

Spiorad na Mara Offshore Wind Farm

Offshore Project

Environmental Impact Assessment Report

Outline Offshore Operation and Maintenance Plan, Volume 3

Project No.: SNM-SNM-PAC-PLN-0009

Date: February 2026

Quality Control Page

Document details	
Document title	Management Plan
Document subtitle	Outline Offshore Operational and Maintenance Plan
Document reference No.	SNM-SNM-PAC-PLN-0009
Date	February 2026
Version	1.0
Author	WSP
Client Name	Sporad na Mara Limited

Document history						
Version	Revision	Issued	Checked	Approved	Date	Comments
1.0	A	WSP	WSP	SnM Ltd	February 2026	Final for submission

Contents

1	Introduction.....	1-1
1.1	Overview	1-1
1.2	Purpose of the Outline Offshore Operational and Maintenance Plan	1-2
1.3	Legislation and guidance.....	1-3
1.4	Scope of Offshore Operation and Maintenance Plan.....	1-4
1.5	Implementation of the Outline Offshore Operation and Maintenance Plan.....	1-4
1.6	Other Related Management Plan	1-4
2	Discharging consent conditions	2-6
3	Glossary of terms and abbreviations.....	3-7
4	References	4-9
	Appendix A Operation and maintenance list.....	4-10
	Appendix B Maximum assessment assumptions for operational and maintenance activities.....	4-14

List of Tables

Table 1.1	Comments raised by Consultees in relation to offshore operation and maintenance activities.....	1-3
Table 1-2	Section 36 and marine licences conditions of relevance to the Operational and Maintenance Plan.....	1-3
Table 1-3	Other related Management Plans to the Outline Offshore Operation and Maintenance Plan	1-4
Table 3-1	Acronyms and abbreviations.....	3-7
Table 3-2	Glossary	3-7
Table A-1	List of activities to be undertaken for operational and maintenance phase	4-10
Table B-1	Maximum assessment assumptions for operational and maintenance activities	4-14

1 INTRODUCTION

1.1 OVERVIEW

1.1.1.1 This **Outline Offshore Operational and Maintenance Plan** (Outline OMP) has been produced along with the Environmental Impact Assessment Report (EIAR) for the proposed Spiorad na Mara Offshore Wind Farm Project (hereafter referred to as 'the Project'). It aims to provide a framework for addressing potential requirements under Section 36 Consent and Marine License, to be refined post-consent once specific conditions are known. The Outline OMP outlines the approach and detail around Operation and Maintenance (O&M) activities, ensuring environmental compliance and minimising impacts on marine receptors.

1.1.2 PROJECT BACKGROUND

- 1.1.2.1 Spiorad na Mara Limited (hereafter referred to as the 'Applicant') is developing the Spiorad na Mara Offshore Wind Farm (the 'Offshore Project') located to the northwest of the Isle of Lewis/*Eilean Leòdhais* in Scotland/*Alba*. The Project comprises both offshore and onshore components.
- 1.1.2.2 This Outline OMP supports the application for the offshore components of the Offshore Project as outlined in **Chapter 1: Introduction, Volume 1a**. The offshore components 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: Project Description, Volume 1a**.
- 1.1.2.3 The Offshore Project is situated off the northwest coast of Isle of Lewis/*Eilean Leòdhais* and the Array Area is located approximately 5 km to 13 km offshore and has a spatial extent of approximately 161 km². It will comprise WTGs, foundations, Offshore Cables, Offshore Substation Platform (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 m to 67 m with the southwest corner of the Array Area reaching 72 m. The proposed WTGs and fixed foundations will be located within a Turbine Area of approximately 140 km², within the Array Area.
- 1.1.2.4 The EIAR accompanies applications for offshore consents, licences, and permissions for the Offshore Project to Marine Directorate - Licensing Operations Team (MD-LOT) under Section 36 (s.36) of the Electricity Act 1989, the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, for the offshore infrastructure seaward of MHWS.
- 1.1.2.5 There are 2 sets of EIA regulations applicable to the Offshore Project: the Electricity Works (EIA) (Scotland) Regulations 2017 for offshore generating stations requiring s.36 consent, and the Marine

Works (EIA) (Scotland) Regulations 2017 for marine licence applications within Scottish territorial waters (0 nm to 12 nm) respectively.

1.2 PURPOSE OF THE OUTLINE OFFSHORE OPERATIONAL AND MAINTENANCE PLAN

- 1.2.1.1 The purpose of this Outline OMP is to provide an outline of reasonably foreseeable offshore maintenance activities and the broad approach to be taken for each activity associated with Offshore Project. This covers the O&M phase of the Offshore Project which is assumed to last 35 years. The aim of the Outline OMP is to detail procedures that will minimise environmental and technical risks during the O&M phase of the Offshore Project.
- 1.2.1.2 Following the commissioning of the Offshore Project, O&M activities can be divided into 2 main categories:
- Scheduled maintenance: during the O&M phase, routine inspection and maintenance of the Offshore Project infrastructure such as wind turbine generators (WTGs), Array Cables and the Offshore Substation Platform (OSP) (if required) will be required to ensure compliance with safety standards and regulations;
 - Unscheduled maintenance: during the O&M phase it is anticipated that unscheduled maintenance activity may be required to deal with fault finding and repairs of the turbines, cable repair/replacement and associated offshore infrastructure repair/replacement.
- 1.2.1.3 Scheduled and unscheduled maintenance activities will require access to the Offshore Project 365 days per year.
- 1.2.1.4 The maximum assessment assumptions for O&M activities that have been assessed in **Chapter 6: Socio-Economics, Volume 2a** to **Chapter 23: Combined and Whole Project Effects Assessment, Volume 2a** are included as **Appendix B: Maximum assessment assumptions for the operational and maintenance activities** of this Outline OMP. Additional details of the O&M activities can be found in **Chapter 3, Volume 1a**.
- 1.2.1.5 This Outline OMP will be further developed post-consent, once the final design and construction methods are confirmed. The subsequent Final Offshore Operational and Maintenance Plan (Final OMP) will include details on:
- O&M requirements of the Offshore Project, including all activities, equipment, structures and associated infrastructure, in accordance with design and manufacturer recommendations;
 - Operational health, safety and environmental management;
 - Accessibility and constraints;
 - Logistical set up of the O&M base;
 - O&M staff requirement, including number and skills;
 - Spare parts and availability;

- Planning of scheduled maintenance;
- Management of unscheduled maintenance.

1.2.1.6 The Outline OMP will be updated and submitted as the Final OMP to Scottish Ministers prior to the O&M phase of the Offshore Project, in consultation with relevant regulatory bodies including, but not limited to, MD-LOT, NatureScot, Historic Environment Scotland, Marine Coastguard Authority, Ministry of Defence, and Scottish Fishermen’s Federation.

1.2.1.7 This Outline OMP has been prepared with consideration of feedback received from stakeholders via the Scoping Opinion, statutory consultation and wider engagement, through which it was emphasised that management plans should be sufficiently robust to serve as effective embedded environmental measures where they are integral to impact reduction. **Table 1.1** presents a summary of stakeholder concerns related to offshore O&M activities.

Table 1.1 Comments raised by Consultees in relation to offshore operation and maintenance activities

Comment	Stakeholder	Response
Paragraph 2.4.16: Section 2.9.2 of the Scoping Report details the operation and maintenance activities that will be considered in the EIA Report. The Scottish Ministers advise that the EIA Report must provide a full description and consideration of the nature and scope of these activities, including the types of activity, their frequency, how activities will be carried out for the Proposed Development and any anticipated cumulative impacts with neighbouring developments. Such proposed activities may require to be permitted by marine licence or planning permission issued for the Proposed Development unless an exemption applies.	MD-LOT	Noted. This document provides the Outline Offshore Operational and Maintenance Plan that sets the foreseeable activities to be included in the consents that have been assessed in the EIAR.

1.2.1.8 **Table 1-2** provides the consent/licence conditions of relevance to the Operational and Maintenance Plan.

Table 1-2 Section 36 and marine licences conditions of relevance to the Operational and Maintenance Plan

Licence / Consent	Conditions	Details	Relevant Section
[To be added post-consent]			

1.3 LEGISLATION AND GUIDANCE

1.3.1.1 The Outline OMP has been developed with reference to the following key legislation and guidance:

- Electricity Act 1989;
- Marine and Coastal Access Act 2009.

1.3.1.2 The Applicant has had regard to the duties set out in the Electricity Act 1989 which requires the generation licence holder (the Applicant in this instance) to do what it reasonably can to mitigate the effects of the Offshore Project as reported in the EIAR. Marine licences are also required for specific activities including during the operation and maintenance phases. The mitigation measures are included within this Outline OMP.

1.4 SCOPE OF OFFSHORE OPERATION AND MAINTENANCE PLAN

1.4.1.1 The Outline OMP will cover the following:

- Discharge of the consent/licence conditions (Section 2). This is the process by which further information is submitted to satisfy the requirements of the conditions imposed by the consent/license before certain works can take place;
- Outline of foreseeable offshore maintenance activities and their maximum assessment assumptions (**Appendix A: Operations and maintenance list** and **Appendix B** of this Outline OMP).

1.5 IMPLEMENTATION OF THE OUTLINE OFFSHORE OPERATION AND MAINTENANCE PLAN

1.5.1.1 This Outline OMP will be submitted for approval to the Scottish Ministers/Licensing Authority and other stakeholders in relation to monitoring compliance with the specific requirements of the relevant consent conditions.

1.5.1.2 During O&M activities the Final OMP, based on this Outline OMP, will be monitored by the Applicant's Operations Manager (or equivalent), Environmental Manager (or equivalent), and MD-LOT.

1.6 OTHER RELATED MANAGEMENT PLAN

1.6.1.1 This Outline OMP and the Final OMP will be developed with consideration of the content and requirements of other relevant Management Plans. These are set out in **Table 1-3** with details of the linkages.

Table 1-3 Other related Management Plans to the Outline Offshore Operation and Maintenance Plan

Management Plan	Licence / consent conditions	Linkage with Offshore Operational and Maintenance Plan
Outline Navigational Safety and Vessel Management Plan	'[To be added post-consent]'	The plan provides an overview of the proposed measures and procedures for managing vessel movements and ensuring navigational safety during the construction and operation of the Offshore Project.

Management Plan	Licence / consent conditions	Linkage with Offshore Operational and Maintenance Plan
Outline Marine Pollution Contingency Plan (MPCP)	'[To be added post-consent]'	Outlines measures to minimise the risk of pollution events and ensure an effective and coordinated response in the event of an incident.
Marine Mammal Mitigation Protocol (MMMP)	'[To be added post-consent]'	Provides mitigation measures for marine mammals during the construction, O&M and decommissioning phases of the Offshore Project. The Outline MMMP will coordinate with the Outline OMP where relevant.
Offshore Invasive Non-Native Species (INNS) Mitigation Plan	'[To be added post-consent]'	Provides measures to prevent and manage INNS during all phases of the Offshore Project, including during the O&M phase. Pollution incidents will be assessed for potential INNS risks.
Fisheries Mitigation Monitoring and Communication Plan	'[To be added post-consent]'	Outlines communication protocols and mitigation measures for interactions with commercial fisheries, including for during O&M.
Outline Offshore Written Scheme of Investigation	'[To be added post-consent]'	Sets out procedures for marine archaeology, including during O&M.
Outline Lighting and Marking Plan	'[To be added post-consent]'	Supports navigational safety and pollution prevention through appropriate marking of offshore infrastructure which will be .
Emergency Response and Cooperation Plan	'[To be added post-consent]'	Will define coordination protocols for multi-hazard emergencies, including fire, collision, and pollution events. It supports compliance with MCA MGN 654 and will be appended to the Safety Zone Application. Protocols for during O&M will be included.

2 DISCHARGING CONSENT CONDITIONS

- 2.1.1.1 The discharging of consent conditions is the process by which conditions that are imposed by MD-LOT at grant of s.36 consent and marine licences are formally satisfied and compliance to them is demonstrated. In the context of O&M, and activities likely to be undertaken during this phase, a list is provided in **Appendix A** of this Outline OMP. This information is currently based on the available information presented in **Chapter 3, Volume 1a**, this list is a live document that will be updated with any additional activities that may be required for the Final OMP and agreed with MD-LOT and consultees.
- 2.1.1.2 The maximum assessment assumptions for O&M activities that have been assessed in **Chapter 6, Volume 2a** to **Chapter 23, Volume 2a** are included as **Appendix B** of this Outline OMP.
- 2.1.1.3 For each activity, a 'traffic light system' will be used to provide clarity as to those activities that can be carried out under the additional marine licences.
- **Green** indicates that an additional Marine Licence is not required, however notification should be provided to the MD-LOT on works being undertaken;
 - **Amber** indicates that an additional Marine Licence may be required if proposed works exceed those assessed within the EIAR;
 - **Red** indicates that an additional Marine Licence could be required dependant on the type of works to be undertaken.

3 GLOSSARY OF TERMS AND ABBREVIATIONS

3.1.1.1 A list of key terms and acronyms used in this Outline OMP are provided in **Table 3-1** and **Table 3-2**.

Table 3-1 Acronyms and abbreviations

Term	Definition
EIAR	Environmental Impact Assessment Report
MD-LOT	Marine Directorate - Licensing Operations Team
MHWS	Mean High Water Springs
O&M	Operation and Maintenance
OCAS	Offshore Cable Area of Search
OWF	Offshore Wind Farm
WTG	Wind Turbine Generator

Table 3-2 Glossary

Term	Meaning
Array Area	Total area within which offshore wind turbine generators (WTGs), associated foundations, Array Cables and Offshore Substation Platform (if required) will be located.
Array Cables	The offshore cables that connect the Wind Turbine Generators (WTGs) to each other and terminate at the Offshore Substation Platform, (if required)
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
Environmental Impact Assessment Report (EIAR)	The Environmental Impact Assessment Report (EIAR) prepared to assess the likely significant effects of the Offshore Project on the environment.
Marine Licence	Licence required for certain activities in the marine environment and granted under either the Marine and Coastal Access Act 2009 or the Marine (Scotland) Act 2010.
Marine Directorate - Licensing Operations Team (MD-LOT)	The regulator for determining marine licence applications on behalf of the Scottish Ministers in the Scottish inshore region (between 0 and 12 nautical miles) under the Marine (Scotland) Act 2010, and in the Scottish offshore region (between 12 and 200 nautical miles) under the Marine and Coastal Access Act 2009.
Offshore Cables	Electrical and communication cables located within the Offshore Cable Area of Search (OCAS) and Array Area.

Term	Meaning
Offshore Cable Area of Search (OCAS)	The area within which the Offshore Cable infrastructure between the Array Area and Landfall will be located.
Offshore Project (Offshore Components of the Project)	Components of the Project seaward of MHWS. Includes Array Area plus Offshore Cable Area of Search.
Offshore Substation Platform	The optional offshore substation located within the Array Area. Includes the platform and associated components which allows the voltage to be increased to meet onward transmission requirements.
Offshore Project Boundary	The 'red line boundary' encompassing the Offshore Project.
Project	To describe the Project as a whole, this includes all offshore and onshore components of the Project.
the Applicant	Sporad na Mara Limited (the Project owner).
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.

4 REFERENCES

Electricity Act 1989, 1989. Available at: Electricity Act 1989 [Accessed 13 February 2026].

Marine (Scotland) Act 2010, 2010 [Online] Available at:

<https://www.legislation.gov.uk/asp/2010/5/contents> [Accessed 13 February 2026].

APPENDIX A OPERATION AND MAINTENANCE LIST

Table A-1 provides a list of activities to be undertaken during the O&M phase for the Offshore Project.

Table A-1 List of activities to be undertaken for operational and maintenance phase

Potential offshore maintenance activity	Included in the EIAR	Location in the application document	Additional Licence likely to be required	Consultation Required with MD-LOT
WTGs Foundations				
Routine Inspections	Yes	Chapter 3 and Chapter 5, Volume 1a. All technical assessments within Chapter 6 to Chapter 23, Volume 2a.	No	No
Repairs and replacements of navigational equipment	Yes		No	No
Removal of marine growth	Yes		No	No
Replacement of corrosion protection anodes	Yes		No	No
Painting	Yes		No	No
Replacement of access ladders and boat landings	Yes		No	No
Modifications to/replacement of J-tubes	Yes		No	No
Foundation replacement	No	N/A. Replacement of a foundation is not expected, as a foundation failure is considered to be a highly unlikely event. Should such an occurrence take place then consent for the replacement of the failed foundation would be obtained from MD-LOT prior to the commencement.	Yes	Yes
WTGs				
Routine inspections	Yes	Chapter 3 and Chapter 5, Volume 1a.	No	No
Replacement of consumables	Yes		No	No

Potential offshore maintenance activity	Included in the EIAR	Location in the application document	Additional Licence likely to be required	Consultation Required with MD-LOT
Minor repairs and replacements within the WTG	Yes	All technical assessments within Chapter 6 to Chapter 23, Volume 2a.	No	No
Major component replacement	Yes		No	No
Painting or other coatings	Yes		No	No
Offshore Substation Platform Foundation (if required)				
Removal of marine growth	Yes	Chapter 3 and Chapter 5, Volume 1a. All technical assessments within Chapter 6 to Chapter 23, Volume 2a.	No	No
Replacement of corrosion protection anodes	Yes		No	No
Painting	Yes		No	No
Replacement of access ladders and boat landings	Yes		No	No
Modifications to/replacement of J-tubes	Yes		No	No
Foundation replacement	No	N/A. Replacement of a foundation is not expected, as a foundation failure is considered to be a highly unlikely event. Should such an occurrence take place then consent for the replacement of the failed foundation would be obtained from MD-LOT prior to the commencement.	Yes	Yes
Offshore Substation Platform (if required)				
Routine inspections	Yes	Chapter 3 and Chapter 5, Volume 1a. All technical assessments within Chapter 6 to Chapter 23, Volume 2a.	No	No
Replacement of consumables and minor components.	Yes		No	No
Major component replacement	Yes		No	No
Painting or other coatings	Yes		No	No
Offshore Cables (Array and Export)				
Routine inspections	Yes	Chapter 3 and Chapter 5, Volume 1a.	No	No

Potential offshore maintenance activity	Included in the EIAR	Location in the application document	Additional Licence likely to be required	Consultation Required with MD-LOT
Offshore Cable repair	Yes	All technical assessments within Chapter 6 to Chapter 23, Volume 2a.	Only if above maximum assessment assumptions in Appendix B of this management plan	Yes
Offshore Cable reburial	Yes		Only if above maximum assessment assumptions in Appendix B of this management plan	Yes
Modifications to/replacement of J-tubes	Yes		No	No
Export Cable repair (intertidal)	Yes		Only if above maximum assessment assumptions in Appendix B of this management plan	Yes
Export Cable reburial (intertidal)	Yes		Only if above maximum assessment assumptions in Appendix B of this management plan	Yes



This page has intentionally been left blank

APPENDIX B MAXIMUM ASSESSMENT ASSUMPTIONS FOR OPERATIONAL AND MAINTENANCE ACTIVITIES

Table B-1 provides the maximum assessment assumptions for offshore operational and maintenance activities and the maximum offshore vessels and logistics assessment assumptions for the O&M phase for the Offshore Project. This information is taken from **Chapter 3, Volume 1a**.

Table B-1 Maximum assessment assumptions for operational and maintenance activities

Potential offshore maintenance activity	Maximum assessment assumptions
WTG foundations	
Routine Inspections	Annually across multiple days including topsides and subsea inspections.
Repairs and replacements of navigational equipment	As required. Would expect to see less than 10 per year across the site unless there was a design issue with the equipment (up to 350 times across the lifetime).
Removal of marine growth	Frequency is dependent on the design basis of the foundations - if marine growth is taken into account in the design, then removal would be infrequent but if there is only a low marine growth allowance then there may need to be campaigns every 2-5 years (up to 18 times across the lifetime).
Replacement of corrosion protection anodes	No more than every 5 years (up to 7 times across the lifetime).
Painting	Typically, every 5 years unless there are design issues (up to 7 times across the lifetime).
Replacement of access ladders and boat landings	Rarely completed (up to 6 times across the lifetime). Typically completed in the event of collision or replacements as part of a life extension refurbishment project.
Modifications to/replacement of J-tubes	Rarely completed. Typically completed in the event of collision or replacements as part of a life extension refurbishment project.
WTGs	
Routine inspections	Annually depending on equipment type. Tasks can be split across different months and different times of year
Replacement of consumables	Annually and bi-annually depending on equipment type. Tasks can be split across different months and different times of year (up to 35 times across the lifetime).
Minor repairs and replacements within the WTG	7-10 instances per year per turbine but we should not seek to limit or quantify - these tasks are the backbone of successful O&M delivery and are required to keep the turbines generating (up to 245 times across the lifetime).
Major component replacement	1-3 replacements per turbine across the lifetime is typical. We should seek to keep a broad approach to delivery (up to 180 times across the lifetime). There are examples of serial defects on some sites which require proactive replacement at all locations within the initial operating period.

Potential offshore maintenance activity	Maximum assessment assumptions
Painting or other coatings	Blade repairs every 2-5 years per WTG (up to 1,050 times across the lifetime). Replacement of Leading Edge Protection every 10 years (up to 4 times across the lifetime). Infrequent paint repairs to turbine.
Offshore Substation Platform Foundation (if required)	
Removal of marine growth	Every 3-5 years with frequency dependent on the design basis of the foundations (up to 12 times across the lifetime).
Replacement of corrosion protection anodes	Every 5 years (up to 7 times across the lifetime).
Painting	Major paint repairs every 5 years unless there are design issues (up to 7 times across the lifetime). There can be minor paint repairs at the annual outage.
Replacement of access ladders and boat landings	Rarely completed. Typically completed in the event of collision or replacements as part of a life extension refurbishment project.
Modifications to/replacement of J-tubes	Rarely completed. Typically completed in the event of collision or replacements as part of a life extension refurbishment project.
Offshore Substation Platform (if required)	
Routine inspections	Up to 2 main planned inspection and maintenance visits per year (up to 70 times across the lifetime). Up to 10 smallest routine inspections visits per year (up to 350 times across the lifetime).
Replacement of consumables and minor components.	Up to 2 main planned inspection and maintenance visits per year (up to 70 times across the lifetime).
Major component replacement	Infrequent, with likelihood of transformer replacement being low and switchgear replacement up to 3 times across the lifetime of the Offshore Project.
Painting or other coatings	Major painting repairs every 5 years unless there are design issues (up to 7 times across the lifetime). Minor paint repairs can occur at annual outage.
Offshore Cables (Array and Export)	
Routine inspections	Up to once per year (up to 35 times across the lifetime).
Offshore Cable repair	Up to 12 km of cable across Offshore Project lifetime.
Offshore Cable reburial	4-6 times across lifetime for highly mobile sites (up to 6 times across the lifetime). Not applicable to low mobility sites.
Modifications to/replacement of J-tubes	Up to 1 across the Offshore Project lifetime.
Export Cable repair (intertidal)	Up to once across the Offshore Project lifetime.
Export Cable reburial (intertidal)	4-6 times across lifetime for highly mobile sites. Not applicable to low mobility sites.