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Morlais Environmental Statement

Addendum 1

Surface Emergent Seabed Mounted (SESM)

Environmental Statement Addendum 1
SESM
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ES Addendum Table of Contents

1. ES Addendum	
Introduction	2
Chapters Remaining Unchanged	3
Changed or new information	6
Summary conclusion.....	6
2. Vol I Chapter 4 Project Description	
3. Vol II Chapter 4 Project Description e.g. Figure 4-5	
4. Vol I Chapter 24 SLVIA Addendum	
5. Vol II Chapter 24 SLVIA Addendum (Appendix A - Figures)	
6. Vol II Chapter 24 SLVIA Addendum (Appendix B - 2019 SLVIA Figures)	

Glossary of Terms

ES	Environmental Statement
EIA	Environmental Impact Assessment
EMMP	Environmental Monitoring and Mitigation Plan
IoACC	Isle of Anglesey County Council
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
MDZ	Morlais Demonstration Zone
NRW	Natural Resources Wales
PDE	Project Design Envelope
RCAHMMW	Royal Commission for Ancient and Historic Monuments of Wales
SLVIA	Seascape, Landscape and Visual Impact Assessment
SESM	Surface Emergent Seabed Mounted

Introduction

This Environmental Statement (ES) Addendum has been produced in order to support the application of a variation to Morlais Marine Licence (reference ORML1938) to amend some of the licenced parameters to allow the proposed Surface Emergent Seabed Mounted (SESM) device deployment within the Morlais Demonstration Zone (MDZ).

Under Regulation 4 of the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended), a variation to a Marine Licence must be assessed to determine whether it introduces new or altered environmental impacts beyond those identified and assessed in the original Environmental Impact Assessment (EIA).

As set out in the Scoping Report (MCRP-MM-DOC-0060 Morlais Variation Scoping Report), with the exception of 3 parameters, the proposed SESM device falls within the technical specifications and operational parameters assessed and consented in the original Morlais EIA and as explicitly outlined in the current Marine Licence. The original EIA assessed impacts based upon defined maximum and minimum operational parameters, including turbine dimensions, rotor diameter, power rating, installation methods, operational noise levels, electromagnetic fields, collision risks, seabed footprint, and hydrodynamic effects. All relevant environmental pathways, receptor sensitivities, and potential impact magnitudes have already been comprehensively evaluated within this parameter envelope. These are summarised in the Project Design Envelope (PDE) Matrix document [MMC156 MOR-RHDHV-DOC-0127b PDE Matrix Spreadsheet] which clearly illustrates which parameters are used to assess which

pathways and impacts.

As validated by a review of the PDE Matrix, with the exception of 3 parameters of the SESM device which will be considered further, the device proposed in this variation does not exceed or differ from these previously assessed parameters and hence for these parameters there are no new or materially different environmental pathways or impacts that could occur. Therefore, whilst this addendum considers the likely significant effects of the project with the proposed changes detailed below, for the remaining unchanged parameters there are no new, altered, or intensified interactions with sensitive receptors or environmental features beyond those previously assessed.

We also highlight that it is acknowledged in the Scoping Opinion that the SESM device is a hybrid of those devices already considered in the ES and hence the SESM device type is therefore considered to be included in the original assessments.

The proposed parameters for the SESM device which are outside of the current PDE are detailed in Table 1 below. This table also details the new proposed parameters for this Marine Licence Variation.

Table 1. Proposed changes to parameters

Parameter	Original ES	ES Addendum 1 SESM
Device swept area – across the whole MDZ	982m ²	1,200m ²
Blade width – across the whole MDZ	2m	3m
Height above Lowest Astronomical Tide (LAT) - to be limited to the geographic area described in the new Figure 4-5 submitted with this application as the Green Hatched Restricted Area.	6.5m	18m

The Scoping Opinion confirmed that a number of matters could be scoped out the process, and that the approach of providing an ES Addendum to make changes to Chapter 4 Project Description and to provide an addendum to Chapter 24 Seascape, Landscape and Visual Impact Assessment (SLVIA) would satisfy this EIA requirement and support the determination of this application.

Chapters Remaining Unchanged

As requested, a list of chapters of the ES that remain unchanged and a summary of these and the reason for scoping out these chapters out of the addendum assessment is included below in Table 2.

These Chapters and the Original ES from Marine Licence ORML 1938 can be accessed via the NRW website here <https://publicregister.naturalresources.wales/Search/Results?SearchTerm=ORML1938>

Table 2. Original ES Chapters remaining unchanged and reason scoped out

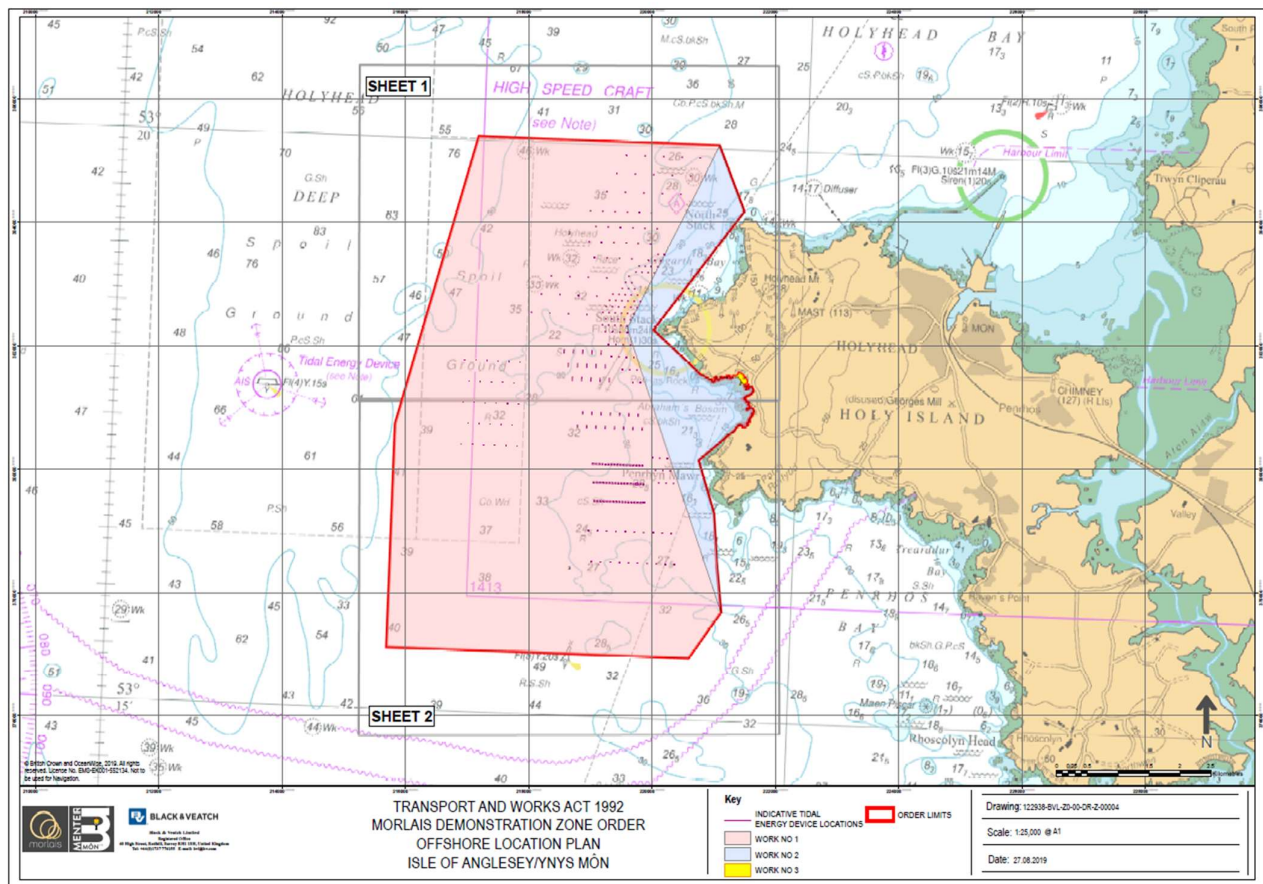
ES Chapter	Reason scoped out and unchanged as agreed by NRWL in the Scoping Opinion
Vol I, Vol II & Vol III Chapter 1 Introduction	In the Scoping Opinion, Natural Resources Wales (NRW) agree with topics scoped out of the EIA assessment as detailed in Table 1 and Appendix 1 of the Scoping Report. This agreement is on the basis that the assessment conducted as part of the original consent application remain applicable and where appropriate necessary mitigation has already been secured.
Vol I, Vol II & Vol III Chapter 2 Policy and Legislation	
Vol I, Vol II & Vol III Chapter 3 Site Selection and Consideration of Alternatives	
Vol I, Vol II & Vol III Chapter 5 EIA Methodology	
Vol I, Vol II & Vol III Chapter 6 Consultation	
Vol I, Vol II & Vol III Chapter 7 Metocean Conditions and Coastal Processes	

Vol I, Vol II & Vol III Chapter 8 Marine Water and Sediment Quality	
Vol I, Vol II & Vol III Chapter 9 Benthic and Intertidal Ecology	
Vol I, Vol II & Vol III Chapter 10 Fish and Shellfish Ecology	
Vol I, Vol II & Vol III Chapter 11 Marine Ornithology	In the Scoping Opinion, NRW agreed with the Scoping Report that no further assessment on Marine Mammals and Marine Ornithology would be required at this stage based on a mitigation which is already in place and secured within the conditions of Marine Licence (ORML1938) which require an Environmental Monitoring and Mitigation Plan (EMMP) which includes a procedure for updating collision risk models for each phase of the development. NRW Advisory were therefore satisfied that further assessment on Marine Mammals and Marine Ornithology can be scoped out.
Vol I, Vol II & Vol III Chapter 12 Marine Mammals	The Scoping Opinion agreed that these could be scoped out of the assessment. The Joint Nature Conservation Committee (JNCC) were satisfied that impact of the proposed changes on collision risk to marine mammals could be scoped out, due to the requirement for an EMMP to be produced as part of the conditions of Marine Licence ORML1938. NRW Advisory agreed with the Scoping Report that no further assessment on Marine Mammals and Marine Ornithology would be required at this stage based on a mitigation which is already in place and secured within the conditions of Marine Licence (ORML1938) for an EMMP which includes a procedure for updating ERM/CRM models for each phase of the development. NRW Advisory were therefore satisfied that further assessment on Marine Mammals and Marine Ornithology can be scoped out.
Vol I, Vol II & Vol III Chapter 13 Offshore Archaeology and Cultural Heritage	The Scoping Opinion agreed that these are scoped out of the ES addendum. Cadw and the Royal Commission for Ancient and Historic Monuments of Wales (RCAHMW) agreed that the revised design would not result in any change to the existing assessment of impact on marine archaeology.
Vol I, Vol II & Vol III Chapter 14 Commercial Fisheries	NRW agree with topics scoped out of the EIA assessment as detailed in Table 1 and Appendix 1 of the Scoping Report. This agreement is on the basis that the assessment conducted as part of the original consent application remain applicable and where appropriate necessary mitigation has already been secured.
Vol I, Vol II & Vol III Chapter 15 Shipping and Navigation	
Vol I, Vol II & Vol III Chapter 16 Infrastructure and Other Users	
Vol I, Vol II & Vol III Chapter 17 Water Resources and Flood Risk	
Vol I, Vol II & Vol III Chapter 18 Ground Conditions and Contamination	
Vol I, Vol II & Vol III Chapter 19 Onshore Ecology	
Vol I, Vol II & Vol III Chapter 20 Onshore Archaeology and Cultural Heritage	

Vol I, Vol II & Vol III Chapter 21 Noise and Vibration	NRW agree with topics scoped out of the EIA assessment as detailed in Table 1 and Appendix 1 of the Scoping Report. This agreement is on the basis that the assessment conducted as part of the original consent application remain applicable and where appropriate necessary mitigation has already been secured.
Vol I, Vol II & Vol III Chapter 22 Air Quality	
Vol I, Vol II & Vol III Chapter 23 Traffic and Transport	
Vol I, Vol II & Vol III Chapter 25 Socioeconomics, Tourism and Recreation	
Vol I, Vol II & Vol III Chapter 26 Cumulative, Transboundary and In-Combination Impact Assessment	
Vol I, Vol II & Vol III Chapter 27 Summary	

As discussed above, only the three device parameters have changed for this Marine Licence Variation proposal. The project location remains unchanged and is provided for ease of reference below in Figure 1. This is a standalone document submitted as part of the Original ES with document reference MOR-BAV-DRW-0001001 and title Offshore Location & Works Plans.

Figure 1. Offshore Project Location



Changed or new information

The following are areas of the ES Addendum that have changed or are new, in order to include the SESM devices in the PDE:

Vol I Chapter 4 Project Description

A new and updated version of Chapter 4 has been provided with this proposal, to include the SESM device type and three changes to devices parameters.

Vol II Chapter 4 Project Description e.g. Figure 4-5

A new and updated version of Figure 4-5 (which formed part of the Original ES Vol II Chapter 4) has been provided with this proposal, to include the SESM devices in the Green Hatched Restricted Area.

Vol I Chapter 24 SLVIA Addendum

The Original ES Chapter 24 remains unchanged and an addendum has been provided with this proposal.

Vol II Chapter 24 SLVIA Addendum (Figures)

New document, Appendix A includes updates to viewpoints which could be affected by the proposed SESM devices. An additional viewpoint was added at the request of NRW and the Isle of Anglesey County Council (IoACC). Appendix B includes the original 2019 figures for ease of reference.

Summary conclusion

Following a review of the proposed variation to the existing consented parameters, it is concluded that no material change arises in respect of the seascape, landscape or visual impacts previously assessed within the 2019 Seascape, Landscape and Visual Impact Assessment (SLVIA).

There have been no changes to the baseline context of the Proposed Development— including published landscape character assessments, landscape designations, or applicable policy frameworks — that would materially alter the original judgements set out in the 2019 SLVIA.

Updated Zone of Theoretical Visibility (ZTV) analysis confirms that the visibility of the proposed SESM devices would be less than that predicted for the Project Design Envelope (PDE) assessed in 2019, with no additional locations where the revised devices would be visible. While the proposed variation introduces a new tidal device type, the change is limited to the height of the structure (up to 18 m above LAT) and the characteristics of the rotor system.

On this basis, the magnitude of change and the level of seascape, landscape and visual effect remain unaltered from those reported in the 2019 Environmental Statement. The proposed variation does not introduce any new or intensified impact pathways, and no new significant environmental effects are predicted.

Additionally, as outlined in the Morlais Variation Scoping Report (Menter Mòn, April 2025), the revised PDE will extend the maximum swept area to 1,200 m² per unit (compared to 982 m² assessed in the Marine Licence) and a blade width (chord) of up to 3 m (compared to 2 m used in the 2019 Environmental Statement). These increases are minor in nature and, represent a modest refinement that will not give rise to any materially different environmental effects. The relevant collision and hydrodynamic parameters remain controlled under the approved Environmental Mitigation and Monitoring Plan (EMMP) and Device Deployment Protocol (DDP), ensuring that site-specific modelling and monitoring will verify acceptability prior to deployment.

In conclusion, and for the purposes of the Environmental Statement Addendum, it is considered that the proposed variation does not result in any material change to the previously assessed impacts in the original ES.