

ATTACHMENT 4.10 NATIONAL BIODIVERSITY ACTION PLAN COMPLIANCE DETAILS

Oriel Wind Farm Project

Oriel Windfarm Limited

1.0 Introduction

This report addresses how the proposed site investigation (SI) works align with and support Ireland's 4th National Biodiversity Action Plan (NBAP) 2023–2030, as required under Question 4.10 of the Maritime Area Regulatory Authority (MARA) Guidance Note for Applicants (November 2025).

Published by the Department of Housing, Local Government and Heritage (DHLGH), the NBAP is Ireland's overarching policy framework for preventing and reversing biodiversity loss across the country, and integration of biodiversity into all sectors. The NBAP is closely aligned with EU law and builds upon the existing EU Birds and Habitats Directives and the EU Natura 2000 Network of protected areas. The plan sets out five strategic objectives, each addressing an individual theme with a series of outcomes to be achieved, with 194 specific actions enabling a whole-of-government and whole-of society response to Ireland's biodiversity crisis. While the plan itself is primarily a policy and strategic document rather than a standalone piece of legislation, it guides the implementation of binding EU environmental directives and national laws, assigning responsibilities to public bodies, and embedding biodiversity considerations into decision-making.

This report provides information to show how the proposed SI works are consistent with the 4th NBAP objectives (see Section 2.0) and the relevant NBAP policies (see Section 3.0). The proposed mitigation measures to ensure the SI works align with the NBAP objectives are outlined in Section 4.0.

1.1 Statement of Authority

The technical competence of the authors is outlined below.

Aoife Edgely is an Associate Marine Scientist in the Environmental Services Business Unit in Tetra Tech. She has over 15 years' experience in the marine science field and is a Chartered Environmentalist and a Full Member of the Institute of Environmental Sciences. Aoife holds an honours degree in Environmental Science from Trinity College Dublin and a Master's in Marine Environmental Protection from Bangor University, Wales. Aoife has delivered the environmental assessments for a wide range of marine and coastal projects, including environmental impact assessment, appropriate assessment and Annex IV species reports.

Rachael Shaw is a Project Scientist in the Environmental Services Business Unit in Tetra Tech. She holds a Bachelor's Degree in Marine Science from the University of Galway and Master's Degree in Climate Change and Managing the Marine Environment from Heriot-Watt University Edinburgh. She has five years' experience working in consultancy, assisting on a wide range of projects from offshore renewable energy projects to flood relief schemes, including marine and terrestrial surveys. She is a full member with Institute of Environmental Sciences (IES).

Róisín Murphy is a Scientist in the Environmental Services Business Unit in Tetra Tech. She holds an honours degree in Zoology (B.Sc.) and Master's degree in Marine Biology, both from University College Cork. She has two years' experience as a Project Manager at Cork Nature Network, responsible for marine and river surveys, and one years' experience in marine licensing and flood relief projects within Tetra Tech. She is a qualifying member with IES.

2.0 Consistency of the SI works with NBAP Objectives

Table 2-1 outlines how the proposed SI works are consistent with the NBAP objectives.

Table 2-1 Alignment of proposed SI works with NBAP objectives.

NBAP Objective	Objective Wording	Consistency of proposed SI works with NBAP objective
Objective One: Adopt a whole-of-government and a whole-of-society approach to biodiversity	Proposed actions include capacity and resource reviews across Government; determining responsibilities for the expanding biodiversity agenda; providing support for communities, citizen scientists and business; and mechanisms for the governance and review of this National Biodiversity Action Plan.	The proposed SI works will align with Objective One through the implementation of mitigation for biodiversity as proposed in the assessment of the works (see Attachment 4.3 Natura Impact Statement (NIS) (Report ref: MDR1520C-TTI-00-XX-RP-Z-0004), Attachment 4.3 AA (Appropriate Assessment) Screening Report (Report ref: MDR1520C-TTI-00-XX-RP-Z-0006) and Attachment 4.4 Annex IV Report (MDR1520C-TTI-00-XX-RP-Z-0005) submitted with this application).
Objective Two: Meet urgent conservation and restoration needs	Supporting actions will build on existing conservation measures. Efforts to tackle Invasive Alien Species (IAS) will be elevated. The protected area network will be expanded to include the Marine Protected Areas. The ambition of the EU Biodiversity Strategy will be considered as part of an evolving work programme across Government.	The proposed SI works will align with Objective Two. The works are temporary in nature and will not impact adversely on Natura 2000 sites (see Attachment 4.3 NIS). Invasive species have not been recorded within the MUL Area; however, mitigation measures will be implemented to manage IAS during the proposed SI works. Standard measures will be in place across all vessels and equipment to prevent the spread of IAS as part of their standard operating procedures.
Objective Three: Secure nature's contribution to people	Actions highlight the relationship between nature and people in Ireland. These include recognising the tangible and intangible values of biodiversity, promoting nature's importance to our culture and heritage and recognising how biodiversity supports our society and our economy.	The proposed SI works will align with Objective Three. The generation of baseline marine ecological data will increase the State's wider baseline database. Furthermore, it can increase awareness and understanding of marine biodiversity and environments.

Oriel Wind Farm Project

NBAP Objective	Objective Wording	Consistency of proposed SI works with NBAP objective
Objective Four: Enhance the evidence base for action on biodiversity	This objective focuses on biodiversity research needs, as well as the development and strengthening of long-term monitoring programmes that will underpin and strengthen future decision-making. Action will also focus on collaboration to advance ecosystem accounting that will contribute towards natural capital accounts.	The proposed SI works will align with Objective Four through the completion of ecological surveys and data collection that will contribute to a stronger evidence base.
Objective Five: Strengthen Ireland's contribution to international biodiversity initiatives	Collaboration with other countries and across the island of Ireland will play a key role in the realisation of this Objective. Ireland will strengthen its contribution to international biodiversity initiatives and international governance processes, such as the United Nations Convention on Biological Diversity.	The proposed SI works will align with Objective Five. SI works will produce baseline ecological and environmental data, expanding Ireland's biodiversity dataset. SI activities can involve the application of internationally recognised survey methods and standards, enabling data comparability and supporting cooperation with neighbouring jurisdictions.

3.0 Consistency of the SI Works with Policies the NBAP Takes into Account

The NBAP is structured around policies, objectives, outcomes, targets and actions. Table 3-1 sets out all marine-relevant items and demonstrates consistency with the proposed SI works.

Table 3-1 Alignment of SI Works with NBAP-Linked Policies and Programmes

Policy/ Programme	Summary of Requirement	Statement of Consistency
EU Green Deal	Make the European Union climate-neutral by 2050 and achieve net-zero greenhouse gas emissions.	SI works will be consistent with and contribute to the Green Deal by enabling the development of the Oriel Wind Farm Project, a renewable energy project.
EU Nature Restoration Regulation (proposed, formerly referred to as “Nature Restoration Law”)	Restore degraded ecosystems across the EU by setting legally binding targets to improve biodiversity and ecosystem health.	SI works will provide detailed data on marine habitats and species, helping support Ireland in meeting future restoration targets under the Regulation, once adopted.
Kunming-Montreal Global Biodiversity Framework	Halt and reverse biodiversity loss by 2030 through conserving at least 30% of land and sea and restoring degraded ecosystems.	SI works will avoid permanent habitat loss, apply strict mitigation to prevent disturbance, and generate baseline data, all of which contribute to Ireland’s delivery of the Framework.
UN Convention on Biological Diversity (CBD)	Requires countries to conserve biodiversity, use biological resources sustainably, and ensure fair sharing of benefits from genetic resources.	SI works will be consistent with the CBD principles: they are precautionary, proportionate, designed to avoid impacts, and contribute new data for sustainable management of marine resources.
UN Sustainable Development Goals (SDGs)	Require global action to achieve sustainable development by balancing economic growth, environmental protection, and social well-being by 2030.	SI works will be consistent with the SDGs and support the Oriel Wind Farm Project in its aim to support clean energy (SDG 13), protects marine ecosystems, and promotes sustainable development through minimising environmental impacts (SDG 14).
EU Biodiversity Strategy to 2030	Protection and restoration of ecosystems, aiming to halt biodiversity loss and place nature on a path to recovery by 2030.	SI works will not result in permanent habitat loss and will avoid adverse effects on Natura 2000 sites. The NIS concluded that the proposed SI works, either alone or in-combination with any other plan or project, will not adversely affect the integrity of any European Site.

Oriel Wind Farm Project

Policy/ Programme	Summary of Requirement	Statement of Consistency
Birds Directive (2009/147/EC)	Protection, management, and conservation of all wild bird species and their habitats across the EU.	SI works will be consistent with the Birds Directive (2009/147/EC). The NIS concluded that the proposed SI works, with the application of mitigation measures, either alone or in-combination with any other plan or project, will not adversely affect the integrity of any European Site or SCI bird species.
Habitats Directive (92/43/EEC)	Requires EU Member States to protect and restore habitats and species of European importance by designating and managing Natura 2000 sites, ensuring strict species protection, and assessing and controlling activities that could damage them to achieve favourable conservation status.	SI works will be consistent with the Habitats Directive (92/43/EEC). The NIS concluded that the proposed SI works, with the application of mitigation measures, either alone or in-combination with any other plan or project, will not adversely affect the integrity of any European Site. The Annex IV Risk Assessment concluded that the proposed SI works comply with the system of strict protections afforded by Article 12 of the Habitats Directive and Regulations 51 and 52 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended.
Water Framework Directive (2000/60/EC)	Requires EU Member States to protect and enhance all surface and groundwater by preventing deterioration and achieving “good” ecological and chemical status through river basin management planning and pollution control measures.	SI works will be consistent with the Water Framework Directive (2000/60/EC) and with the implementation of the mitigation measures, there will be no long term or significant negative impacts on water aspects (water quality and hydrology) of the receiving environment as a result of the SI works as demonstrated in attachment 4.5 Consistency of the Proposed Maritime Usage with the Objectives of the WFD.
Nitrates Directive / Nitrates Action Programme	Protect water quality by identifying vulnerable areas and implementing measures—such as limits on fertiliser and manure application and rules of good agricultural practice—to prevent and reduce nitrate pollution from agriculture.	Not applicable. The SI works do not generate nutrient inputs and have no interaction with this Directive or Programme.
Marine Strategy Framework Directive (2008/56/EC)	Protect, preserve and restore the marine environment by applying an ecosystem-based approach and implementing marine strategies to achieve or maintain “good environmental status” while ensuring the sustainable use of marine resources.	SI works will be consistent with the Marine Strategy Framework Directive (2008/56/EC) as they do not hinder the achievement or maintenance of “good environmental status” of marine waters, as demonstrated in attachment 4.6 Compliance with the Objectives of the MSFD.
OSPAR Convention	Requires contracting parties to cooperate to prevent and eliminate marine pollution, protect and conserve marine ecosystems and biodiversity, and	SI works will be consistent with the OSPAR Convention as works will be carried out in a way that prevents marine pollution and

Oriel Wind Farm Project

Policy/ Programme	Summary of Requirement	Statement of Consistency
	ensure the sustainable use of the North-East Atlantic through coordinated monitoring, regulation, and application of best environmental practices.	minimises disturbance to marine ecosystems, supporting the Convention's objectives of protecting the marine environment and ensuring sustainable use.
Wildlife Acts (1976–2023)	Licensing, mitigation, and monitoring to avoid disturbance, injury, or habitat damage to protected species and designated wildlife areas.	SI works will be consistent with the Wildlife Acts (1976–2023) and will be undertaken with appropriate mitigation measures implemented to avoid or minimise disturbance, injury, or habitat damage to protected species and designated wildlife areas.
Climate Action Plan (CAP) 2025	Requires Ireland to implement cross-sector measures and policies to significantly reduce greenhouse gas emissions (by 51% by 2030) and transition to a climate-neutral, climate-resilient economy by 2050 in line with legally binding carbon budgets and targets.	SI works will be consistent with the CAP 2025 and will enable the sustainable deployment of Oriel Wind Farm project, contributing to national emissions reduction targets while ensuring environmental impacts are appropriately assessed and managed.
Common Agricultural Policy Strategic Plan	Requires Member States to design and implement measures that provide financial support to farmers while ensuring compliance with environmental, climate, and land-management standards to promote sustainable agriculture, biodiversity protection, and viable rural economies.	Not applicable. The SI works have no interaction with agricultural land or practices. There is therefore no conflict with the plan, and the works are neutral in relation to its objectives.
Forestry Strategy	Expansion and sustainable management of forests to increase forest cover and deliver climate mitigation, biodiversity protection, water quality improvement, and economic and social benefits through multifunctional, resilient forestry.	Not applicable. The SI works do not involve forestry or land use change. They have no interaction with the Forestry Strategy and therefore present no conflict.
River Basin Management Plan (RBMP)	Requires Member States to assess water bodies, identify pressures, and implement coordinated programmes of measures at river basin scale to prevent deterioration and protect and restore waters to “good” ecological and chemical status.	SI works will be consistent with the RBMP as demonstrated through the Compliance with Objectives of the WFD (Attachment 4.5), which confirms no deterioration of water body status and no hindrance to achieving good ecological and chemical status.
Proposed Maritime Area Planning (Marine Protected Areas) (Amendment) Bill	Requires the identification, designation, and effective management of marine protected areas, with enforceable measures to conserve marine biodiversity and ecosystems and establish a coherent network of protected sites covering a significant proportion of Ireland's maritime area.	SI works will be consistent with the Proposed Maritime Area Planning (Marine Protected Areas) (Amendment) Bill as they have been designed to avoid disturbance or damage to protected or proposed marine areas and to inform assessments ensuring compliance with conservation and management objectives.

4.0 Mitigation Measures

Mitigation has been proposed in the design of the SI works to ensure no adverse effect on designated sites or species, demonstrating consistency with the 4th NBAP. Further details on mitigation measures are described in Attachment 4.3 NIS (Report ref: MDR1520C-TTI-00-XX-RP-Z-0004). After detailed assessment, the AA Screening Report, NIS and Annex IV Risk Assessment determine that the mitigation measures implemented will preserve the conservation status of protected habitats and species during the SI works proposed under this MUL. In the following section the proposed mitigation to be implemented for receptor groups screened into the NIS is outlined, along with the conclusion of assessments of impacts to said receptor groups.

4.1 Marine Mammals

The NBAP clearly requires management of pressures like noise and disturbance for protected species and sites, including marine mammals. There is the potential for underwater noise generated during the geophysical and geotechnical surveys proposed in this MULA, as well as from survey vessels, to result in injury and/or disturbance to marine mammal species. Mitigation measures have been included in the survey design to avoid and/ or mitigate the risk of underwater noise disturbance:

- MMO pre survey monitoring - a qualified MMO will undertake at least 30 minutes of pre-start monitoring, with surveys only commencing if no marine mammals are detected within the relevant exclusion zones, and only under suitable daylight visibility.
- Soft-start procedures – will be applied to sound-producing surveys (20 mins geophysical, 40 mins seismic), though are not required for geotechnical drilling;
- Log of all relevant events - MMO will record all sightings, mitigation actions, and operational events using standardised forms.

The assessment undertaken in the NIS concludes that the proposed SI works, either alone or in-combination with any other plan or project, will not adversely affect the integrity of any European Site (or Conservation Objectives of said sites). Therefore, the proposed SI works are consistent with the NBAP Objectives and will not adversely impact marine mammal species.

4.2 Otter

The NBAP clearly requires management of pressures like noise and disturbance for protected species and sites, including otter. Desk-based and site-specific survey data show that otter activity is rare within the areas adjacent to the MUL, however, as otters can forage within 80 m of the shoreline there is potential for interaction between otters and underwater noise generated during nearshore geophysical and geotechnical surveys being undertaken within this zone. Mitigation measures have been included in the survey design to avoid and/ or mitigate the risk of underwater noise disturbance to otter:

- MMO pre survey monitoring - a qualified MMO will undertake at least 30 minutes of pre-start monitoring, with surveys only commencing if no otter are detected within the relevant exclusion zones, and only under suitable daylight visibility.
- Soft-start procedures – will be applied to sound-producing surveys (20 mins geophysical, 40 mins seismic). Soft start procedures are not required or appropriate for geotechnical drilling;
- Log of all relevant events - MMO will record all sightings, mitigation actions, and operational events using standardised forms.

The assessment undertaken in the NIS concludes that the proposed SI works, either alone or in-combination with any other plan or project, will not adversely affect the integrity of any European Site (or Conservation

Objectives of said sites). Therefore, the proposed SI works are consistent with the NBAP Objectives and will not adversely impact otter.

4.3 Birds (SPA's)

The NBAP clearly requires management of pressures like noise and disturbance for protected species and sites, including birds. Potential impacts to birds were screened into the NIS comprised above water noise and disturbance to seabirds and wintering birds. Likely significant effects due to habitat loss, alteration or fragmentation and underwater noise effects were ruled out for all SPAs.

The physical presence of survey vessels in the marine environment, and the noise associated with the operation of survey equipment, could result in a limited degree of disturbance to seabirds in the vicinity of survey vessels and/or Jack-Up-Barge (JUB). This activity will not differ considerably to existing vessel activity in the region. There is a regular baseline of vessel traffic within the MUL Area, while commercial and fishing vessels transverse the MUL Area to access nearby ports. It is not anticipated that above-water noise emitted by the survey vessels and equipment will differ significantly from that emitted by vessels already using the area. Birds using the area are likely to be habituated to the baseline levels of activity and are unlikely to be significantly disturbed by the presence of vessels.

It is possible that ex situ birds from nearby sites will be present within the MUL Area during intertidal geotechnical sampling. Given the availability of extensive alternative foraging and roosting habitat along this stretch of coastline and the temporary nature and short duration of the works on the beach, it is considered highly unlikely that the SI works will lead to levels of disturbance capable of resulting in long-term displacement or a reduction in population of any bird species. Therefore, the proposed SI works are consistent with the NBAP objectives and will not adversely impact on birds.

4.4 Invasive Alien Species

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM), 2004, entered into force globally on 8 September 2017. It is a treaty, adopted by the International Maritime Organization (IMO) in order to help prevent the spread of potentially harmful aquatic organisms and pathogens in ships' ballast water, including invasive species¹. The Sea Pollution (Miscellaneous Provisions) Act 2006 gives effect to a number of internationally agreed instruments including the International Convention on Ballast Water Management 2004. The Convention stipulates that ships must manage their ballast water so that aquatic organisms and pathogens are removed or rendered harmless before the ballast water is released into a new location.

All vessels used as part of the SI works will take actions to prevent the spread of IAS as part of their standard operating procedures. Therefore, the proposed SI works are consistent with the NBAP objectives and will include measures to avoid introducing IAS.

4.5 Pollution Control

As is standard procedure onboard vessels operating in the marine environment, the following standard measures will be implemented to ensure the works align with the NBAP to ensure pollution control:

- All vessels will comply with international standards according to the MARPOL (maritime pollution) Convention and the Sea Pollution Acts with respect to wastewater and food waste discharges. Hazardous materials, radiation sources or chemicals will be stored, handled, used and documented in accordance with those legal provisions and also the Safety Health and Welfare at Work Act 2005, as amended, and

¹ <https://invasives.ie/about/legislation-policy/> - Accessed July 2026

associated regulations, which apply to vessels as places of work, and the Chemicals Act 2008, as amended, and associated regulations, accepted guidelines, and technical standards and requirements.

- An oil pollution emergency plan will be implemented onboard all survey vessels. This plan will specify:
 - Information on the location and detail of spill response resources on board
 - Information on crew training in relation to oil pollution response
 - How crew will interface with other vessel operators, where applicable.
- Spill kits will be stored on board all vessels and will also be available where machinery is operating in the intertidal zone. Any fluid leaks or spills will be cleaned up immediately. All machinery or vehicles on the intertidal area will be fuelled on the hard-standing surface of a car park or road and at least 10 m from a drain or gully.

5.0 Conclusion

The proposed SI works have been designed and assessed with full consideration of the 4th National Biodiversity Action Plan (2023–2030).

- The SI works have been designed in a way that aligns with NBAP objectives to protect ecological sensitivities, while also generating a robust environmental evidence base. Through the application of mitigation measures and careful planning, the surveys minimise potential impacts on marine habitats and species, supporting conservation and ecological protection.
- As demonstrated in Table 2-1, the SI works are consistent with all relevant NBAP items, including the protection of designated sites and species, prevention and control of IAS and the generation of data relevant to biodiversity and ecosystems, including conservation needs.
- Mitigation has been proposed in the design of the SI works to ensure no adverse effect on designated sites or species, demonstrating consistency with the 4th NBAP.

Therefore, the works proposed in this MULA are consistent with the Ireland's 4th National Biodiversity Action Plan (NBAP) 2023–2030. They uphold the statutory biodiversity duty under the Wildlife (Amendment) Act 2023 to have regard to the NBAP, and they ensure that the proposed maritime usage is fully consistent with national biodiversity policy.