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Document history

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Contents

Glos	sary	. 1
Abbr	eviations and Acronyms	.2
	Introduction	
2.	Consistency with MSFD Descriptors	.4
3.	Conclusion	. 7

Glossary

Term	Definition	
Adverse Effect on Site Integrity (AEOSI)	A finding under the Habitats Directive when a plan or project undermines the ecological functions of a Natura 2000 site.	
Annex IV Species	Species strictly protected under Annex IV of the EU Habitats Directive, including all cetaceans, seals, and marine turtles.	
Appropriate Assessment (AA)	Assessment required under the Habitats Directive to determine whether a plan or project will adversely affect the integrity of a Natura 2000 site.	
Favourable Conservation Status (FCS)	A status achieved when the natural range, population viability, and future prospects of a species or habitat are secure and stable or improving.	
Good Environmental Status (GES)	The environmental status of marine waters where they are ecologically diverse, clean, healthy, and productive, as defined by the MSFD.	
Marine Strategy Framework Directive (MSFD)	EU Directive (2008/56/EC) requiring Member States to achieve or maintain GES in their marine waters.	
Mitigation Measures	Actions designed into a project to avoid, reduce, or offset potential adverse environmental impacts.	
Natura 2000	A European network of protected areas established under the Birds and Habitats Directives, including SACs and SPAs.	
Site Investigation (SI) Works	Temporary surveys and sampling activities undertaken to collect baseline data to inform offshore project design, environmental assessment, and consenting.	

Abbreviations and Acronyms

Abbreviation / Acronym	Meaning
AA	Appropriate Assessment
AEOSI	Adverse Effect on Site Integrity
CAP	Climate Action Plan
DMAP	Designated Maritime Area Plan
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
FCS	Favourable Conservation Status
GES	Good Environmental Status
GIS	Geographic Information System
km/m	kilometre / metre
MARA	Maritime Area Regulatory Authority
MMO	Marine Mammal Observer
MSFD	Marine Strategy Framework Directive
MUL	Marine Usage Licence
MW / GW	Megawatt / Gigawatt
NIS	Natura Impact Statement
ORE	Offshore Renewable Energy
ORESS	Offshore Renewable Electricity Support Scheme
PAM	Passive Acoustic Monitoring
RA	Risk Assessment
SAC	Special Area of Conservation
SCI	Special Conservation Interest (species listed for protection in an SPA)
SEA	Strategic Environmental Assessment
SI	Site Investigation
SISAA	Supporting Information for Screening for Appropriate Assessment
SPA	Special Protection Area
UHRS	Ultra High-Resolution Seismic survey
USB	Ultra Short Baseline (acoustic positioning system)
WFD	Water Framework Directive

1. Introduction

This statement addresses the consistency of the proposed site investigation (SI) works at the Tonn Nua site (Maritime Area A) with the Marine Strategy Framework Directive (MSFD) (2008/56/EC), as required under Question 4.6 of the Maritime Area Regulatory Authority (MARA) Guidance Note for Applicants (August 2025).

The MSFD establishes a framework for the protection and sustainable use of the marine environment across EU waters. Its primary aim is to achieve and maintain Good Environmental Status (GES) in the marine environment by 2020 and beyond. Ireland's obligations under the MSFD are transposed into national law through the European Communities (Marine Strategy Framework) Regulations 2011 (S.I. No. 249/2011).

This statement has been prepared by a Suitably Qualified Person (SQP) with relevant expertise in marine environmental assessment and offshore consenting. A full summary of the qualifications and experience of the author and contributing specialists is provided in Section 4 of Attachment 4.0: Marine Planning and Environmental Considerations document in the SQP register, ensuring compliance with MARA's requirement that such information is prepared and certified by appropriately qualified professionals.

GES is defined through 11 qualitative descriptors, which reflect the health and sustainability of marine ecosystems:

- 1. Biodiversity is maintained.
- 2. Non-indigenous species do not adversely alter ecosystems.
- 3. Commercial fish and shellfish are within safe biological limits.
- 4. Food webs ensure long-term abundance and reproduction of species.
- 5. Eutrophication is minimised.
- 6. Seafloor integrity supports ecosystem functioning.
- 7. Hydrographical conditions are not adversely altered.
- 8. Contaminants do not pollute the marine environment.
- 9. Contaminants in seafood are below harmful levels.
- 10. Marine litter does not cause harm.
- Energy, including underwater noise, does not adversely affect the environment.

The proposed SI works are temporary, localised, and reversible. With embedded mitigation in place, they will not compromise Ireland's ability to achieve or maintain GES under these descriptors.

2. Consistency with MSFD Descriptors

The MSFD sets out 11 descriptors that define Good Environmental Status (GES) in Europe's seas. Each descriptor addresses a different aspect of marine ecosystem health, from biodiversity to seafloor integrity and underwater noise.

For the proposed SI works at Tonn Nua, only certain descriptors are directly relevant — mainly those relating to biodiversity, seafloor integrity, contaminants, and underwater noise. Others are of low relevance but are included here for completeness to demonstrate full consistency with the Directive.

The consistency of the works with GES relies on a suite of embedded mitigation and management measures. These are grouped under the following themes:

Marine Mammals and Underwater Noise

- Soft-start procedures for acoustic sources where possible.
- Relevant application of activity specific mitigations in line with NPWS (2025) guidance.
- Relevant detail is provided in the Annex IV Species Risk Assessment (Attachment 4.4).

Benthic and Fish Ecology

Biosecurity protocols to prevent spread of invasive species.

Water Quality and Pollution Prevention

- Vessel and plant to comply with MARPOL requirements.
- Spill prevention and emergency response procedures.
- Waste management procedures in line with best practice.

Navigation and Maritime Safety

- Advance notification through Notices to Mariners.
- Compliance with COLREGS.
- Marking/lighting as appropriate.

General Construction Good Practice

- Toolbox talks and environmental inductions for survey crews.
- Emergency preparedness plans for incidents.

These controls are summarised in Section 5 of the Marine Planning and Environmental Considerations document.

The table below (Table 2.1) sets out, for each descriptor:

- the potential risks or pressures arising from the SI works;
- the mitigation measures and supporting assessments that address those risks; and
- the resulting consistency statement in relation to Ireland's progress towards GES.

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Table 2.1: Consistency of the proposed Tonn Nua SI works with the 11 Marine Strategy Framework Directive (MSFD) descriptors of Good Environmental Status (GES).

MSFD Descriptor	Potential Risk / Impact	Controls and Evidence	Consistency Statement
D1 – Biodiversity	Disturbance to seabirds during sensitive breeding/wintering periods; disturbance to marine mammals from underwater noise; localised benthic disturbance from sampling.	Soft-start procedures for acoustic sources where possible and application of activity specific mitigations in line with NPWS (2025) guidance. NIS (4.3.2) conclude no AEoSI; Annex IV RA (4.4) confirms negligible risk to FCS.	With controls in place, no significant impacts are expected; biodiversity and ecosystem integrity remain protected; consistent with GES.
D2 – Non- Indigenous Species	Introduction of invasive species via vessel ballast water, hull fouling, or survey equipment.	Biosecurity protocols for vessels and equipment, including cleaning procedures and adherence to best practice guidance. SISAA (4.3.1) concludes no potential to impact designated sites	Effective controls are embedded in project delivery, ensuring no introduction or spread of invasive species. Consistent with GES.
D3 – Commercial Fish & Shellfish	Temporary avoidance behaviour of fish due to survey noise; localised seabed disturbance from grab sampling.	Acoustic protocols reduce potential disturbance. Geotechnical sampling is minor, localised, and reversible. NIS (4.3.2) concludes no significant effects.	No effect on population status of commercial species; consistent with GES.
D4 – Food Webs	Possible indirect effects if prey species (plankton, forage fish) are displaced or disturbed.	Assessment evidence shows impacts are minor, spatially restricted, and short-lived. No mitigation beyond standard survey practice required.	No measurable impact on trophic dynamics; food webs unaffected; consistent with GES.
D5 – Eutrophication	Risk of nutrient enrichment or pollution from vessel discharges.	Strict waste management protocols; no nutrient discharges; spill prevention measures in place.	No risk of eutrophication; GES maintained.
D6 – Seafloor Integrity	Physical disturbance of seabed from sampling, anchors, and survey gear.	Sampling footprint is small-scale, temporary, and reversible. WFD Assessment (4.5) confirms no deterioration of water body status.	Seafloor integrity preserved; consistent with GES.
D7 – Hydrographical Conditions	Localised, short-term changes from vessel presence and wakes.	No dredging, extraction, or lasting alteration proposed. Assessment confirms vessel effects are transient.	Hydrographical regime unaffected; GES maintained.

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MSFD Descriptor	Potential Risk / Impact	Controls and Evidence	Consistency Statement
D8 – Contaminants	Risk of accidental release of fuels, oils, or lubricants into marine waters.	Spill kits, emergency response protocols, MARPOL compliance; crews trained in pollution prevention.	No contamination of marine environment; consistent with GES.
D9 – Contaminants in Seafood	Only possible if contaminants from vessels entered the food chain.	No discharges of contaminants; strict spill prevention and waste protocols in place.	No risk to seafood safety; GES maintained.
D10 – Marine Litter	Accidental release of survey debris, plastics, or waste.	Waste management systems in place; MARPOL compliance; all deployed gear recovered.	No contribution to marine litter; consistent with GES.
D11 – Underwater Noise/Energy	Auditory injury and disturbance to marine mammals and fish from geophysical and geotechnical surveys	Equipment will be operated at sound levels below marine mammal and fish auditory injury thresholds where possible. Mitigation measures will be implemented following DAHG 2014 ¹ guidance including pre-start monitoring by marine mammal observers (MMOs) or passive acoustic monitoring (PAM) operators (30 minutes of a 500m radius) and ramp up procedures where equipment allows. <i>Annex IV RA (4.4) confirms negligible disturbance and no injury risk.</i>	Underwater noise controlled and temporary; consistent with GES.

DAHG. (2014). Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters. January 2014. Prepared by the National Parks and Wildlife Service of the DAHG [now DHLGH].

3. Conclusion

The proposed SI works at Tonn Nua (Maritime Area A) are consistent with the objectives of the Marine Strategy Framework Directive. The activities are temporary, localised, and reversible, and are supported by robust embedded mitigation to avoid significant impacts on biodiversity, water quality, seafloor integrity, or other MSFD descriptors.

The findings of the SISAA (4.3.1), NIS (4.3.2), Annex IV Risk Assessment (4.4), and Compliance with Objectives of the WFD (4.5) confirm that the SI works will not compromise Ireland's ability to achieve or maintain Good Environmental Status under the MSFD.



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