportioned to Atlantic puffins [<i>Fratercula arctica</i>], and advise that the unidentified guillemot/razorbill group should be apportioned to either common guillemot or razorbill only. If the common guillemot/razorbill group contains puffins, it should be counted as Auks instead.</p>	<p>The advice provided by NatureScot is noted and agreed. The treatment of birds not recorded to species group is fully described in Appendix 14.1, Volume 2c. All common guillemot/razorbill group birds were apportioned to guillemot or razorbill and not puffin.</p>

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		<p>With regards to collision risk, NatureScot advise that they support the Applicant's intention to follow Guidance Note 7 when conducting the collision risk assessment, and the intention to use the stochastic collision risk modelling (sCRM) tool. NatureScot advise that they no longer require Option 3 models to be run, only Option 2. They do, however, advise they still expect deterministic outputs for each collision risk species as well as stochastic outputs for Option 2.</p>	<p>CRM has been undertaken in line with NatureScot guidance, with only Option 2 outputs presented from the sCRM tool. Further details on CRM are described in Section 14.10.1 of Chapter 14, Volume 2a. Any project-specific variations, for example Statutory Nature Conservation Body's (SNCB) (2014) avoidance rates vs Ozsanlav-Harris <i>et al.</i>, (2023) rates, are clearly documented within Appendix 14.3: Collision Risk Model (CRM) Technical Report Volume 2c. Both deterministically and stochastically model runs are presented in Appendix 14.3, Volume 2c.</p>
		<p>NatureScot note that they are currently reviewing their avoidance rate guidance in light of the Ozsanlav-Harris <i>et al.</i> (2023) review, and that some avoidance rates may change prior to the submission of the EIAR.</p>	<p>It is noted that NatureScot have now published their updated CRM guidance (NatureScot, 2025) and that guidance has been adopted (which aligns with values in Ozsanlav-Harris <i>et al.</i>, (2023)). Further details on CRM are described in Section 14.10.1 of Chapter 14, Volume 2a.</p>
		<p>NatureScot support the use of generic data for the parameters for sCRM. They note that if possible, the Applicant may present additional data and confirm that they accept the inclusion of additional data where appropriate.</p>	<p>As above, CRM has been applied in line with NatureScot guidance. Any project-specific variations or additional data have been clearly documented within Appendix 14.3, Volume 2c, however the</p>

Consultee	Date and Forum	Comment	Applicant's Response
			assessment of impact within Section 14.10.1 of Chapter 14, Volume 2a . focussed on the NatureScot guidance..
		NatureScot advise that Population Viability Analysis (PVA) should be undertaken when the assessed effects from collision mortality exceed a change to the adult annual survival rate of 0.02 percentage points.	The threshold for PVA is noted and applied throughout this EIAR as relevant. Appendix 14.5: EIA Population Viability Analysis (PVA) Technical Report, Volume 2c provides the full methods for the PVAs.
		<p>Regarding parameters for CRM, NatureScot advise that the nocturnal activity scores for cormorant [<i>Phalacrocorax carbo</i>] and fulmar [<i>Fulmarus glacialis</i>] should be devised as per Garthe and Huppopp (2004), where cormorant would be a factor of 1 (0%), and fulmar would be a factor of 4 (75%). For shag, the nocturnal activity factor for cormorant should be used as a proxy.</p> <p>The nocturnal activity factor for all gull species presented within the EIA Scoping Report is a median value (+ SD) of the range presented within NatureScot's guidance note. NatureScot are content with this approach as long as it captures the range presented.</p> <p>For common tern [<i>Sterna hirundo</i>], the flight speed parameter should be 10.9, as per Alerstam <i>et al.</i>, (2007) using Arctic tern [<i>Sterna paradisaea</i>] as a proxy. Other parameters for common tern should be taken from the same sources presented in NatureScot guidance, e.g. Snow and Perrins (1998) for body length and wingspan.</p>	The advice provided by NatureScot is noted and agreed. Further details on CRM are described in Section 14.10.1 of Chapter 14, Volume 2a .

Consultee	Date and Forum	Comment	Applicant's Response
		<p>NatureScot support the intention to assess displacement using SeabORD where possible, with displacement matrices used for other species and seasons. They also support the proposed approach to use the displacement and mortality rates set out in their Guidance Note 8.</p>	<p>SeabORD modelling has been carried out, with results presented in Annex 14.2.2: SeabORD Technical Report, Volume 2c. However, due to the limitations of the SeabORD model (as detailed in Annex 14.2.2, Volume 2c), the results are considered to provide valuable contextual information, but quantitative assessment within this EIAR relies on the results of the matrix approach to displacement assessment.</p>
		<p>NatureScot do not support the proposed use of Wright <i>et al.</i>, (2012) to assess barrier effects to migratory birds, and advise that the source has been superseded. They instead recommend the use of the recently published Offshore wind – birds on migration in Scottish waters: strategic review (2023) for assessing migratory birds.</p>	<p>The advice provided by NatureScot is noted and agreed. Further details on the assessment of barrier effects on migratory birds are provided in Section 14.10.5 of Chapter 14, Volume 2a, and on collision risk to migratory birds in Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c.</p>
		<p>NatureScot support the proposed approach to PVA set out in the EIA Scoping Report, following Guidance Note 11 and using the Natural England PVA tool, with PVA run for the Offshore Project lifespan as well as 25 and 50 years using parameters from Horswill and Robinson (2015) and the Seabird Monitoring Programme (SMP) database.</p>	<p>The advice provided by NatureScot is noted. Note the advice concerning the PVA duration has been superseded by more recent consultation responses, please see the consultation comments from 9 June 2025. Other aspects of PVA modelling follow Guidance Note 11.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>NatureScot welcome the Applicant's recognition of the impact of HPAI in the 2022/23 breeding seasons and their intention to account for this in PVA. They acknowledge the challenge of quantifying impacts from HPAI and support a qualitative assessment where a quantitative assessment is not possible. NatureScot recommend that the most up-to-date information and data from colonies should be used where available.</p>	<p>The advice provided by NatureScot is noted and agreed. Consideration of the impacts of HPAI is given throughout this EIAR, as relevant.</p>
		<p>NatureScot advise that they cannot provide specific advice on the approach to cumulative assessments of impacts on ornithological receptors as the EIA Scoping Report does not set out any specific approaches. They advise that if the CEF is published within the Offshore Project timeframe then it should be used to undertake the cumulative assessment.</p>	<p>The advice provided by NatureScot is noted. The CEF has not been published at time of drafting of this EIAR and therefore the methodology for cumulative assessment is set out in Section 14.7 of Chapter 14, Volume 2a, with the assessment itself presented in Section 14.13 of Chapter 14, Volume 2a.</p>
		<p>NatureScot have advised Marine Directorate that the Berwick Bank application will have adverse effects on site integrity (AEoSI) on multiple seabird species within the UK European Site Network, some of which overlap with the species and sites assessed in other applications. Consequently, as the outcome of the Berwick Bank application is unknown at present, NatureScot advise that PVA models should be run using two scenarios: Berwick Bank consented and Berwick Bank unconsented.</p>	<p>As advised, the PVA models have been run using the two scenarios for Berwick Bank (with and without), see Section 14.13 of Chapter 14, Volume 2a.</p>
		<p>NatureScot advise that the embedded mitigation presented in the EIA Scoping Report Section 6.7.4, limited to the development of a Construction Environmental Management Plan (CEMP) and Invasive Non-Native Species (INNS) management plan, are appropriate however there is scope for additional embedded mitigation measures to be</p>	<p>The Project design envelope has been revised and refined, to include raising the air gap (between blade tip height and MSL) to 30 m . Further details on the Project design are presented in Section</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>specified, for example: Wind Turbine Generator (WTG) design to target a minimum blade tip height of 30 m above mean sea level (MSL), and development and adherence to a Vessel Management Plan (VMP), or equivalent.</p>	<p>14.8.1 of Chapter 14, Volume 2a, and embedded mitigation in Section 14.8.2 of Chapter 14, Volume 2a. Please note that the CEMP will be referred to as the outline Offshore Environmental Management Plan (OEMP). An Outline Navigational Safety and Vessel Management Plan, OEMP and Invasive Non-Native Species Management plan are provided in Volume 3.</p>
		<p>NatureScot welcome the inclusion of assessments considering inter-related effects and transboundary effects, as in EIA Scoping Report Section 4.5. NatureScot note that they cannot provide advice at this stage as no specific approaches to these assessments are set out.</p>	<p>The advice provided by NatureScot is noted. The assessment for receptor-led effects is presented in Section 14.11 of Chapter 14, Volume 2a, and the assessment for transboundary effects in Section 14.14 of Chapter 14, Volume 2a.</p>
<p>Royal Society for the Protection of Birds (RSPB) Scotland</p>	<p>Response to request for Scoping Opinion December 2023</p>	<p><i>"The UK is of outstanding international importance for its breeding seabirds and wintering marine birds. As with all Annex I and regularly migratory species, the UK has a particular responsibility under the Birds Directive to secure their conservation. Their survival and productivity rates can be impacted by offshore windfarms directly (i.e. collision) and indirectly (e.g. displacement from foraging areas, additional energy expenditure, potential impacts on forage fish and wider ecosystem impacts such as changes in stratification)."</i></p> <p><i>"The proposed development has a large design envelope. We understand a degree of flexibility in design options where details of the whole project are</i></p>	<p>The comment from the RSPB Scotland is noted.</p> <p>The Offshore Project design envelope has been revised and refined. Further details</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>not available is usually a necessity for renewables energy projects. Sufficient detail must however be provided in the Environmental Statement to allow the impacts of the proposed development to be fully assessed. A lack of specificity can hinder assessment of the development and make it difficult for stakeholders to providing meaningful advice during the determination process."</i></p>	<p>on the Offshore Project design are presented in Section 14.7.1 of Chapter 14, Volume 2a and in Section 3.5 of Chapter 3, Volume 1a.</p>
		<p><i>"RSPB Scotland encourage the adoption of a precautionary approach to the identification of relevant protected sites for seabirds with clear methodology on the exclusion of sites and species. We generally agree with the collection and analysis methods advised by NatureScot, with some exceptions as set out below. If an Applicant chooses to undertake supplementary modelling using alternative parameters to that recommended, we suggest this is clearly labelled."</i></p>	<p>The methodology applied throughout has been agreed with NatureScot, and where there are differences these are clearly identified and explained.</p>
		<p><i>"Much of the knowledge of offshore windfarms and their impacts to date come from monitoring and the development of models is predominantly based on North Sea wind farms. We nevertheless consider this is the best information available to assess impacts, especially for species common to both areas. Attention should however be paid to behaviour differences between species, for example flight height can differ depending on prey type and this would have implications for collision risk modelling. Overall, if a precautionary approach is taken from the beginning, the likelihood of irreversible damage occurring is reduced even whilst our knowledge base is incomplete, and modelling improves. An underestimation of impacts will have repercussions when consenting later offshore wind development"</i></p>	<p>The comment from the RSPB Scotland is noted. A precautionary approach has been followed throughout the assessment, using the best available evidence and conservative assumptions to minimise the risk of underestimating potential impacts, as recommended in current guidance.</p>
		<p><i>"As set out in Searle et al., (2023), assessing impacts of offshore windfarms and other renewables developments is inherently uncertain. This uncertainty is propagated throughout the impact assessments, as there are</i></p>	<p>The comment from the RSPB Scotland is noted. The assessment fully acknowledges and addresses uncertainty by using,</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>not only direct impacts, but ecosystem wide impacts that can change, for example, the abundance and availability of prey. Multiple data sources and modelling techniques are used to capture a simplified version of reality. They do not fully capture the complexity of seabird behavioural or demographic processes in a dynamic marine environment."</i></p>	<p>transparent and precautionary methods, and by clearly stating data limitations and assumptions. Where uncertainty remains, a precautionary approach is taken and professional judgement is applied, as recommended in current guidance.</p>
		<p><i>"An EIA report is required to include any measures envisaged in order to avoid, prevent, or reduce and, if possible, offset likely significant adverse effects on the environment. The requirement to 'avoid' appears to have been omitted from section 4.3 and Figure 4.3-1 [of the EIA Scoping Report]. Data collection and assessment should be used to inform the development proposal, minimise impacts and maximise benefits. The "mitigation hierarchy" is the accepted approach to enabling this to happen. Avoidance of any impacts should be the first consideration avoided, and lastly, any unavoidable remaining should be offset."</i></p>	<p>The comment from the RSPB Scotland is noted. It was an unintentional omission from the EIA Scoping Report to not be more explicit about the need to, in the first instance, avoid impacts. The Applicant is committed to avoiding impacts as far as practicable and has committed to embedded mitigation to minimise impacts. Embedded mitigation relevant for Marine and Nearshore Ornithology is set out in Section 14.8.2 of Chapter 14, Volume 2a.</p>
		<p><i>"When assessing sensitivity and magnitude, it is particularly relevant that: The fourth census of Britain and Ireland's internationally important populations of breeding was published in November 2023. The overall picture of one of decline and results show 14 of the 23 seabird species which regularly breed in Scotland have declined since the last census, published in 2004. Just 3 species have remained stable but 2 of these – Great Skua [Stercorarius skua] and Northern Gannet - are known to have been significantly impacted by Highly Pathogenic Avian Influenzas after the census took place. Climate change, food depletion, adverse weather</i></p>	<p>The results of Seabirds Count (Burnell <i>et al.</i>, 2023) have been used as the primary source of recent population information throughout this EIAR. Consideration has also been given to the impacts of HPAI, including reviewing more recent count data (e.g. Tremlett <i>et al.</i>, 2024).</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>condition, predation as well as human factors are believed to be the common causes of declines.</i></p> <p><i>HPAI is devastating UK and global wild bird populations, exacerbating ongoing nature declines across the world. In summer 2022, the UK's seabird populations were hit extremely hard with tens of thousands of birds dying across the UK. Gannet, Great skua Barnacle Geese [Branta leucopsis] and terns were especially badly impacted. In 2023, the virus behaved differently and there have been mass die-offs of breeding adult Black-headed Gulls [Chroicocephalus ridibundus]. Significant impacts to terns, Kittiwakes [Rissa tridactyla] and Guillemots have also been recorded. Governments of the UK have collectively failed to meet 11 out of the 15 indicators of Good Environmental Status (GES) for our seas as required under the Marine Strategy Regulations 2010. The marine birds indicator is moving away from target. For breeding seabirds, more species are now experiencing frequent, widespread breeding failures.</i></p> <p><i>Black-legged Kittiwake and Atlantic Puffin are red listed on the Birds of Conservation Concern and have been assessed by the IUCN as vulnerable to global extinction.</i></p> <p><i>Seabirds are relatively long-lived, take longer to reach breeding age than most other birds and have just one or 2 young per year. As a result, their populations are sensitive to small increases in adult mortality.</i></p> <p><i>Once a temporary impact (e.g. collision risk from the operation of a windfarm) has ceased it will take time for the population to recover.</i></p> <p><i>The growth of offshore wind is placing great cumulative pressure on seabird colonies."</i></p>	<p>The RSPB Scotland's other comments are noted. The Applicant would like to note that the causes of seabird population trends are multifaceted, but that climate change is consistently regarded as one of the most significant threats. Renewable energy developments such as the Offshore Project are central to the UK Government's strategy to reach net zero by 2050.</p>
		<p><i>"RSPB Scotland disagree with the magnitude of impact being assessed in terms of predicted increases to baseline mortality. As above, small</i></p>	<p>The approach to assessment is detailed in Section 14.7 of Chapter 14, Volume 2a</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>increases in mortality can have large impacts. It is more meaningful to view impacts across the lifeline of the development in comparison to population size in the absence of the development and consider long-term viability of colonies and time for recovery."</i></p>	<p>and follows industry best practice (CIEEM, 2022) and NatureScot guidance and advice. In particular, it should be noted that PVA does assess the potential impact over the lifespan of the Offshore Project and considers the long-term viability of colonies. In line with a proportionate approach to assessment and NatureScot guidance, PVA is only conducted when the increase in baseline mortality is sufficient to require further modelling; where the increase in baseline mortality is below the threshold set out by NatureScot, it can be concluded that the impact magnitude is negligible and has no potential to lead to a likely significant effect.</p>
		<p>RSPB advise that the Flannan Isles, St Kilda, and North Rona and Sula Sgeir SPAs together support almost the entire UK breeding population of Leach's petrel [<i>Hydrobates leucorhous</i>]. In addition, Manx shearwater [<i>Puffinus puffinus</i>] are qualifying species of the North Rona and Sula Sgeir SPA, and storm petrel are qualifying species of both North Rona and Sula Sgeir SPA and St Kilda SPA. RSPB Scotland considers that it is likely that these species will be under-recorded in the DAS, and therefore that it is not appropriate to screen out these receptors on this basis. Impacts to these species should be scoped in and they welcome focused survey techniques for these species.</p>	<p>Shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a) and response to artificial lighting (Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>The timing limitation of DAS is also applicable to other species, such as kittiwake where colony-specific tracking indicates some local populations commute at dawn and dusk. Overall, RSPB Scotland advise that the timing and context of the aerial studies should be considered in the context of bird usage of the site. They suggest it may be necessary to supplement DAS with boat-based surveys and further tagging work.</p>	<p>The comment from the RSPB Scotland is noted. The DAS were commenced prior (2022-2024) to the latest advice from NatureScot (2023a) but fully comply with the current requirements. The latest advice from NatureScot, following research from Cook <i>et al</i>, (2023) is that the nocturnal activity of kittiwake is much lower than during the day when the DAS occur. The CRM also account for this nocturnal activity when being undertaken.</p>
		<p>RSPB Scotland recommend using Seabirds Count (2023) as the most up-to-date record of seabird numbers.</p>	<p>The results of Seabirds Count (Burnell <i>et al</i>, 2023) have been used as the primary source of recent population information throughout this EIAR.</p>
		<p>RSPB Scotland encourage discussion with local ornithology groups, referencing anecdotal reports of thousands of sooty (and other) shearwater being present around the West coast of Lewis/<i>Eilean Leòdhais</i> in certain weather conditions.</p>	<p>The comment from the RSPB Scotland is noted and this anecdotal evidence is presented in Chapter 14, Volume 2a. The Applicant has engaged with local stakeholders (please see RSPB Scotland 21st November 2024 consultation meeting further below), as detailed in Chapter 5, Volume 1a.</p>
		<p>RSPB Scotland welcome using foraging ranges published in Woodward <i>et al</i>, 2019) to derive connectivity with SPA colonies. They recommend that site-specific data is also examined and where the maximum foraging</p>	<p>The comment from the RSPB Scotland is noted. Foraging ranges for use in assessment do align with those recommended by the RSPB Scotland.</p>

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		<p>range from the colony exceeds the generic value, that the site-specific value is used.</p> <p>The exceptions to the above are for guillemot and razorbill where, for all designated sites south of the Pentland Firth (i.e., excluding the Northern Isles/<i>Na h-Eileanan a Tuath</i>) they advise the use of mean max +1SD discounting Fair Isle values. North Caithness Cliffs SPA is considered to lie south of the Pentland Firth/<i>Caol Arcach</i>.</p>	
		<p>In regard to the preliminary list of key receptor species, RSPB Scotland encourage a broad longlist, and re-iterate that species that are unlikely to be present in DAS due to size and/or behaviour, despite there being colonies in foraging range, should not be scoped out, and impacts to these species must be considered.</p>	<p>The comment from the RSPB Scotland is noted. The limitations of DAS are acknowledged, and additional species are considered as necessary, with particular regards to the potential for collision on migration (see Section 14.10.1 of Chapter 14, Volume 2a).</p>
		<p>Regarding the list of migratory species in section 6.7.3.8 of the EIA Scoping Report, RSPB Scotland considers there are a number of species missing that are reported around the west coast of Lewis. This includes:</p> <p><i>Shearwaters and skuas:</i> Sooty shearwater [<i>Ardenna grisea</i>], long-tailed skua [<i>Stercorarius longicaudus</i>] and pomarine skua [<i>Stercorarius pomarinus</i>] have been reported to number in their thousands in suitable weather conditions.</p> <p><i>Bar-tailed godwit</i> [<i>Limosa lapponica</i>] and <i>grey phalarope</i> [<i>Phalaropus fulicarius</i>]:</p>	<p>The comment from the RSPB Scotland is noted.</p> <p>Skuas, shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.3, Volume 2c) and response to artificial light (Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results. Bar-tailed godwit, corncrake and Greenland white-fronted goose are</p>

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		<p>RSPB Scotland recommends both of these species are included in the list of birds for consideration.</p> <p><i>Corncrake</i> [<i>Crex crex</i>]: Spring and autumn migration and within-season dispersal of corncrake takes place at night so would not be picked up on aerial surveys. Existing records in relation to powerlines indicate the species' poor flight manoeuvrability or lack of detection of obstacles. Overall, they are a tricky species for which to predict risk of impact in the absence of data, and precaution is therefore necessary.</p> <p><i>Greenland white-fronted goose</i>: For surveys, RSPB Scotland welcome identification of the foraging areas around the onshore development area of search. They also recommend assessment of migration routes so that impacts can be avoided and/or mitigated.</p> <p><i>White-tailed eagle</i> [<i>Haliaeetus albicilla</i>]: RSPB Scotland has had reports of white-tailed eagle hunting and parasitising seabirds off the coast of South Galson/<i>Gàbhsann bho Dheas</i>, and there are observations of the species around North Rona/<i>Rònaigh an Daimh</i> (71km from shore) and St Kilda/<i>Hiort</i> (60km from shore), indicating the birds can and do travel out to sea. Other anecdotal information suggests white-tailed eagles fly across the proposed site area. As a result of this and the proximity of the proposed array to shore, the potential for white-tailed eagle collision risk should be scoped in. As part of this work, flight height data for white-tailed eagles foraging over the sea would need to be ascertained, e.g. through the use of Light Detection and Ranging (LiDAR).</p>	<p>explicitly considered in the mCRM (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c). Consideration has been given to grey phalarope, but no evidence was available to support a quantitative assessment. Given the negligible impacts predicted through mCRM (see Section 14.10.1 of Chapter 14, Volume 2a) on other species with similar behaviours, such as the congeneric red-necked phalarope, it is reasonable to conclude that any impact would also be of negligible magnitude. The Applicant obtained data from Global Positioning System (GPS) tracking of four white-tailed eagles tagged as chicks on Lewis/<i>Eilean Leòdhais</i> in June 2020. Tracking data was supplied for all four chicks up to the request date of January 2025, representing approximately 4.5 years of tracking data. In this time, there were zero records of position fixes from any bird within the Array Area or 4 km buffer around it. It is therefore concluded that there is negligible risk to white-tailed eagles as a result of the Offshore Project.</p>

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		<p>If the proposed turbines are within a migration route, RSPB Scotland suggest an appropriate mitigation measure may be to curtail turbine rotation speed and appropriate times of year to reduce collision risk, similar to the approach taken for Dutch North Sea WTGs during bird migration.</p>	<p>The comment from the RSPB Scotland is noted. As no significant collision impact on migratory birds is expected (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c), no further mitigation is proposed.</p>
		<p>RSPB Scotland broadly agree with the scoping in and out of the primary impact pathways but consider that more thought should be given to secondary and cumulative impact pathways. For example, ocean stratification should be considered in the context of offshore wind development and the effects on prey availability and seabird foraging areas scoped in.</p>	<p>The comment from the RSPB Scotland is noted. Secondary and indirect impacts have been considered (see Section 14.4.5 of Chapter 14, Volume 2a) and assessed where necessary.</p>
		<p>Regarding modelling approaches, RSPB Scotland has outstanding issues with the bio-seasons definitions from Furness (2015) for gannet and kittiwake, because by using the 'migration-free' seasonal definition as opposed to the full breeding season, the early and later months of the breeding season are effectively excluded.</p>	<p>The comment from the RSPB Scotland is noted. The seasons defined for all species follow NatureScot's guidance (NatureScot, 2020) and have been confirmed with NatureScot through pre-application engagement.</p>
		<p>RSPB Scotland agree with NatureScot (2023) guidance for running CRM. They advise that running CRM with Option 3 provides valuable context, but their decision around significance of impacts will be based on Option 2. Similarly running the models deterministically adds context particularly when comparing to older developments.</p>	<p>The comment from the RSPB Scotland is noted. The Applicant has presented and assessed the predicted impacts of Band Option 2 within Chapter 14, Volume 2a. Both deterministically and stochastically model runs are presented in Appendix 14.3, Volume 2c.</p>

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		<p>RSPB Scotland agree with NatureScot that the Natural England approach of applying a macro-avoidance rate to gannet density prior to calculating collision risk is inappropriate for breeding birds.</p> <p>RSPB Scotland agree with the majority of the NatureScot-advised Avoidance Rates including the use of a 99.2% avoidance rate for non-breeding gannets. However, in their opinion, a 98% avoidance rate is more appropriate for breeding gannets, because the figures used for the calculation of avoidance rates advocated by SNCBs are largely derived from the non-breeding season for gannet. Differences in behaviour between the breeding and non-breeding seasons are likely to result in changes in avoidance behaviour. This seasonally defined change in reactive behaviour will also be reflected in the distributional changes occurring due to the presence of turbines. Therefore, alongside the 70% displacement rate recommended by NatureScot for gannet, RSPB Scotland recommend the presentation of 60% displacement rate during the breeding season.</p> <p>For gannet displacement analysis, an availability bias should also be applied to input densities, following the same logic as for other diving species.</p> <p>RSPB Scotland express disappointment with the commitment to a minimum blade tip clearance to MSL of 22 metres. Increasing the blade tip clearance is a key collision risk mitigation measure and RSPB Scotland therefore recommend the minimum blade tip clearance is increased.</p>	<p>The comment from the RSPB Scotland is noted. CRM has been followed out following NatureScot's latest guidance (NatureScot, 2025a), which includes accounting for gannet macro-avoidance in the non-breeding season only.</p> <p>Applying an availability bias correction for gannet is not standard practice and has not been advised by NatureScot or the Marine Directorate. Furthermore, the Applicant notes any such availability bias is likely to be small for gannets. One study (Garthe <i>et al.</i>, 2014) reports the average dive time for the gannets studied to be 6.3 seconds, and a mean number of 1.6 dives per hour. This would suggest gannets spend, on average, approximately 10 seconds per hour unavailable to be detected by DAS imagery, or 0.3% of the time.</p> <p>The Offshore Project design envelope has been revised and refined, to include raising the air gap (between blade tip height and MSL) to 30 m . Further details on the Offshore Project design and embedded mitigation measures are</p>

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		RSPB Scotland advise that it should be made clear the embedded mitigation will put nature first and, where mitigation involves reliance on advice from an Ecological Clerk of Works (EcCOW), the EcCOW must be empowered to hold off works if necessary.	presented in Section 14.8.1 and 14.8.2 of Chapter 14, Volume 2a . The comment from the RSPB Scotland is noted and the full mitigation measures proposed are presented in Section 14.7.2 of Chapter 14, Volume 2a . Details on the EcCOW are presented in the OOEMP provided in Volume 3.
		RSPB Scotland advocate for an EIA non-technical summary, and that the planning and consenting process is accessible. RSPB Scotland advise that a non-technical summary is vital to set out the main findings of the EIAR in an accessible way and in plain English so that it is easily understood by the public. It should not just describe the process but also clearly present information with interpretation and explanation with clear figures, maps and tables as necessary, as well as include a definition of 'significant' in an ornithological context, and clear information on how the mitigation hierarchy has been followed.	The comment from the RSPB Scotland is noted. A non-technical summary will be provided which addresses the points raised by RSPB Scotland.
NatureScot	Response to request for advice on Proposed Approach to Marine and Nearshore Ornithology Impact Assessment	NatureScot advise that the latest version of SeabORD should be available when the CEF is published, and should be used if available within the Applicant's timelines. NatureScot will update their position once the CEF is available. In the absence of the CEF, it is acceptable to use the current version of SeabORD with the distance decay method.	The comment from the NatureScot is noted. Neither the CEF or an updated SeabORD tool have been published at time of drafting of this EIAR. Annex 14.2.2, Volume 2c is provided for context which utilised the current version of SeabORD.
		As advised in their response to the EIA Scoping Report, NatureScot do not support an assessment of migratory birds based on SOSS-MAT due to more recent work which reflects the Scottish-specific context.	The comment from the NatureScot is noted. The Offshore wind strategic review (Woodward <i>et al.</i> , 2023) has been used to

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	25 April 2024	<p>NatureScot agree that, until the Butler <i>et al.</i>, (2020) apportioning tool is updated as part of the CEF to enable Seabirds Count data to be used, the tool cannot be used. NatureScot suggest at present [at the time of writing] that theoretical apportioning should be applied to all colonies under consideration, and then the apportioning that is allocated to sites with sufficient tagging data may be re-apportioned depending on the results of the tracking analysis.</p>	<p>inform assessment of migratory waterbirds (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c).</p> <p>The comment from the NatureScot is noted. As the CEF has not been published at the time of the EIAR production, the theoretical approach to apportionment has been used (see Offshore Report to Inform Appropriate Assessment (Offshore RIAA) for further details).</p>
Marine Directorate – Licensing Operations Team (MD-LOT)	Scoping Opinion May 2024	<p><i>"The Study Area is defined in section 6.7.2 of the Scoping Report including a 'Wider Marine and Nearshore Ornithology Study Area' which includes an additional 150km buffer around the Array Area, the Scottish Ministers do not agree with this approach. The Scottish Ministers advise that connectivity to the Proposed Development is determined using Woodward et al., 2019 foraging ranges (mean max +1SD) and direct the Developer to the NatureScot representation in this regard."</i></p> <p><i>"In regards to the DAS campaign, the Scottish Ministers advise that the presence of sensitive species should be confirmed on completion of two full years of survey and no receptors should be scoped out on a single year of data. This is a view supported by NatureScot in its representation."</i></p>	<p>The comment from the Scottish Ministers is noted and agreed. This EIAR does not apply an arbitrary buffer and instead identifies connectivity to breeding colonies through the use of foraging ranges (Woodward <i>et al.</i>, 2019) and BDMPS regions (Furness, 2015).</p> <p>No receptor species were excluded following the first year of surveys and the EIAR draws upon the full two years' worth of DAS for inclusion or exclusion of specific receptor species. Species considered within this assessment were clarified within Appendix 14.1, Volume 2c and presented in Section 14.4.4 of Chapter 14, Volume 2a.</p>

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		<p><i>"In section 6.7.3.5 of the Scoping Report the lack of recordings of Leach's petrel and Manx Shearwater is noted in relation to the DAS. The Scottish Ministers do not support scoping out these species due to limitations of the DAS, as they may be under recorded due to life history characteristics, the species and timings of DAS surveys."</i></p>	<p>The comment from the Scottish Ministers is noted, agreed and therefore these species are not scoped out. Shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a) and response to artificial light (Sections 14.9.4 and 14.10.7 in Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results.</p>
		<p><i>"The Scottish Ministers advise that consideration be given to supplementing the DAS data with boat-based surveys and further tagging work. The Developer is directed to the RSPB Scotland representation in this regard."</i></p> <p><i>"Additionally, the Developer is encouraged to engage with local ornithological groups in relation to the potential presence of sooty and other shearwater in the area of the Proposed Development."</i></p> <p><i>"In relation to white fronted goose, the Scottish Ministers advise that consideration should be given to assessing migration routes with a view to avoiding and/or mitigating any impact identified. This is in line with the RSPB Scotland representation."</i></p>	<p>The comment from the Scottish Ministers is noted and this anecdotal evidence is presented in Chapter 14, Volume 2a. The Applicant has engaged with local stakeholders, as detailed in Chapter 5, Volume 1a. The potential impacts of the Offshore Project on migratory birds, including white-fronted goose, has been assessed (see Appendix 14.4, Volume 2c).</p>
		<p><i>"The Scottish Ministers are content with the data sources listed in table 6.7-2 of the Scoping Report and support the approach to use this data for context only. However, the recently published Seabird Count (Burnell et al.,</i></p>	<p>The comment from the Scottish Ministers is noted. Seabirds Count (Burnell et al., 2023) has been used as the primary</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>2023) is the most recent seabird census and should be used to replace Mitchell et al., 2004. Additionally, Woodward et al., 2023 Migratory bird review, WWT & MacArthur Green, 2014 and Buckingham et al., 2022 should also be considered, this is in line with the NatureScot representation."</i></p>	<p>source of recent population information throughout this EIA. Woodward et al., (2023), WWT & MacArthur Green (2014) and Buckingham et al., 2022 have all also been considered and are referenced in this EIA where relevant.</p>
		<p><i>"The Scottish Ministers broadly agree with the potential impacts to be scoped into and out of the EIA Report as summarised in table 6.7-6 of the Scoping Report. The Developer is advised to include White-tailed eagle in the collision risk assessment and is directed to the RSPB Scotland representation in this regard. Furthermore, Scottish Ministers advise that secondary impact pathways are considered, the Developer is directed to the RSPB Scotland representation in this regard and advised to fully address this in the EIA Report."</i></p>	<p>The comment from the Scottish Ministers is noted. With regards to white-tailed eagle, the Applicant obtained data from GPS tracking of 4 white-tailed eagles tagged as chicks on Lewis/Eilean Leòdhais in June 2020. Tracking data was supplied for all 4 chicks up to the request date of January 2025, representing approximately 4.5 years of tracking data. In this time, there were 0 records of position fixes from any bird within the Array Area or 4 km buffer around it. It is therefore concluded that there is negligible risk to white-tailed eagles as a result of the Offshore Project.</p>
		<p><i>"The Scottish Ministers support the intention to follow NatureScot guidance with respect to apportioning impacts, however, refer the Developer to the NatureScot representation in this regard and advise that this is addressed in the EIA Report."</i></p>	<p>The comment from the Scottish Ministers is noted. In line with NatureScot's representation, the theoretical approach to apportionment has been used (see Offshore RIAA for further details).</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>"The EIA Report should be clear in its approach to assessment of the impacts to migratory birds, the Developer is directed to the NatureScot representation in this regard and advised to fully consider the advice provided in compiling the EIA Report."</i></p>	<p>The comment from the Scottish Ministers is noted. The potential impacts of the Offshore Project on migratory birds has been assessed, taking into account all advice received (see Sections 14.10.1, 14.10.4 and 14.10.6 of Chapter 14, Volume 2a).</p>
		<p><i>"The Scottish Ministers advise that the advice provided by NatureScot in its representation regarding apportioning, collision risk modelling, distributional responses and population viability analysis ("PVA") should be fully implemented by the Developer."</i></p>	<p>The comment from the Scottish Ministers is noted. Apportioning, CRM, distributional responses and population viability analysis have all been carried out in line with the approach set out in NatureScot guidance and agreed through engagement with NatureScot.</p>
		<p><i>"The Scottish Ministers highlight the RSPB Scotland representation in regards to bio-seasons for kittiwakes and gannets, foraging ranges for common guillemot and razorbill and avoidance and displacement rates for gannets. While the Scottish Ministers advise that the RSPB Scotland representation should be fully considered when compiling the EIA Report, for the avoidance of doubt, where there are differences in advice, the Scottish Ministers expect that the NatureScot guidance is followed in relation to the assessment approach."</i></p>	<p>The comment from the Scottish Ministers is noted. Bio-seasons for kittiwakes and gannets (see Section 14.6.1 of Chapter 14, Volume 2a), foraging ranges for common guillemot and razorbill (see Section 14.4.2 of Chapter 14, Volume 2a) and avoidance and displacement rates for gannets (see Section 14.10.1 of Chapter 14, Volume 2a) all follow NatureScot's guidance and advice.</p>
		<p><i>"In terms of mitigation and monitoring, the Scottish Ministers support the commitment to a Construction Environmental Management Plan ("CEMP") and INNS Management Plan as embedded mitigation measures however</i></p>	<p>The Project design envelope has been revised and refined, to include raising the air gap (between blade tip height and</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>advise consideration is also given to further measures including development of a Vessel Management Plan ("VMP") and to designed in measures such as a minimum air gap from WTG blade tip to MSL. This is a view supported by NatureScot in its representation. RSPB Scotland also support considering a minimum air gap as mitigation. Additionally, the Developer is directed to the RSPB Scotland representation in relation to the reduction of WTG rotation speed as mitigation and advised to address this in the EIA Report."</i></p>	<p>MSL) to 30 m. Further details on the project design are presented in Section 14.8.1 of Chapter 14, Volume 2a, and embedded mitigation in Section 14.8.2 of Chapter 14, Volume 2a. With regards to the RSPB's representation on curtailment or turbine rotation, as no significant collision impact on migratory birds is expected (see Section 14.10.1 of Chapter 14, Volume 2a) no further mitigation is proposed. Please note that the CEMP will be referred to as the outline OEMP.</p>
		<p><i>"Should it be available at time of assessment, the Scottish Ministers advise the use of the CEF in undertaking the cumulative assessment."</i></p> <p><i>"In relation to the inclusion of Berwick Bank in the cumulative impact assessment, as this project is yet to be determined, the Scottish Ministers advise that PVA models should be run using two scenarios, Berwick Bank consented and unconsented."</i></p> <p><i>"The Scottish Ministers are unable to provide further specific advice due to the lack of detail in the Scoping Report in relation to the cumulative assessment of the impact to ornithological receptors."</i></p>	<p>At time of drafting the EIAR, the CEF is not available. As advised, the Cumulative Effects Assessments (CEA) have been run using the two scenarios for Berwick Bank (with and without), see Section 14.13 of Chapter 14, Volume 2a.</p>
		<p><i>"The Scottish Ministers agree with scoping in transboundary impacts to ornithological receptors however are unable to provide specific advice in</i></p>	<p>The transboundary assessment is presented in Section 14.15 of Chapter 14, Volume 2a.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<i>relation to the approach to assessment due to the lack of detail provided in the Scoping Report."</i>	
RSPB Scotland	RSPB Introductory Meeting 21 November 2024	<p>With regards to the consideration of European storm petrel and Leach's petrel, RSPB suggest that other wind farms, such as West of Orkney and Arven, are located close to important European storm petrel colonies and so may have collected data on petrel flight heights for assessment. RSPB note the concern about impacts on petrel species due to potential for attraction to light and disorientation. RSPB recommend exploratory measures, and note other developers are funding research on the species including ScotWind developers. Reassurance is needed that the internationally important populations won't be impacted.</p> <p>Regarding white-tailed eagles, RSPB noted that there could be white-tailed eagles flying at turbine height and that any evidence that can be gathered would be beneficial. In terms of collision risk modelling, the British Trust for Ornithology (BTO) has recommended a round figure of 100 flight height recordings. RSPB note that satellite tags on white-tailed eagles will provide data on flight height.</p>	<p>Shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a) and respond to artificial lights (Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results. The comment from the RPSB Scotland is noted, but there is not additional data from the West of Orkney or Arven projects, which is of use for the assessment of the Offshore Project.</p> <p>The Applicant obtained data from GPS tracking of four white-tailed eagles tagged as chicks on Lewis/<i>Eilean Leòdhais</i> in June 2020. Tracking data was supplied for all four chicks up to the request date of January 2025, representing approximately 4.5 years of tracking data. In this time, there were zero records of position fixes from any bird within the Array Area or 4 km buffer around it. It is therefore concluded that there is negligible risk to white-tailed eagles as a result of the Offshore Project.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>The RSPB would like to see the 98% avoidance rates alongside the 99.2% NatureScot avoidance rate guidance. They note that data is being gathered at the Flamborough and Filey Coast SPA to inform RSPB's position.</p>	<p>The comment from the RSPB Scotland is noted. However, as required by the Scottish Ministers, the Applicant has carried out CRM using the avoidance rates advised by NatureScot (NatureScot, 2025a). No additional evidence as to why 98% is more appropriate than 99.2% has been provided by RPSB, therefore 98% has not been presented within the Chapter 14, Volume 2a nor Appendix 14.3, Volume 2c</p>
		<p>RSPB welcome the increase in minimum tip blade clearance to 30 m.</p>	<p>The comment from the RSPB Scotland is noted.</p>
<p>NatureScot</p>	<p>Comments on DAS Year 2 final report 3 April 2025</p>	<p>NatureScot confirm that the use of a 10 km buffer around the Array Area for DAS is appropriate for the development size and will reduce the impact of any edge effects, as well as being suitable given the presence of red-throated diver [<i>Gavia stellata</i>] within the Survey Area.</p>	<p>The comment from NatureScot is noted.</p>
		<p>A Ground-Sampling Distance (GSD) of 1.5 cm is stated in the DAS Year 2 Final Report, however this differs from the Year 1 Report which states a GSD of 1.6 cm was used. NatureScot request clarification on this discrepancy between the Year 1 and Year 2 reports.</p>	<p>The Applicant's DAS contractor has confirmed that the GSD was 1.5 cm for all surveys, with the 1.6 cm in the Year 1 report being erroneous.</p>
		<p><i>"The Year 1 Report states that surveys captured 30% coverage of the site, with 10% site coverage analysed using design-based methods. This is on the low end of what we would expect to see but acceptable in this case. Coverage is stated as the same for year 2 of DAS (30% captured and 10% analysed), however Table 6</i></p>	<p>The Applicant's DAS contractor has confirmed that the coverage values given in the Year 2 report are correct for all surveys. The coverage values given in the Year 1 report were preliminary and based</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>shows > 11.5% coverage was analysed in all survey months across year 1 and 2. This is an increase from year 1, where coverage was 10.1% to 10.3% for each month, indicating additional data was analysed. This is not stated in the survey methodology in section 1, and there appears to be no increase in raw count observations for year 1 surveys between DAS reports."</i> NatureScot request clarification on this discrepancy between the Year 1 Report and Year 2 Final Report.</p>	<p>on nominal survey parameters, while the final coverage values presented in the Year 2 report are calculated taking into account recorded data on aircraft pitch, yaw and roll from the aircraft's Inertial Measurement Unit (IMU), along with aircraft height above sea level, image overlap and lens distortion.</p>
		<p>Section 2.6 states that the approach laid out by JNCC (Method C) (JNCC, 2013) was used to correct population estimates of auks to account for availability bias. NatureScot accept this as an appropriate method to use. The correction factors applied to guillemot, razorbill and puffin recorded in the DAS as sitting on the sea surface are 1.311, 1.211 and 1.165 respectively. NatureScot are currently reviewing this and other methods and will provide an update to their guidance note shortly.</p>	<p>The comment from NatureScot is noted. No new guidance on this has been issued at time of drafting this EIAR and the correction factors stated have been used (see Appendix 14.1, Volume 2c).</p>
		<p>NatureScot note that the species presented in the report are generally as expected at the survey location for both the breeding and non-breeding seasons. Regarding Manx shearwater and storm petrel, NatureScot note that these species are known to be active at night and therefore the number of birds present in the survey area may well be higher than the numbers recorded. As such, NatureScot advise that consideration should be given to sources of information regarding the distribution of these species at sea as a general guide to their presence considering DAS may not be effective at detection of nocturnal species, such as Stone <i>et al.</i> (1995) and Waggitt <i>et al.</i> (2019).</p>	<p>Shearwaters and petrels are explicitly considered in the sections on collision risk (Section 14.10.1 of Chapter 14, Volume 2a) and respond to artificial lights (Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a), using literature as relevant to supplement the DAS results.</p>

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		<p><i>"NatureScot advice regarding the Year 1 Report noted that the coefficient of variations (CVs) presented across species are proportional standard errors and several of these are very high, but it was understood that these may reduce with the additional survey data from the second year of DAS flights. This point still applies after the second year, where the CVs for individual survey months for each species are still similarly high".</i></p>	<p>The comment from NatureScot is noted. Assessments throughout this EIA apply a precautionary approach, acknowledging the uncertainty in the DAS data.</p>
		<p>NatureScot advise that the presented approach to apportionment of unidentified individuals is appropriate. However, NatureScot note that their advice regarding the Year 1 report, recommending the presentation and discussion of auk ID rates in the Year 2 report, has not been addressed.</p>	<p>The method recommended by NatureScot for apportioning unidentified individuals has been applied to all DAS data and presented fully in Appendix 14.1, Volume 2c.</p>
		<p>NatureScot note that no dead birds were reported in the Year 1 report and it was unclear whether this was because there were no dead birds recorded or if they were not included in the report. The Year 2 final report records 33 deceased birds in total, from 11 surveys spanning both survey years.</p>	<p>Abundance estimates throughout the EIA are with dead birds excluded. Full results from the surveys are presented within Appendix 14.1, Volume 2c, which supersedes the interim Year 1 and Year 2 reports.</p>
		<p>In their advice regarding the Year 1 report, NatureScot recommended giving consideration to local and/or regional mortality events (such as HPAI and auk wrecks) when interpreting results. NatureScot note this has not been addressed in the Year 2 final report beyond reporting numbers of deceased birds recorded during surveys.</p> <p>NatureScot advise the Applicant to give proper consideration to mortality events in future assessment, particularly given the DAS were completed both during and after the main HPAI outbreaks of 2021 - 2022. NatureScot advise it will be important to consider the current status of seabird populations relative to their status prior to the</p>	<p>The results of Seabirds Count (the fourth census of Britain and Ireland's internationally important populations of breeding seabirds; Burnell <i>et al.</i>, 2023) have been used as the primary source of recent population information throughout this EIA. Consideration has also been given to the impacts of HPAI, including reviewing more recent count data (e.g. Tremlett <i>et al.</i>, 2024).</p>

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		<p>outbreak, and signpost to recent population data on the SMP database and an RSPB report on HPAI effects (Tremlett <i>et al.</i>, 2024).</p>	
		<p>Section 4 of the Year 2 final report presented estimates of flight heights. NatureScot note they currently recommend the use of generic flight heights from Johnston <i>et al.</i>, (2014) for option 2 of the sCRM tool as per Guidance Note 7. If the Applicant intends to present additional site-specific flight height data as contextual information, a full description of method, accuracy, precision and comparison with Johnston <i>et al.</i>, (2014) with explanation of any differences will be needed to inform further discussions with NatureScot.</p>	<p>Generic flight heights from Johnston <i>et al.</i> (2014) have been used for CRM (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.3, Volume 2c). No site-specific data on flight heights has been presented.</p>
		<p><i>"Within the DAS data one of the most important findings is the 35 unidentified Anser geese noted within the array in Mar 2022, which may equate to over 300 birds based on the tables in the report. It is possible these are Greenland white-fronted geese and on a precautionary approach we advise these are treated as such. Whilst this sub-species is no different in terms of collision risk of other Anser geese, the population is in severe decline and there is an AEWA single species action plan which we are signed up to, which aims to minimise additional mortality on the species. Additionally, the population already has some cumulative drisks from terrestrial wind farms. Woodward et al. (2023) is appropriately precautionary as regards its assessment of Greenland white-fronts but the biogeographic population on last winter's census is now less than 15,000 birds so Woodward is out of date on population size."</i></p>	<p>The collision risk to multiple species of goose, including Greenland white-fronted goose has been assessed through the mCRM (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c).</p>
		<p>Due to the proximity of the development to the shore, NatureScot recommend that the cumulative assessment should also consider the inclusion of onshore wind farms in the vicinity.</p>	<p>Onshore wind farms have been considered within the cumulative assessment where relevant (see Section 14.13 of Chapter 14, Volume 2a).</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>"In the terrestrial environment we use Natural Heritage Zone areas to assess impacts on species at a regional level (both stand alone and cumulatively) and in some cases we recommend national level. See the relevant NatureScot guidance here. A significant proportion of bird activity records from the DAS especially in the breeding season will relate to the regional NHZ3 – Coll, Tiree and Outer Hebrides population and the assessment of impacts should include this. We also recommend assessing the connectivity to Lewis Peatlands SPA given the foraging distances of red-throated diver. See the NatureScot guidance on Assessing Connectivity with SPAs, noting the Western Isles distances which come from survey for other terrestrial wind farms in Lewis."</i> (Page 5)</p>	<p>The comment from NatureScot is noted. The approach to offshore assessment follows standard practice and guidance. It is acknowledged that this does not explicitly consider Natural Heritage Zones, but rather considers regional populations as set out in Appendix 14.1, Volume 2c. Connectivity to SPAs is detailed in the Offshore RIAA but for the avoidance of doubt, connectivity is identified for red-throated diver as a feature of the Lewis Peatlands SPA.</p>
NatureScot	<p>Spiorad na Mara Marine Ornithology Meeting</p> <p>16 April 2025</p>	<p>NatureScot advise that the migratory mCRM tool is now published and available to be used.</p> <p>NatureScot advise that, when using a 'broad front' approach to migratory seabird assessment with WWT Consulting and MacArthur Green (2014), a sense check of whether there is any new information available should be undertaken as the numbers may be different in the 10 years since the publication of the report.</p> <p>Based on previous consultation responses, the only species that have been raised and are not included in the approach to migratory seabirds are sooty shearwater and grey phalarope. NatureScot advise that the Applicant should check if RSPB have provided any sources for these two species. NatureScot also suggest ProcBe work and Marine Directorate</p>	<p>The mCRM tool has been used (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c).</p> <p>The population numbers used for the 'broad front' approach have been updated based on more recent information (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c).</p> <p>The Applicant sought any available information regarding sooty shearwater and grey phalarope from the RSPB and other stakeholders. No evidence was available to support a quantitative assessment.</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>work for sooty shearwater collision, and the use of the Trektellen database.</p> <p>If there is no quantitative information available, NatureScot advise they may need to be assessed qualitatively. Where there is data-poor information, a proxy species that has been assessed quantitatively could be considered to inform a qualitative assessment. NatureScot advise that if there are no sources available and there is no evidence of the two species, then they could be scoped out: grey phalarope based on low numbers and sooty shearwater on a qualitative basis.</p>	<p>The Trektellen database has relatively few records of grey phalarope (zero records from Lewis & Harris/<i>Leòdhas agus na Hearadh</i>; a total of 21 individuals recorded in the period 2016 – 2025 from South Uist/<i>Uibhist a Deas</i> migration count sites). Sooty shearwater were recorded more regularly, but not in significant numbers (average annual total 989 records from the Butt of Lewis/<i>Rubha Robhanais</i> count site).</p> <p>Given the negligible impacts predicted through mCRM (see Section 14.10.1 of Chapter 14, Volume 2a) on other species with similar behaviours (e.g. Manx shearwater and red-necked phalarope, respectively), it is reasonable to conclude that any impacts would also be of negligible magnitude to these species too. In addition, a recent review paper reported the flight height of sooty shearwater as 1.21 ± 1.3 m above sea level, confirming the negligible risk of collision (Miller <i>et al.</i>, 2025).</p>
		<p>NatureScot confirm that for EIA and HRA, species should be taken through the cumulative assessment if the project alone makes a tangible</p>	<p>The comment from NatureScot is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).</p>

Consultee	Date and Forum	Comment	Applicant's Response
		impact, defined as 0.2 mortalities per year or an increase in the baseline mortality rate by at least 0.02 percentage points.	
		NatureScot confirm that scenarios should include with and without Berwick Bank, and that Marine Directorate – Licensing Operations Team (MD-LOT) should be asked if any additional scenarios would also be required to be assessed.	The comment from NatureScot is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).
		NatureScot confirm that compensated impacts from developments where consent has been issued, and compensation has been secured, do not need to be assessed in the cumulative/in-combination assessment.	The comment from NatureScot is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).
		NatureScot agree that data on white-tailed eagle chicks tracked for four years from 2020 to the start of 2025 is a good demonstration to show that white-tailed eagles are not using the Array Area, and would agree that this data should be included in the assessment to support the justification of scoping out white-tailed eagle. (Page 3)	The comment from NatureScot is noted and agreed. White-tailed eagle are therefore scoped out of assessment within this EIAR.
		NatureScot confirm that using individual components of the scores given in Wade <i>et al.</i> , 2016) rather than overall vulnerability scores would not change the conclusions reached by the Applicant with regards to species and/or SPAs screened in, and that no species/SPAs were missed as a result of the method applied.	The comment from NatureScot is noted and agreed.
		NatureScot requested that barrier effects to fulmar at nearby colonies is considered in a qualitative manner, but that there is no need for a displacement assessment.	The comment from NatureScot is noted and agreed. Barrier effects are considered in Section 14.10.5 of Chapter 14, Volume 2a .
		NatureScot advise that Manx shearwater behaviour, in particular nocturnal behaviour and their attraction to lights, is challenging when applying the species to CRM, and any results therefore need to be interpreted with caution.	The comment from NatureScot is noted and Manx shearwater has been fully assessed within the EIAR acknowledging these challenges.

Consultee	Date and Forum	Comment	Applicant's Response
		NatureScot advise that they would typically expect to see herring gull [<i>Larus argentatus</i>] in the collision assessment.	Herring gull has been included in CRM (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.3, Volume 2c).
		NatureScot advise that, in the lack of Northeast and East Ornithology Group (NEEOG) information for puffin in the non-breeding season, the Applicant should use BDMPS to assess puffin.	The comment from NatureScot is noted and agreed. The BDMPS approach has been used for non-breeding puffin.
		The Applicant confirmed they are carrying out a review of literature regarding impacts of lighting on light sensitive species, which will inform the assessment. NatureScot confirms any conclusions or approaches can be shared and discussed with them.	The approach to assessment on light sensitive species was presented on the 8 th April 2025 consultation meeting, The review of responses to lighting and potential impacts is presented in Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a .
NatureScot	Answers to further post-scoping questions 8 May 2025	NatureScot agree with the Applicant's proposed approaches, which includes using the mCRM tool to assess migratory waterbirds, and Wildlife and Wetlands Trust (Consulting) Ltd (2014) and the migrant collision risk tab of the Band (2012) CRM for migratory seabirds.	The comment is noted and agreed (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c).
		NatureScot confirm they understand the mCRM tool to be accurate and advise it should be used for migratory waterbird species. NatureScot agree with the default parameters built into the mCRM tool, but would advise sense checking the results, and if there are unusual or unexpected results emerging from the tool to contact them for discussion.	The comment is noted and agreed (see Section 14.10.1 of Chapter 14, Volume 2a and Appendix 14.4, Volume 2c). As has been raised separately with NatureScot, the default population values built into the mCRM tool do not match the values given in Woodward <i>et al.</i> (2023) for all species, and were therefore

Consultee	Date and Forum	Comment	Applicant's Response
			amended to match Woodward <i>et al.</i> (2023).
		Regarding the assessment of sooty shearwater and grey phalarope, NatureScot would advise requesting the sources that RSPB have used to make their recommendation, and investigating sources such as the Trektellen migration website. Once this has been carried out, NatureScot advise that we will be in a better place to advise what steps to take next, whether the species can be scoped out, and what type of assessment might be appropriate. For species which quantitative data are not readily available, a qualitative assessment may be adequate.	The Applicant sought any available information regarding sooty shearwater and grey phalarope from the RSPB and other stakeholders. No evidence was available to support a quantitative assessment. Given the negligible impacts predicted through mCRM (see Section 14.10.1 of Chapter 14, Volume 2a) on other species with similar behaviours (e.g. Manx shearwater and red-necked phalarope, respectively), it is reasonable to conclude that any impacts would also be of negligible magnitude to these species too.
		NatureScot agree that, as the CEF has not yet been published, the Applicant may progress the application and NatureScot would not expect the Applicant to apply the CEF if it is subsequently published. NatureScot acknowledge that the Applicant will need to progress an alternative assessment in order to keep to proposed scheduling, and NatureScot are happy to provide comments on any alternative assessment outline.	The comment is from NatureScot noted and agreed.
		Regarding cumulative assessment, NatureScot's advice is to include species in the EIA where the project-alone impacts result in a ≥ 0.02 percentage point decrease in annual survival rate.	The comment from NatureScot is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).

Consultee	Date and Forum	Comment	Applicant's Response
		<p><i>"The exception to this is where the project contribution to the cumulative impact is less than 0.2 birds per annum (noting that the ≥ 0.02 percentage point decrease in survival is considered first). In this case the impact from the individual project is deemed to not make a tangible contribution to the cumulative impacts. Where the project contribution is less than 0.2 birds per annum, a project-alone and, where relevant, an in-combination table should be provided that details by site and species the percentage point changes in adult survival rate and the number of birds impacted per annum. This is to allow for this data to be used in future cumulative assessment for other offshore renewable developments, where necessary."</i></p> <p>NatureScot do not accept a threshold of one mortality per annum from the project-alone as the requirement for a cumulative assessment.</p> <p>NatureScot recommend that MD-LOT will need to be consulted to advise on the definitive list of projects to include in cumulative assessments.</p>	<p>The Applicant has requested and received confirmation from MD-LOT as to the projects included within the CEA. See consultee comments within this table from MD-LOT on 25 June 2025 and 8 July 2025.</p>
		<p>NatureScot agree with the proposed approach for obtaining data for other projects, in particular the use of impact values from the NEEOG dataset. NatureScot also accept the approach to obtain values for projects not included in the NEEOG dataset from applications and/or other developer documents.</p>	<p>The comment from NatureScot is noted and the values from the NEEOG dataset have been used for those projects that are covered by NEEOG following MD-LOT advice (see Section 14.13 of Chapter 14, Volume 2a).</p>
		<p>NatureScot agree that it would be acceptable to correct values obtained from other projects to bring impact values in line with current assessment approaches. If values have been corrected, the Applicant</p>	<p>The comment from NatureScot is noted and the values from the NEEOG dataset have been used for those projects that are covered by NEEOG following MD-LOT</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>should provide the original values alongside corrected values and explain the approach taken to provide transparency in the values presented.</p>	<p>advice. For projects not covered by NEEOG, any values that have been corrected to bring the assessment in line with current approaches are highlighted as requested (see Section 14.13 of Chapter 14, Volume 2a).</p>
		<p>NatureScot agree with the approach to identifying VORs, considering abundance in the Array Area, conservation importance (protected site connectivity and Birds of Conservation Concern (BoCC) status) and vulnerability to pressures (using Wade <i>et al.</i>, 2016).</p>	<p>The comment from NatureScot is noted and agreed (see Section 14.6.1 of Chapter 14, Volume 2a which details the approach to identifying VORs).</p>
		<p>NatureScot agree with the species scoped in for inclusion within the collision risk assessment (kittiwake, great black-backed gull [<i>Larus marinus</i>], Arctic tern, fulmar, Manx shearwater, and gannet). NatureScot also advise the inclusion of common gull [<i>Larus canus</i>] and herring gull in collision assessment.</p> <p>In addition, NatureScot advise caution in the interpretation of CRM results for Manx shearwater as attraction to artificial light associated with all phases of the Project will likely increase the risk of collision, but this is not currently accounted for in the CRM.</p>	<p>The comment from NatureScot is noted. CRM has been carried out for herring gull (see section 14.10.1 of Chapter 14, Volume 2a).</p> <p>Zero common gull were recorded in the Turbine Area in the site-specific DAS, and therefore CRM has not been carried out for common gull (with an input density of zero birds, the CRM result would necessarily be zero collisions).</p> <p>Impacts on Manx shearwater have been carefully considered through running CRM (see Section 14.10.1 of Chapter 14, Volume 2a), and additionally through the review of lighting impacts (Sections 14.9.4 and 14.10.7 of Chapter 14, Volume 2a).</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>NatureScot agree with the species scoped in for inclusion within the displacement assessment (guillemot, razorbill, puffin, red-throated diver, great northern diver, gannet). NatureScot request that fulmar is assessed for barrier effects due to the potential of this pressure for birds from breeding colonies in the immediate vicinity of the Project, and advise that a qualitative assessment will likely be sufficient.</p>	<p>The comment from NatureScot is noted and agreed. Displacement effects are considered in Section 14.10.3 Chapter 14, Volume 2a. Barrier effects are considered in Section 14.10.5 of Chapter 14, Volume 2a.</p>
		<p>NatureScot agree with the proposed rate of displacement (100%) and buffer (4 km) for red-throated diver.</p>	<p>The comment from NatureScot is noted and agreed. Displacement effects are considered in Section 14.10.3 Chapter 14, Volume 2a and have used a 4 km for red-throated diver.</p>
		<p>Regarding puffin, NatureScot agree with the Applicant's approach of using the NEEOG methodology if this is available within assessment timescales. If not, NatureScot would advise using the BDMPS to apportion impacts to puffin in the non-breeding season.</p>	<p>The comment from NatureScot is noted and agreed. The BDMPS approach has been used for non-breeding puffin.</p>
		<p>At the screening stage of the HRA, the distance between the colony and the array should be measured as the shortest at-sea distance between the edge of the colony and the edge of the array. To determine the distance between an SPA and the array, this distance should be measured between the closest edge of the SPA boundary and the edge of the array, with all colonies making up the SPA included as the SPA is considered to have connectivity with the development.</p>	<p>Whilst this comment mostly relates to HRA matters (see Offshore RIAA), for consistency, the regional reference population in the breeding season used within this EIAR is assumed to consist of breeding birds from the same list of colonies with connectivity as used for HRA Apportioning. In line with this advice, if the distance from the edge of the Array Area to the edge of an SPA is within the species' specific recommended foraging range, then all colonies for that species</p>

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			<p>within the SPA are deemed to have connectivity (regardless of the distance from the colony itself to the Array Area) and, in addition, any non-SPA colony that is either within foraging range or at least as close as the furthest SPA colony with connectivity is also deemed to have connectivity. See Appendix 14.1, Volume 2c for further details.</p>
NatureScot	Response to Applicant's briefing note	NatureScot are in agreement with the species that have been scoped in and out of the assessment of collision risk and distributional responses. Which confirms that assessment of black guillemot is not required.	The comment from NatureScot is noted and agreed.
	2 June 2025	NatureScot advise that the 'commic tern' species group should be apportioned to Arctic and common tern. Given that no common tern were observed in the Array Area or 2 km buffer, it may be the case that all commic tern are apportioned to Arctic tern. However, NatureScot advise that apportioning should consider the species observed in the wider Survey Area, and if common tern were recorded then commic tern should be appropriately apportioned between both tern species.	The comment from NatureScot is noted. Apportionment of 'commic' terns is not carried out within Appendix 14.1, Volume 2c , but for Arctic tern CRM, the input density includes both Arctic tern and 100% of 'commic' tern (see Appendix 14.3, Volume 2c).
		NatureScot advise that the sensitivity of red-throated diver and great northern diver to collision risk should be classed as 'low' rather than 'very low', citing their vulnerability scores of 60 and 67 respectively from Wade <i>et al.</i> , (2016), which are greater than puffin (scoring 0) which is classed as having very low vulnerability.	The comment from NatureScot is noted and has been applied (see Appendix 14.3, Volume 2c).
		NatureScot note that the abundance of diver species should be considered within the Array Area + 4 km buffer rather than 2 km buffer, as in their previous consultation note.	The comment from NatureScot is noted and has been applied (see Appendix 14.2, Volume 2c).

Consultee	Date and Forum	Comment	Applicant's Response
NatureScot	Update following project update meeting 9 June 2025	<p>NatureScot are participating in the Scottish Renewables Ornithological Impact Assessment (OIA) Streamlining project. In advance of updating their guidance notes, NatureScot will provide advice on the issues identified as projects go through to the OIA process. These include the use of Marine Renewables Strategic Environmental Assessment (MRSea) (especially any project sites where the DAS have observed low numbers) for species, and the duration to be calculated during PVAs, for example 35 and 50 years. NatureScot note that they no longer require a 25 - year period to be calculated.</p> <p>NatureScot note they are hearing of the need for multiple applications as part of a project consenting strategy supported by one EIA. If this is likely to be the case for this project, it would be helpful to discuss the approach to presentation of the impact assessment, particularly in respect of in-combination assessment for the RIAA. NatureScot note their wish to see clear and concise approaches.</p>	<p>The comment from NatureScot is noted. The Applicant can confirm the PVAs have been run for 35 and 50 years (see Appendix 14.5, Volume 2c).</p> <p>The comment from NatureScot is noted however there is a single Offshore Project with a single EIAR therefore this comment is no longer relevant.</p>
MD-LOT	Interim response to questions on cumulative impacts approach 25 June 2025	<p><i>"MD-LOT does not expect any projects, other than Berwick Bank, to have with and without scenarios included in the EIA Report's cumulative effects/in combination assessments. Northland should be aware however that some projects, e.g. West of Orkney, have submitted additional information. This additional information should be considered for relevant projects when conducting cumulative impacts/in combination assessments."</i></p> <p>Regarding a question about how compensated impacts from pre-consent and compensated projects should be accounted for in the cumulative/in-combination assessments, MD-LOT advise that, at the time of writing, they are in discussions with their EIA team about this and will provide a further update when possible.</p>	<p>The comment from MD-LOT is noted and the most current evidence has been used within the CEA (see Section 14.13 of Chapter 14, Volume 2a). This includes incorporation of West of Orkney's additional information.</p> <p>The comment from MD-LOT is noted. The Applicant received further advice in October 2025 which agrees that if a project has been consented and has compensated impacts, then these</p>

Consultee	Date and Forum	Comment	Applicant's Response
		<p>MD-LOT is broadly content with the procedure set out in the 'Zone of Influence' tab of the screening methodology. However, MD-LOT are currently in discussion with NatureScot about how appropriate it is to only consider projects "<i>of an equivalent scale as Spiorad na Mara</i>". The outcome of these discussions could lead to MD-LOT requesting amendments to the projects screened in for Marine Ornithology in the relevant spreadsheet.</p>	<p>compensated impacts can be removed from the CEA.</p> <p>The comment from MD-LOT is noted. All developments which have been considered within the CEA are presented in Appendix 5.3: Cumulative Effects Assessment Detailed Search and Screening Criteria, Volume 1c.</p>
MD-LOT	Email advice 8 July 2025	<p>No project, other than Berwick Bank, requires both "<i>with</i>" and "<i>without consent</i>" considerations for the assessments.</p> <p>Any project that has been deemed to require, and has subsequently successfully secured, a derogation case due to the conclusion that the project will have AEoSI, or at least that MD-LOT is unable to conclude there will be no AEoSI, does not need to have the compensated effects considered within your assessments. However, all non-compensated aspects of such projects must be considered in the assessments.</p> <p>Any project that has not been consented but has the potential to require derogations should still be considered in full within the assessments. Discounting impacts included within a derogation case on the basis of an unapproved compensations package would imply prejudgement of the outcome of that derogation case's determination on MD-LOT's part, which would be inappropriate. MD-LOT is content that the approach you set out in your email on 26 June 2025 is in line with this advice.</p>	<p>The comment from MD-LOT is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).</p> <p>The comment from MD-LOT is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).</p> <p>The comment from MD-LOT is noted and has been applied (see Section 14.13 of Chapter 14, Volume 2a).</p>
		<p><i>"The NTS would also like to re-iterate that impacts on Fulmar and Storm petrels should be considered in the assessments."</i></p>	<p>The Applicant can confirm that both fulmar and storm petrel have been</p>

Consultee	Date and Forum	Comment	Applicant's Response
The National Trust for Scotland (NTS)	Meeting in July 2025 and follow up comments in August 2025		considered as VOR within Chapter 14, Volume 2a.
		The NTS commented that guillemot and razorbill foraging ranges are often underestimated and can vary substantially site-by-site. Specific reference was mentioned in regard Mingulay, Berneray and Pabbay, however there is no-site specific data that the NTS can provide.	The Applicant has followed Woodward <i>et al.</i> (2019) when defining the foraging ranges which is in line with current NatureScot guidance.
NatureScot	Email advice 15 August 2025	The Applicant provided evidence that the numbers presented in the NEEOG dataset had some discrepancies and therefore requested confirmation that previous advice (8 May 2025 from NatureScot) to use NEEOG database was still valid, albeit acknowledging there is potential discrepancies. NatureScot confirmed that the Applicant should still use the NEEOG dataset, despite the discrepancies highlighted, for cumulative impacts.	The comment from NatureScot is noted and the values from the NEEOG dataset have been used for those projects that are covered by NEEOG (see Section 14.13 of Chapter 14, Volume 2a).
RSPB Scotland (Outer Hebrides)	Email received 09 September 2025	RPSB Outer Hebrides providing information on large counts of migratory species that they had been noticing. This included "1000+ Sooty shearwater, 200+ Cory's shearwater along with smaller numbers of great shearwater and both storm-petrel and leach's petrel in 90mins" and "1000+ Manx shearwater, a few hundred sooty shearwater along with smaller numbers of both storm and leach's petrel and pomarine skua in just 1hr".	The Applicant responded to RSPB Outer Hebrides on 06 February 2026 confirming that the number of birds observed have been accounted for within the mCRM (Appendix 14.4, Volume 2c) and that these numbers are known to exist within this area, as described within Appendix 14.1, Volume 2c .
MD-LOT	Email received 14 October 2025	MD-LOT confirmed that previous advice (08 July 2025) was still valid albeit with the application due to be submitted in January 2026 which was slightly delayed than first reported to MD-LOT.	The Applicant notes that the advice provided in July 2025 is still valid and has been followed throughout Chapter 14, Volume 2a and specifically Section 14.14 of Chapter 14, Volume 2a which assesses the cumulative effects.

Consultee	Date and Forum	Comment	Applicant's Response
		<p>MD-LOT confirmed that <i>"In relation to future projects, projects that have a submitted scoping report up to six months prior to application are to be included"</i> in reference to offshore projects and <i>"In relation to future projects, projects that have a submitted scoping report up to three months prior to application are to be included"</i> in reference to onshore projects.' Is an appropriate time period for inclusion of projects within the CEA shortlist.</p>	<p>The Applicant has updated the CEA development list (Appendix 5.3, Volume 1c) to align with the agreed timeframes for inclusion of projects. Appendix 5.3, Volume 1c has been used within the CEA for Marine and Nearshore Ornithology.</p>

2 GLOSSARY OF TERMS AND ABBREVIATIONS

2.1.1.1 A list of key terms and acronyms used in this appendix are provided in **Table 2-1** and **Table 2-2**.

Table 2-1 Acronyms and abbreviations

Term	Definition
AEOI	Adverse Effects on Site Integrity
AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
BDMPS	Biologically Defined Minimum Population Scales
BTO	British Trust for Ornithology
CEA	Cumulative Effect Assessment
CEF	Cumulative Effects Framework
CEMP	Construction Environmental Management Plan
CRM	Collision Risk Modelling
DAS	Digital Aerial Survey
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
ES	Environmental Statement
GPS	Global Positioning System
GSD	Ground Sampling Distance
HPAI	Highly Pathogenic Avian Influenza
HRA	Habitat Regulations Appraisal
mCRM	Migratory Collision Risk Modelling
MD-LOT	Marine Directorate Licencing Operations Team
MHWS	Mean High Water Spring
MRSea	Marine Renewables Strategic Environmental Assessment
MSL	Mean Sea Level
NEEOG	North-East And East Ornithology Group
OIA	Ornithological Impact Assessment
OEMP	Outline Offshore Environmental Management Plan
OWF	Offshore Wind Farm
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
ScotMER	Scottish Marine Energy Research
sCRM	Stochastic Collision Risk Model
SD	Standard Deviation
SMP	Seabird Monitoring Programme
SNCB	Statutory Nature Conservation Body
SPA	Special Protection Area
UK	United Kingdom
VMP	Vessel Management Plan

Term	Definition
VOR	Valued Ornithological Receptors
WTG	Wind Turbine Generator

Table 2-2 Glossary

Term	Meaning
the Applicant	Spiorad na Mara Limited (the Project owner)
Array Area	The offshore area within which the offshore wind turbine generators (WTGs), associated foundations, Offshore Cables, and Offshore Substation Platform (OSP) (if required), will be located. This area encompasses the Turbine Area that will contain all above water surface infrastructure (WTGs/OSP) and an additional area within which further below water infrastructure (foundations and cables) may also be located.
Avoidance	Probability that a bird takes successful evasive action to avoid collision with a turbine.
Biologically Defined Minimum Population Scales	The smallest spatial region for which a biologically distinct population of a given species can be defined. The population present may vary between biological seasons.
Collision risk	Risk of a bird lethally colliding with a wind turbine within a wind farm.
Cumulative effects	Considers the likely significant effects of multiple impacts and activities from several developments.
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
EIA (Environmental Impact Assessment)	A statutory process by which the likely significant effects of certain projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the Environmental Impact Assessment (EIA) Regulations, including the publication of an EIA report.
Environmental Impact Assessment Report (EIAR)	The Environmental Impact Assessment Report (EIAR) prepared to assess the likely significant effects of the Project on the environment.
Embedded or 'Designed-in' Mitigation	Mitigation measures to avoid or reduce environmental effects that are directly incorporated into the preferred design for the Project. This can include standard practice in accordance with or without guidance. Embedded mitigation is considered as part of the impact assessment, before effect significance is identified.
Habitat Regulations Appraisal	A process which helps determine likely significant effects and (where appropriate) assesses adverse effects on the integrity of European conservation sites and Ramsar sites (when these are also an SPA or SAC). The process consists of a multi stage assessment which incorporates screening, appropriate assessment, assessment of

Term	Meaning
	alternative solutions and assessment of imperative reasons of overriding public interest (IROPI) and compensatory measures.
Impact	Change that is caused by an action; for example, land clearing (action) during construction which results in habitat loss (impact).
Landfall	This consists of works from offshore Horizontal Directional Drill (HDD) exit pits (located below MLWS) to onshore at the Transition Joint Bays (TJB) (located above MHWS). The infrastructure and installation methods associated with the Landfall involves both onshore and offshore components.
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.
MRSea	The 'Marine Renewables Strategic Environmental Assessment' statistical package for R to model spatial count data and predict spatial abundances. This package has been developed by the Centre for Research into Ecological and Environmental Modelling (CREEM) specifically for dealing with data collected for marine renewable projects.
NatureScot	NatureScot is the lead public body responsible for Scotland's natural environment.
Offshore Cables	Electrical and communication cables located within the Offshore Cable Area of Search and Array Area. The Offshore Cables consist of Array Cables, Array Cables to Landfall, and Export Cables.
Offshore Cable Area of Search (OCAS)	The area within which the offshore electrical and communication cables between the Array Area and Landfall up to Mean High Water Springs (MHWS) will be located.
Offshore Project	The components of the Spiorad na Mara offshore wind farm (the Project) located seaward of Mean High Water Springs (MHWS).
Ornithology	The study of birds, their behaviour, physiology and taxonomy.
Population Viability Analysis	Population modelling to predict future trends and population estimates for a range of input scenarios.
Project	The Spiorad na Mara offshore wind farm development. This term describes the whole development, including all offshore and onshore components.
Receptor	Any physical, biological or anthropogenic element of the environment that may be affected or impacted by the Project. Receptors can include natural features such as the seabed and wildlife habitats as well as man-made features like fishing vessels and cultural heritage sites.
Scoping	An early part of the EIA process by which the key potential significant impacts of the Project are identified, and methodologies identified for how these should be assessed. This process gives the relevant authorities and key consultees opportunity to comment and define the scope and level of detail to be provided as part of the EIA – which can also then be tailored through the consultation process.

Term	Meaning
Seabird	Bird species that is ecologically dependent on the marine environment for at least part of its life cycle. Seabirds typically forage at sea and may nest on coastal cliffs, islands, or beaches. Examples include gannets, puffins, kittiwakes, and shearwaters.
Season	Bird behaviour is recognised to differ across a calendar year, with particular months recognised as being part of different seasons. Defined seasons allow for assessment to be carried out using season-specific methodology and assessed against the population present within that season.
Study Area	The area in which impacts resulting from the Offshore Project are most likely to occur. This is defined as the Turbine Area plus a 4 km buffer around the Turbine Area, up to Mean High Water Springs (MHWS) (i.e. excluding any land within 4 km of the Turbine Area). Note that consideration is given to connectivity with mobile receptors and protected sites beyond the Study Area.
Turbine Area	A reduced area within the Array Area where above water surface infrastructure would be located i.e. wind turbine generators (WTG) and Offshore Substation Platform (OSP) (if required). This area has been developed and refined through stakeholder engagement and environmental assessment.
Waterbird	Bird species that is ecologically dependent on wetlands, freshwater bodies, or coastal habitats for feeding, breeding, or roosting. This group includes species such as ducks, geese, swans, waders, and herons. While some waterbirds may use marine environments, they are generally more associated with inland or coastal waters than with open sea areas.
Wind Turbine Generator (WTG)	The wind turbines that generate electricity consisting of tubular towers and blades attached to a nacelle housing mechanical and electrical generating equipment

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