SEATEC NV

Supporting Information for Screening for Appropriate Assessment

Porcupine Bank Commercial Cargo Recovery Operation

Applicant	SEATEC NV
Maritime Usage Licence	MUL230036
Location	Irish Exclusive Economic Zone
Maritime usage	Survey and recovery of non-ferrous commercial cargo
Document reference	SEATEC-MUL230036-SISAA-03
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Submission basis	Supplementary material under section 119(6)(b) of the Maritime Area Planning Act 2021

Prepared and signed by the SEATEC NV Technical Team

Matthias Leroy, MSc Marine and Lacustrine Sciences
Ben Lemeire, Survey Superintendent and Subsea Acoustic Systems Specialist
Captain Guy Pochet, MSc Nautical Sciences, Salvage Master and Lloyd's SCR
Captain Pim de Rhoodes, Founder and Managing Director

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1.0	17 July 2026	Final	Matthias Leroy; Ben Lemeire; Captain Guy Pochet	Captain Pim de Rhoodes

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1. Introduction and Purpose

This report provides Supporting Information for Screening for Appropriate Assessment in respect of Maritime Usage Licence application MUL230036. It is submitted in response to Ground 3 of MARA's Minded to Determine Notice dated 26 June 2026, which states that MARA was unable to carry out screening because the applicant had not provided all information reasonably considered necessary.

The report identifies the specific European Sites within the project's Zone of Influence, the relevant Qualifying Interests and Special Conservation Interests, their conservation objectives, the project-related impact pathways and the potential for Likely Significant Effects, alone and in combination. Screening is undertaken without reliance on mitigation measures intended to avoid or reduce effects.

2. Statement of Authority and Legal Framework

2.1 Authors

The report has been prepared by Matthias Leroy, MSc Marine and Lacustrine Sciences and BSc Biology, with acoustic systems input from Ben Lemeire and operational input from Captain Guy Pochet. It has been reviewed and approved for SEATEC NV by Captain Pim de Rhoodes.

2.2 Legal and methodological basis

- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, in particular Article 6(3).
- Directive 2009/147/EC on the conservation of wild birds.
- European Communities (Birds and Natural Habitats) Regulations 2011, as amended.
- Maritime Area Planning Act 2021, as amended.
- European Commission guidance on Article 6(3) and Article 6(4), including the 2021 methodological guidance.
- MARA Applicant Technical Guidance Note Version 8 and published MARA SISAA practice for North Atlantic shipwreck survey applications.
- NPWS site boundaries, site synopses, conservation objectives and supporting documents current in July 2026.

3. Description of the Proposed Project

3.1 Project location and purpose

The project is located at approximately 51°52.720'N, 014°16.880'W, approximately 265 km west of Valentia, County Kerry. The licence area is 96.47 ha and water depth is approximately 330 m.

The project purpose is the survey and recovery of non-ferrous commercial cargo. It does not include recovery of the vessel. Hull structure, machinery, fixtures, bunkers, personal effects and non-cargo material are excluded. Cargo recovery is confined to visible, loose and recoverable cargo in cargo-hold openings and the immediately associated cargo debris field.

3.2 Project elements

Element	Description	Seabed contact
MBES survey	200-400 kHz multibeam survey of the licence area and target site	None
Side-scan sonar survey	300/600 kHz survey passes to define seabed and cargo features	None
ROV visual survey	Camera inspection, cargo identification and exclusion-zone confirmation	No deliberate seabed contact
USBL positioning	20-34 kHz acoustic positioning for ROV and grab	None
DP2 station-keeping	N35 holds position without anchors	None
Crane and grab cargo recovery	Camera- and USBL-guided retrieval of commercial cargo only	Localised at cargo recovery points
Verification and close-out survey	ROV and acoustic record of the post-operational condition	None

3.3 Excluded activities

The project excludes blasting, explosives, piling, seismic airguns, sparkers, boomers, sub-bottom profiling, drilling, cutting, dismantling, trenching, ploughing, dredging, anchoring, disposal at sea and recovery of the vessel or its structure.

4. Screening Methodology

A source-pathway-receptor approach was applied. A European Site is screened in where a project pressure has a plausible pathway to a Qualifying Interest or Special Conservation Interest, having regard to site-specific conservation objectives, species mobility, marine mammal Management Units and seabird foraging ranges. A site or feature is screened out only where no plausible ecological pathway exists.

At screening stage, the assessment considers the project as described, including characteristics that define what is and is not proposed. It does not rely on mitigation measures such as marine mammal monitoring, soft-start, seasonal management or pollution-response procedures to exclude Likely Significant Effects.

5. Receiving Environment

The site is an open Atlantic, upper-slope location with deep-sea mud to muddy sand. It is outside all European Site boundaries and outside VME Area 51. The surrounding waters are used by mobile cetaceans and wide-ranging seabirds. The Porcupine Bank and Seabight are part of an oceanic ecological system in which bottlenose dolphin and other cetaceans can move over large distances. Breeding seabirds from Irish SPAs may forage far offshore during the breeding season.

The nearest offshore SACs contain Reef habitat and bottlenose dolphin Qualifying Interests. Reef communities occur in designated canyon and mound features that are spatially and bathymetrically separate from the cargo recovery area. No designated reef, sandbank, coastal, estuarine or intertidal habitat occurs within the project footprint.

6. Source-Pathway-Receptor Assessment

Project source	Potential pathway	Potential receptor	Screening finding
MBES, SSS and USBL	Underwater sound propagating through the water column	Bottlenose dolphin QIs; other mobile marine mammals	Plausible pathway. Likely Significant Effect cannot be excluded at screening stage.
N35 transit, DP and ROV	Continuous vessel and equipment sound; physical presence	Bottlenose dolphin QIs; wide-ranging seabird SCIs	Plausible pathway. Temporary disturbance or displacement cannot be excluded.
Crane and grab cargo recovery	Localised mechanical sound and sediment suspension	Mobile fish, cetaceans and seabirds through prey-mediated pathways	Direct effect is local; indirect mobile-species pathway is weak but considered with the sound pathway.
Local seabed contact	Physical disturbance of deep mud/muddy sand	Reef QIs of offshore SACs	No pathway. No overlap, sediment connection or hydrodynamic mechanism to designated reef features.
Accidental vessel pollution	Hydrocarbon dispersion in the water column	Mobile marine mammal and seabird QIs/SCIs	Low-probability pathway exists and is considered in Stage 2 assessment.
Vessel lighting and presence at the surface	Visual disturbance or attraction	Wide-ranging seabird SCIs	Plausible pathway for birds using offshore foraging waters.
Ballast water or hull fouling	Introduction of non-indigenous species	Habitats and species of European Sites	No credible route to a designated site at a significant level from a compliant single vessel; screened out.
Recovery of commercial cargo	Removal of non-living material	European Site QIs/SCIs	No direct receptor. The vessel and its biological communities are not the target of recovery.

7. Zone of Influence

7.1 Benthic habitats

The benthic Zone of Influence is the licence area and immediate sediment-settlement area around individual grab points. It does not extend to designated offshore reef features because there is no spatial overlap, no continuous habitat and no plausible sediment transport pathway capable of affecting the structure or function of those reefs.

7.2 Marine mammals

For bottlenose dolphin, the Zone of Influence follows MARA practice by including SACs for which the species is a Qualifying Interest where the project lies within the same Oceanic Waters Management Unit. Harbour porpoise SACs are screened in only where the project lies within the relevant harbour porpoise Management Unit; on the management-unit mapping used in comparable MARA assessments, the project location is not within a harbour porpoise Management Unit.

7.3 Seabirds

SPAs are included where a breeding seabird Special Conservation Interest has a published mean-maximum foraging range capable of encompassing the project area. The principal relevant species are Manx shearwater, Fulmar, Storm petrel and Gannet. Other coastal and short-ranging seabird SCIs are outside the Zone of Influence.

8. European Sites and Conservation Objectives

8.1 Special Areas of Conservation

Code	European Site	Relevant QI	Basis	Decision
000191	St. John's Point SAC	Bottlenose dolphin [1349]	Oceanic Waters MU; potential acoustic disturbance	Screened in

Code	European Site	Relevant QI	Basis	Decision
000328	Slyne Head Islands SAC	Bottlenose dolphin [1349]	Oceanic Waters MU; potential acoustic disturbance	Screened in
000495	Duvillaun Islands SAC	Bottlenose dolphin [1349]	Oceanic Waters MU; potential acoustic disturbance	Screened in
002074	Slyne Head Peninsula SAC	Bottlenose dolphin [1349]	Oceanic Waters MU; potential acoustic disturbance	Screened in
002165	Lower River Shannon SAC	Bottlenose dolphin [1349]	Oceanic Waters MU considered in MARA screening practice	Screened in
002327	Belgica Mound Province SAC	Bottlenose dolphin [1349]; Reefs [1170]; Harbour porpoise [1351]	Bottlenose dolphin pathway. Reef and harbour porpoise features have no project pathway	Screened in for bottlenose dolphin only
002329	South-west Porcupine Bank SAC	Bottlenose dolphin [1349]; Reefs [1170]	Bottlenose dolphin pathway; no reef pathway	Screened in for bottlenose dolphin only
002998	West Connacht Coast SAC	Bottlenose dolphin [1349]; Harbour porpoise [1351]	Bottlenose dolphin pathway; project outside relevant harbour porpoise MU	Screened in for bottlenose dolphin only
003001	Porcupine Bank Canyon SAC	Bottlenose dolphin [1349]; Reefs [1170]	Bottlenose dolphin pathway; no reef pathway	Screened in for bottlenose dolphin only

For bottlenose dolphin, the conservation objective is to maintain the favourable conservation condition of the species, including continued access to suitable habitat and no adverse effect on population distribution, habitat use or the ecological conditions supporting the species. The project has no pathway to the Reef QIs because it does not overlap or hydrodynamically connect with designated reef habitat.

8.2 Special Protection Areas

Code	European Site	Relevant SCI	Basis for inclusion
004236	North-west Irish Sea SPA	Fulmar [A009]; Manx shearwater [A013]	Published foraging ranges
004170	Cruagh Island SPA	Manx shearwater [A013]	Published foraging range
004008	Blasket Islands SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004003	Puffin Island SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004175	Deenish Island and Scariff Island SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004007	Skelligs SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]; Gannet [A016]	Published foraging ranges
004237	Seas off Wexford SPA	Fulmar [A009]; Manx shearwater [A013]; Gannet [A016]	Published foraging ranges
004136	Clare Island SPA	Fulmar [A009]	Published foraging range
004189	Kerry Head SPA	Fulmar [A009]	Published foraging range
004002	Saltee Islands SPA	Fulmar [A009]; Gannet [A016]	Published foraging ranges
004154	Iveragh Peninsula SPA	Fulmar [A009]	Published foraging range

The site-specific conservation objectives for the listed seabird SCIs require maintenance or restoration of favourable conservation condition, including breeding population abundance, productivity, distribution, colony function, prey availability and access to marine foraging habitat. The relevant project pathway is temporary disturbance or displacement of birds using offshore waters, together with low-probability pollution risk.

9. Likely Significant Effects

Feature	Potential effect without mitigation	Screening conclusion
Bottlenose dolphin QIs of the screened-in SACs	Temporary disturbance or displacement from non-impulsive acoustic systems, vessel/DP sound and operational presence within the Oceanic Waters Management Unit.	A significant effect cannot be excluded on objective scientific grounds at Stage 1.

Feature	Potential effect without mitigation	Screening conclusion
Manx shearwater, Fulmar, Storm petrel and Gannet SCIs of the screened-in SPAs	Temporary displacement from a stationary vessel, transits, lighting and accidental pollution in offshore foraging waters.	A significant effect cannot be excluded on objective scientific grounds at Stage 1.
Reef QIs of Porcupine Bank Canyon, South-west Porcupine Bank and Belgica Mound Province SACs	No overlap and no sediment, hydrodynamic or structural pathway from local cargo recovery to designated reef habitat.	No Likely Significant Effect.
Harbour porpoise QIs	Project location is outside the relevant harbour porpoise Management Units used in MARA screening practice.	No Likely Significant Effect on the identified harbour porpoise SAC QIs.
Other habitats and species of European Sites	No overlap, no functional connectivity and no project pressure capable of reaching the receptor.	No Likely Significant Effect.

10. In-combination Assessment

The in-combination assessment considered other publicly available MARA applications, normal commercial fishing, shipping and marine research activity over the two-year project period. No other licensed or proposed project was identified within the immediate cargo-recovery footprint. Fishing and vessel traffic may occur in the wider area and can contribute to background sound and presence.

Without mitigation, the project's acoustic and vessel-presence effects could act in combination with background vessel and fishing activity on mobile bottlenose dolphin and seabird receptors. A Likely Significant Effect therefore cannot be excluded at Stage 1 for the same screened-in QIs and SCIs. This pathway is assessed in the accompanying Natura Impact Statement.

11. Transboundary Effects

The project is within the Irish Exclusive Economic Zone and no work is proposed in another State's maritime area. Project pressures are local and temporary. No direct pathway to a European Site in another EU Member State has been identified. The Oceanic Waters Management Unit and wide-ranging mobile species are nevertheless treated conservatively through the Stage 2 assessment of disturbance and in-combination effects.

12. Screening Conclusion

The project is not directly connected with or necessary to the management of any European Site. There is no spatial overlap with a European Site and no impact pathway to designated Reef habitat or other fixed habitat Qualifying Interests.

However, in the absence of mitigation and applying the precautionary principle, Likely Significant Effects cannot be excluded for bottlenose dolphin Qualifying Interests of SACs within the Oceanic Waters Management Unit and for wide-ranging Manx shearwater, Fulmar, Storm petrel and Gannet Special Conservation Interests of the identified SPAs. Likely Significant Effects also cannot be excluded in combination with background vessel and fishing activity.

Accordingly, the project should proceed to Stage 2 Appropriate Assessment. A Natura Impact Statement is submitted with this SISAA to enable MARA to complete that assessment and determine whether the project, with mitigation, will adversely affect the integrity of any European Site.

References

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MARA (2025). MUL240050 Supporting Information for Screening for Appropriate Assessment: North Atlantic Shipwrecks Survey.

MARA (2026). Maritime Usage Licence Assessment Report, MUL230036, 26 June 2026.

NPWS (2024-2025). Site-specific Conservation Objectives and supporting documents for the SACs and SPAs identified in Section 8.

NPWS (2014). Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters.

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Signed for and on behalf of SEATEC NV

/s/ Matthias Leroy MSc Marine and Lacustrine Sciences; BSc Biology *Lead Author* Date: 17 July 2026	**/s/ Ben Lemeire** BSc; Survey Superintendent and Subsea Acoustic Systems Specialist *Acoustic Systems Reviewer* Date: 17 July 2026
/s/ Captain Guy Pochet MSc Nautical Sciences; Graduate Advanced Maritime Law; Lloyd's SCR *Operational Reviewer* Date: 17 July 2026	**/s/ Captain Pim de Rhoodes** Maritime Captain; Founder and Managing Director *Approved for SEATEC NV* Date: 17 July 2026

SEATEC NV

Supplementary Heritage Assets Policy 1 Assessment

Cargo-Only Recovery Method, Heritage Protection Measures and Policy Balance

Application	Maritime Usage Licence MUL230036
Applicant	SEATEC NV
Proposed maritime usage	Survey and recovery of non-ferrous commercial cargo from the SS Ohio wreck site
Location	51°52.720'N, 014°16.880'W - Porcupine Bank, Irish EEZ
Document reference	SEATEC-MUL230036-HERITAGE-03
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Prepared by the SEATEC NV Technical Team

Captain Guy Pochet, MSc Nautical Sciences, Salvage Master and Lloyd's SCR
Matthias Leroy, MSc Marine and Lacustrine Sciences
Ben Lemeire, Survey Superintendent and Subsea Acoustic Systems Specialist
Reviewed and approved by Captain Pim de Rhoodes, Founder and Managing Director

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1. Purpose and Response to MARA Ground 1

MARA's Minded to Determine Notice dated 26 June 2026 states that the proposed maritime usage does not support Heritage Assets Policy 1 of the National Marine Planning Framework. MARA's Assessment Report explains that this conclusion arose principally from wording in the earlier submission stating that disturbance was inherent in cargo recovery and that SEATEC did not seek to minimise it.

Correction and binding clarification
SEATEC NV withdraws and replaces any earlier wording suggesting that the Applicant does not seek to minimise disturbance. SEATEC's position is the opposite: every practicable operational measure will be used to avoid contact with the vessel and to minimise and mitigate the localised disturbance that is unavoidable when loose commercial cargo is lifted from open cargo holds or from the existing midships debris field.

This report demonstrates that the revised cargo-only method follows the hierarchy required by Heritage Assets Policy 1: avoid harm where possible; minimise unavoidable harm; mitigate residual harm through recording, monitoring, conservation and reporting; and demonstrate that the public benefits of the proposal outweigh the limited residual effect.

2. Defined Scope: Recovery of Commercial Cargo Only

Permitted recovery scope sought by SEATEC
The proposed maritime usage is limited to the recovery of loose, identifiable non-ferrous commercial cargo from the open cargo holds and cargo already dispersed at the pre-existing torpedo break. The vessel itself is not the salvage target.

2.1 Material included within the recovery scope

- Loose copper, brass and zinc cargo that can be positively identified by camera or ROV and lifted without cutting or dismantling the ship.
- Bulk, repetitive commercial cargo units lying exposed within cargo holds 1, 3 and 4.
- Loose cargo lying on the seabed at the existing hold 2/midships break, where the vessel was already structurally destroyed by the wartime torpedo event.
- Non-cargo debris accidentally recovered with a grab only to the extent required for safe segregation, recording and lawful disposal or return as directed.

2.2 Material excluded from recovery

- Hull plating, frames, decks, bulkheads, boilers, machinery, shafting, propeller, anchors, bridge or accommodation structure.
- The stern gun, armament fittings, navigational equipment, ship's fittings, name plates or other diagnostic components of the vessel.
- Personal effects, human remains or material associated with crew accommodation.
- Unique, inscribed or diagnostic artefacts and any object assessed as having individual archaeological or commemorative significance.
- Any suspected live munition, explosive or hazardous energetic material. Discovery triggers immediate cessation, marking of the location and notification to the competent authorities.

The target is therefore the commercial cargo carried by the ship, not the ship as a heritage asset. This scope distinction is operationally enforceable through pre-survey mapping, camera observation, USBL positioning, exclusion zones and stop-work criteria.

3. Heritage Assets Policy 1 Compliance Test

Heritage Assets Policy 1 supports proposals that enhance heritage significance. Where enhancement is not the primary purpose, proposals may still be supported if they demonstrate, in order of preference, that they avoid, minimise or mitigate harm; where harm cannot be fully mitigated, public benefits must outweigh the harm to significance.

Policy limb	Project response	Control evidence	Conclusion
Avoid	The vessel, machinery, fittings, accommodation and potential human-remains areas are outside the recovery scope.	DP2 without anchors; mapped no-go zones; cargo-only target list; no cutting, dredging, explosives or structural lifting.	Direct harm to the vessel is avoided as the primary design principle.
Minimise	Only exposed cargo is approached; the smallest suitable grab is used and every descent is camera- and USBL-controlled.	Two grab sizes; ROV verification; positioning accuracy better than 0.5 m under the existing Salvage Plan; work limited to Beaufort 5 or less.	Any necessary contact is confined to discrete cargo points.
Mitigate	The archaeological information associated with cargo movement is preserved by survey, provenance recording, representative retention and post-work reporting.	Pre- and post-work MBES/SSS/ROV record; lift log; photography; unexpected-find protocol; final site report deposited with MARA/NMS.	Residual loss of context is reduced and documented.
Public benefit	The operation produces a verified historical record, preserves representative material, recovers substantial secondary metals and sustains specialist maritime capability.	Integrated archive, public report, representative collection, approximately 385,974 kg of specifically documented copper consignments, plus other cargo.	Benefits outweigh limited and localised residual disturbance.

4. Heritage Significance and Differentiated Treatment of the Site and Cargo

4.1 Significance of the wreck

SEATEC recognises the SS Ohio as a First World War merchant-vessel loss with historical, technological and commemorative significance. The vessel records transatlantic wartime trade, submarine warfare and the loss of a French merchant crew. Its surviving hull form, machinery, damage pattern, cargo stowage and archaeological context are therefore treated as heritage receptors requiring protection.

4.2 Significance of the cargo assemblage

The cargo is historically relevant because it confirms the vessel's identity, voyage and economic purpose. That evidential value is strongest at assemblage level: cargo type, markings, stowage location, distribution and relationship to the torpedo break. It does not follow that every one of thousands of repetitive, fungible metal units has the same individual heritage significance as the vessel fabric, a unique diagnostic object or a personal artefact.

The revised method therefore preserves the archaeological information of the cargo assemblage while allowing the bulk repetitive commercial material to be recovered. Each working area is recorded before disturbance; cargo provenance is logged by hold/target; representative examples and all diagnostic items are retained; and the hull and unique artefacts remain in situ.

5. Existing Condition of the Wreck and Nature of Potential Effects

5.1 Existing condition

The wreck lies upright in two principal sections at approximately 330 m depth. The bow and stern are separated by approximately 50 m. The catastrophic break is at the midships/hold 2 area, consistent with the torpedo attack recorded in the U-44 war diary. Holds 1, 3 and 4 remain substantially open from above. The bridge and accommodation area are collapsed and are not within the proposed working area. Cargo is visible within the open holds and is dispersed over the seabed at the pre-existing break.

5.2 Potential effects before mitigation

- Accidental contact between a grab and weakened hull structure.
- Movement of cargo from its original or post-wrecking location and associated loss of archaeological context.
- Localised sediment resuspension within the hold or debris field.
- Accidental recovery of a diagnostic object, personal item, human remains or hazardous munition.
- Cumulative disturbance if repeated lifts are not spatially controlled and recorded.

5.3 Residual effect after controls

After application of the measures in Section 6, the residual effect is limited to the intentional removal of identified commercial cargo and short-duration disturbance of sediment immediately surrounding each cargo target. There is no planned removal, cutting or dismantling of the vessel. The significance of the wreck as a ship, wartime loss and archaeological structure is retained.

6. Avoidance, Minimisation and Mitigation Measures

6.1 Pre-operation heritage baseline

1. Complete MBES and side-scan sonar survey of the licence area and wreck before recommencement.
2. ROV video and still-photographic survey of every proposed cargo-working area.
3. Preparation of a geo-referenced target plan distinguishing cargo targets, protected hull structure and no-go zones.
4. Recording of the bow, stern, midships break, cargo-hold boundaries, machinery, bunker area, bridge/accommodation remains and any potential commemorative or human-remains sensitivity.
5. Review of the target plan by the Salvage Master, Survey Superintendent and a qualified underwater archaeologist appointed before operations recommence.

6.2 Cargo-only retrieval controls

- DP2 station-keeping; no anchors, moorings or seabed hold-back systems.
- Use of the smallest grab capable of safely lifting the identified cargo target.
- Camera, lighting and USBL transponder fitted to the grab, with continuous bridge/crane/camera communication.
- ROV confirmation where camera visibility is insufficient or target identity is uncertain.
- Controlled lowering; the grab is not dropped onto the wreck or seabed.
- No cutting, burning, drilling, explosives, water-jetting, dredging or deliberate breaking of hull structure.
- No attempt to pull cargo trapped beneath or structurally integrated with the vessel.
- Operations only at Beaufort Force 5 or less and only while stable DP and clear imaging are maintained.
- Lift-by-lift log recording date, time, target coordinates, hold/debris-field origin, cargo type, photographs and any incidental material.

6.3 Mandatory stop-work criteria

- Any contact, movement, cracking or deformation of hull structure.
- Loss of camera image, USBL position confidence or ROV oversight where required.
- Encounter with machinery, fittings, inscriptions, unique artefacts, personal effects or objects not positively identified as commercial cargo.
- Any suspected human remains or material associated with a possible burial context.
- Any suspected live munition, explosive or hazardous item.
- Any unexpected change in site conditions or deterioration of weather/DP performance.

6.4 Archaeological documentation and mitigation

- Qualified underwater archaeologist retained to review the project design, no-go zones, recording standard, unexpected-find protocol and final report.
- Representative examples of each cargo class and all marked, inscribed, unusual or diagnostic objects excluded from the commercial stream and retained for assessment and curation as directed.
- No commercial disposal of an object until it has been inspected, classified and entered in the recovery register.
- Post-recovery MBES/SSS and ROV survey comparing the final site with the baseline.
- Interim and final reports supplied to MARA and the National Monuments Service, including plans, lift records, imagery, retained-sample catalogue and recommendations for ongoing site management.
- Project archive maintained as a coherent digital and physical record and made available for professional review and public dissemination, subject to location-security restrictions.

7. UNESCO Convention and Authorised Commercial Cargo Recovery

Ireland deposited its instrument of ratification of the 2001 UNESCO Convention on 11 December 2025, and the Convention entered into force for Ireland on 11 March 2026. SEATEC has therefore structured the revised project to engage with, rather than avoid, the Convention and the corresponding provisions of the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023.

7.1 The Convention does not impose an absolute ban on all recovery

The Convention treats in situ preservation as the first option, not as an automatic prohibition on any intervention. Article 4 expressly contemplates the application of salvage law where the activity is authorised by the competent authorities, is fully consistent with the Convention and ensures maximum protection of the underwater cultural heritage. The Annex likewise requires that activities do not affect the heritage more than necessary, use the least destructive practicable methods, are professionally designed and are comprehensively documented.

7.2 Cargo and heritage significance

Article 1 includes cargo within the examples of material that may form underwater cultural heritage where it has a cultural, historical or archaeological character. SEATEC does not ask MARA to treat the entire wreck site as unprotected. It submits that significance must nevertheless be assessed rationally and at the correct level. The vessel, damage pattern, stowage context, marked or diagnostic cargo and representative assemblage possess clear heritage value. Thousands of duplicate, fungible units of bulk industrial metal do not each possess the same independent significance once their type, markings, quantity, location and context have been fully recorded and representative material preserved.

7.3 Compatibility of the proposed commercial component

The project is not directed at the sale of unique artefacts, personal possessions or components of the historic vessel. It is a licensed cargo-recovery operation directed at bulk commercial metal carried for trade in 1917. SEATEC proposes a controlled disposition protocol under which the heritage archive, diagnostic objects and representative samples remain intact and available for research, while only the recorded, repetitive and non-diagnostic commercial cargo enters the recycling stream, subject to the conditions and authorisations imposed by the competent authorities.

This approach prevents the irretrievable dispersal of the archaeological information and collection of heritage-significant material. It also preserves the ship in situ. SEATEC submits that a significance-based, authorised and fully recorded cargo-recovery project is materially different from treasure hunting or the sale of unique underwater cultural objects and can be conditioned to achieve maximum heritage protection.

8. Public Benefits and Proportionality

Even if MARA determines that a limited residual effect cannot be completely eliminated, Heritage Assets Policy 1 expressly permits a balancing exercise. The following public benefits arise from the revised proposal:

- Creation of the first integrated, geo-referenced record combining the wreck survey, U-44 war diary, Lloyd’s loss record, cargo documentation and physical recovery evidence.
- Correction and improvement of the public historical record for a First World War merchant loss whose recorded historical position was imprecise.
- Preservation of the ship, machinery, damage pattern and principal archaeological structure in situ.
- Retention and curation of representative and diagnostic cargo material, with a public-facing final synthesis.

- Recovery of three specifically documented copper consignments totalling 850,928 lb, equivalent to 385,974.45 kg (385.97 metric tonnes), together with other non-ferrous cargo, for re-entry into the European secondary-metals economy.
- Continuation of specialist European maritime employment and skills in DP2 operations, ROV survey, hydrographic positioning and controlled deep-water recovery.
- A regulated and transparent operation, subject to MARA conditions, rather than an unrecorded or uncontrolled future intervention.

The benefit is not merely the private value of recovered metal. The revised project generates a permanent historical and archaeological record, protects the vessel through a cargo-only method, provides regulatory oversight, preserves representative material and disseminates the results.

9. Residual Effects and Policy Conclusion

The unavoidable residual effect is the removal of identified commercial cargo and associated local disturbance within open holds and the pre-existing torpedo debris field. The project does not require the removal, demolition or dismantling of the SS Ohio. The revised methodology avoids the vessel fabric, minimises each cargo interaction, preserves archaeological information and provides for professional recording, curation and final reporting.

Heritage Assets Policy 1 conclusion
The proposed maritime usage supports Heritage Assets Policy 1. It follows the required hierarchy of avoidance, minimisation and mitigation; it retains the significance of the SS Ohio as a historic shipwreck; and any limited residual harm associated with lifting bulk commercial cargo is outweighed by the public benefits of regulated documentation, preservation of representative heritage material, improved historical knowledge and recovery of substantial secondary metals.

10. Binding Heritage Commitments

Ref.	Commitment	Binding measure
H1	Cargo-only scope	No intentional recovery of hull, machinery, fittings, personal effects, human remains or unique artefacts.
H2	No-anchor operation	N35 will maintain station by DP2; no anchors will be deployed at the wreck site.
H3	Baseline record	MBES, SSS and ROV baseline completed before further cargo lifting.
H4	No-go zones	Engine room, machinery, bridge/accommodation, stern gun, bunker and sensitive structure mapped and excluded.
H5	Precision recovery	Camera, lighting, USBL and smallest suitable grab used for every cargo target.
H6	No destructive access	No cutting, burning, drilling, explosives, dredging or structural breaking.

Ref.	Commitment	Binding measure
H7	Weather and visibility	Recovery only under safe DP, imaging and weather conditions, not exceeding Beaufort 5.
H8	Archaeological oversight	Qualified underwater archaeologist appointed before recommencement and retained through reporting.
H9	Unexpected finds	Immediate stop, mark, protect and notify procedure for human remains, diagnostic objects and suspected UXO.
H10	Lift register	Every lift recorded by position, source area, cargo type and imagery.
H11	Representative collection	Representative and diagnostic material excluded from commercial disposition and curated as directed.
H12	Post-work survey	Comparative MBES/SSS/ROV survey and final heritage report submitted to MARA/NMS.

References

1. Maritime Area Regulatory Authority, Minded to Determine Notice under section 119(6)(b), MUL230036, 26 June 2026.

2. Maritime Area Regulatory Authority, Maritime Usage Licence Assessment Report, MUL230036, 26 June 2026.

3. Government of Ireland, National Marine Planning Framework, Heritage Assets Policy 1.

4. UNESCO, Convention on the Protection of the Underwater Cultural Heritage 2001, Articles 1-4, 9-10 and Annex Rules 1-36.

5. UNESCO, Ireland ratification notice: instrument deposited 11 December 2025; entry into force 11 March 2026.

6. Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023, sections 137-147.

7. United Nations Convention on the Law of the Sea, Article 303.

8. SEATEC NV, Salvage Plan LIC230036 and operational survey/recovery records.

9. Lloyd’s Record of War Losses, SS Ohio entry, 7 March 1917.

10. U-44 Kriegstagebuch summary of vessels sunk, including SS Ohio, 7 March 1917.

Appendix A. Operational and Site Evidence

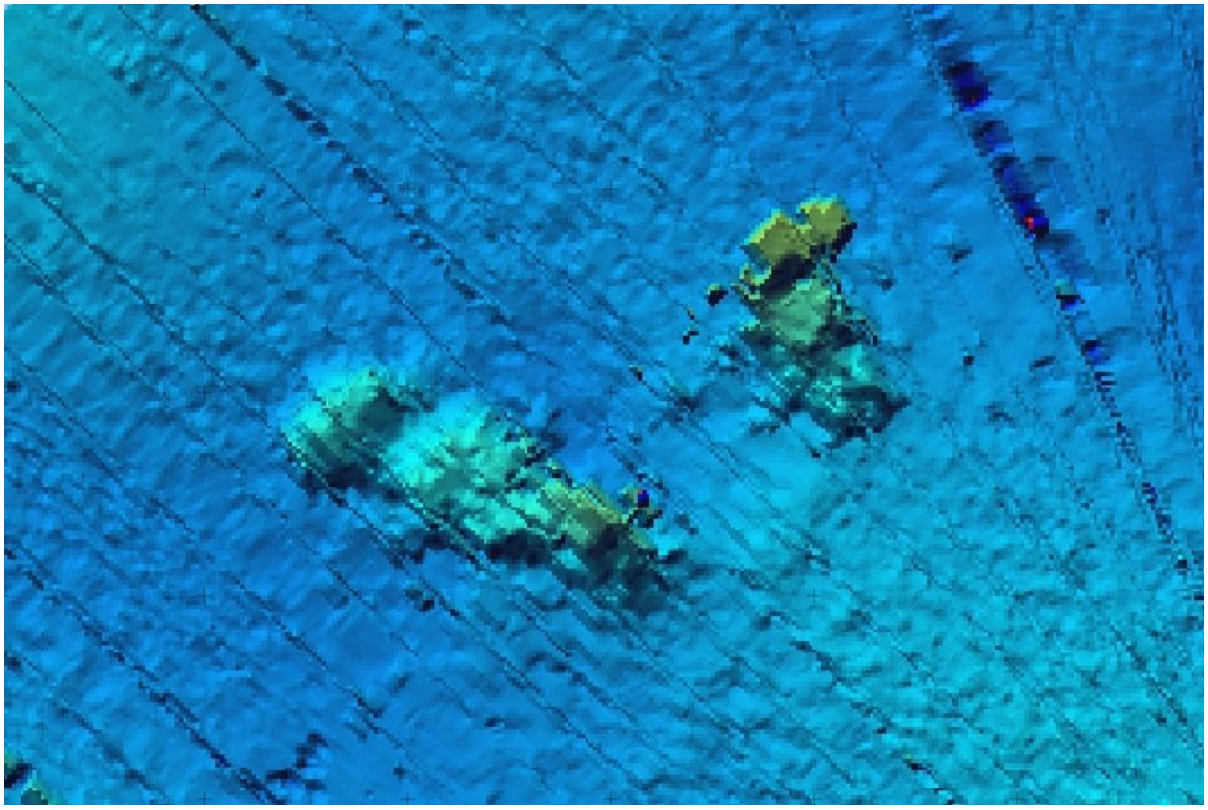


Figure A1. Side-scan/sonar image showing the wreck in two principal sections, consistent with catastrophic midships failure.

Figure A2. Camera/USBL-assisted mechanical grab returning commercial cargo to the N35. The method enables controlled vertical recovery without anchors.

Figure A3. Recovered repetitive tubular metal cargo segregated on deck during the 2024 operation.

Figure A4. Additional view of the recovered bulk cargo, demonstrating its repetitive commercial character and the scale of the cargo assemblage.

Figure A5. Representative end profile of a recovered tubular cartridge case/cargo unit. Diagnostic or marked examples are to be retained and recorded.

Signatures

This document is issued by SEATEC NV as the Applicant's final supplementary submission in relation to the stated subject matter.

Lead author	/s/ Captain Guy Pochet - Salvage Master; MSc Nautical Sciences; Graduate in Advanced Maritime Law; Lloyd's Special Casualty Representative
Technical contributors	/s/ Matthias Leroy - MSc Marine and Lacustrine Sciences; /s/ Ben Lemeire - Survey Superintendent and Subsea Acoustic Systems Specialist
Approved for SEATEC NV	/s/ Captain Pim de Rhoodes - Founder and Managing Director, SEATEC NV

/s/ Captain Pim de Rhoodes

Founder and Managing Director, SEATEC NV
17 July 2026

SEATEC NV

Wreck Identification and Cargo Evidence Report

Confirmation that the Target Wreck Corresponds to the SS Ohio

Application	Maritime Usage Licence MUL230036
Applicant	SEATEC NV
Proposed maritime usage	Survey and recovery of non-ferrous commercial cargo from the SS Ohio wreck site
Location	51°52.720'N, 014°16.880'W - Porcupine Bank, Irish EEZ
Document reference	SEATEC-MUL230036-WRECKID-02
Version	1.0 - Final
Date	17 July 2026
Submission basis	Supplementary material under section 119(6)(b) of the Maritime Area Planning Act 2021

Prepared by the SEATEC NV Technical Team

Matthias Leroy, MSc Marine and Lacustrine Sciences
Ben Lemeire, Survey Superintendent and Subsea Acoustic Systems Specialist
Captain Guy Pochet, MSc Nautical Sciences, Salvage Master and Lloyd's SCR
Reviewed and approved by Captain Pim de Rhoodes, Founder and Managing Director

Document Control

Version	Date	Status	Prepared by	Approved by
1.0	17 July 2026	Final	Matthias Leroy; Ben Lemeire; Captain Guy Pochet	Captain Pim de Rhoodes

Contents

1. Purpose and Conclusion

This report supplies the historical documents and visual evidence requested in relation to the identity of the target wreck at 51°52.720'N, 014°16.880'W. The identification is based on independent and mutually reinforcing evidence: vessel name, date, tonnage, voyage, cargo, wartime loss record, recorded attack position, hull dimensions, propulsion type, catastrophic midships damage, two-part wreck configuration and physical cargo recovered from the recorded cargo-hold areas.

Identification conclusion
The convergence of the U-44 war diary, Lloyd's Record of War Losses, the archival copper and bills-of-lading record, the surveyed dimensions and configuration of the wreck, the torpedo break at midships and the recovered cargo establishes to a high degree of confidence that the target wreck is the steamship SS Ohio, lost on 7 March 1917.

2. Identification Method

SEATEC applied a cumulative-evidence method. No single historical position is treated as exact. Wartime positions were commonly derived from dead reckoning, submarine estimates and observations made under operational conditions. Identity is therefore determined by comparing the complete historical casualty profile with the directly surveyed site.

1. Compile primary and contemporary records for the SS Ohio, including the U-44 Kriegstagebuch and Lloyd's war-loss record.
2. Compare date, nationality, tonnage, voyage, cargo and reported loss circumstances.
3. Compare historical dimensions and propulsion configuration with sonar and ROV observations.
4. Compare the documented torpedo attack with the observed two-part midships structural failure.
5. Compare documented cargo with cargo visible and physically recovered from the target wreck.
6. Assess whether any alternative known wreck in the reviewed search area matches the complete evidence set.

3. Historical Evidence for the SS Ohio

3.1 Vessel and casualty particulars

Characteristic	Historical record	Observed target wreck	Assessment
Name/date	SS Ohio; lost 7 March 1917	Target located through search based on U-44 and casualty records	Consistent
Nationality/type	French cargo steamship	Steel steamship wreck with cargo-hold arrangement	Consistent
Gross tonnage	8,719 grt	Large cargo vessel matching the expected scale	Consistent
Voyage	New York to Le Havre	Open-Atlantic location west of Ireland on the reported route	Consistent
Dimensions	445 ft 5 in x 61 ft 2 in x 27 ft 5 in (approximately 135.76 x 18.64 x 8.36 m)	Surveyed wreck dimensions and layout correspond to approximately 135.6 x 18.7 x 8.4 m	Strong match
Propulsion	Single-propeller steamship	ROV/survey evidence consistent with a single-	Consistent

Characteristic	Historical record	Observed target wreck	Assessment
		shaft steam cargo ship	
Cause of loss	Torpedo attack by U-44	Catastrophic break at midships/hold 2; wreck divided into two principal sections	Strong diagnostic match
Cargo	Copper, machinery and wartime munitions; other records identify brass and zinc	Large quantities of non-ferrous cargo and repetitive tubular cartridge cases recovered from cargo-hold areas	Strong diagnostic match

3.2 U-44 Kriegstagebuch

The U-44 summary page for the patrol records an entry dated 7 March for the French steamer Ohio, 8,719 tons, carrying munitions and guncotton, sunk by torpedo at a recorded position in the North Atlantic west of Ireland. The name, date and tonnage are exact matches to the SS Ohio. The historical position is an operational submarine estimate and is treated as a search datum rather than a modern survey coordinate.

3.3 Lloyd's Record of War Losses

The Lloyd's entry records Ohio (French), lost on 7 March 1917, gross tonnage 8,719, voyage New York to Havre, position "Off West Ireland", with cargo described as copper and machinery. The record also identifies a specific insured value on the copper cargo. These particulars independently match the U-44 entry and the target wreck.

3.4 Archival cargo record

The archival cargo extract identifies the French steamship Ohio, 8,719 gross tons, voyage from New York to Le Havre, carrying war munitions and copper. It records three copper consignments to Société d'Electro Métallurgie de Dives from the Calumet & Hecla Mining Company and gives specific shipment markings.

4. Survey and Wreck-Condition Evidence

4.1 Two-part wreck configuration

Side-scan and multibeam survey show two substantial hull sections resting upright and separated by approximately 50 m. The bow is oriented at approximately 325° and the stern at approximately 115°. The separation is centred on the midships/hold 2 area. This is the physical signature expected from the recorded torpedo loss and is not consistent with an intact vessel that foundered without catastrophic midships damage.

4.2 Cargo-hold and structural correspondence

Holds 1, 3 and 4 remain open and accessible from above. The bridge/accommodation structure is collapsed. Cargo is exposed in the surviving holds and dispersed around the destroyed midships section. The overall length, beam, hold arrangement, steamship construction and single-shaft configuration correspond with the documented SS Ohio particulars.

4.3 Historical-position discrepancy

The coordinate in the Wreck Inventory of Ireland is a historical estimate, not a surveyed seabed position. The target coordinate is derived from direct modern acoustic survey. The modest difference between wartime reported positions and the surveyed location is not evidence against identity where the complete casualty profile - name, date, tonnage, route, cargo, dimensions and damage - converges on a single candidate.

5. Cargo Evidence and Copper Conversion

5.1 Copper consignments

The newly supplied archival extract gives a more specific and better-evidenced figure than the earlier approximate cargo summaries in the application. The three listed consignments total 850,928 lb. Using the exact international conversion factor of 1 lb = 0.45359237 kg, the documented copper equals 385,974.45 kg, or approximately 385.97 metric tonnes.

Consignment	Recorded pounds	Kilograms	Metric tonnes
1	212,028 lb	96,174.28 kg	96.174 t
2	549,271 lb	249,145.13 kg	249.145 t
3	89,629 lb	40,655.03 kg	40.655 t
Total	**850,928 lb**	**385,974.45 kg**	**385.974 t**

5.2 Physical recovery evidence

The 2024 recovery photographs show large quantities of repetitive tubular cartridge cases and other metal cargo recovered by grab from the mapped hold areas. Their form is consistent with the archival description of wartime munitions cargo and with the broader record of copper, brass and machinery. This physical evidence is particularly probative because it was recovered from the surveyed wreck, not inferred from a remote historical database.

The recovered cargo therefore links the physical site directly to the documented SS Ohio cargo. The combination of an 8,719-ton French steamship, on the correct route and casualty date, broken in two at midships by torpedo damage and containing the documented non-ferrous and wartime cargo is highly specific.

6. Convergence of Evidence and Exclusion of Alternative Candidates

Evidence stream	Independent match to SS Ohio	Evidential weight
U-44 KTB	Ohio; French; 7 March 1917; 8,719 tons; munitions; torpedo loss	Very high
Lloyd’s war-loss record	Ohio; French; 7 March 1917; 8,719 grt; New York-Havre; copper and machinery; west of Ireland	Very high
Archival cargo record	Same vessel, voyage and tonnage; war munitions and three marked copper consignments	Very high
Sonar configuration	Large cargo ship in two upright sections with catastrophic midships break	High
ROV/structural observations	Dimensions, hold layout, steamship construction and single-shaft configuration	High
Recovered cargo	Bulk non-ferrous and repetitive cartridge-case cargo in the hold areas	Very high
Alternative candidates	No alternative wreck in the historical dataset reviewed by SEATEC matches the complete name/date/tonnage/voyage/cargo/damage	High

Evidence stream	Independent match to SS Ohio	Evidential weight
	profile	

Identification does not depend on a single uncertain coordinate. It rests on the combined specificity of the casualty and cargo profile and the modern surveyed wreck. The probability that an unrelated wreck would independently match every one of these characteristics is remote.

7. Conclusion

Final identification finding
SEATEC NV concludes to a high degree of confidence that the target wreck at 51°52.720'N, 014°16.880'W is the SS Ohio. The historical documents, casualty particulars, surveyed dimensions, two-part torpedo-damage configuration and recovered cargo form a coherent and mutually reinforcing evidence set. The historical Wreck Inventory coordinate should be treated as an estimated wartime position and not as evidence displacing the modern acoustic survey and direct physical evidence.

References

1. U-44 Kriegstagebuch, patrol summary listing SS Ohio, 7 March 1917.

2. Lloyd's Record of War Losses, SS Ohio entry.

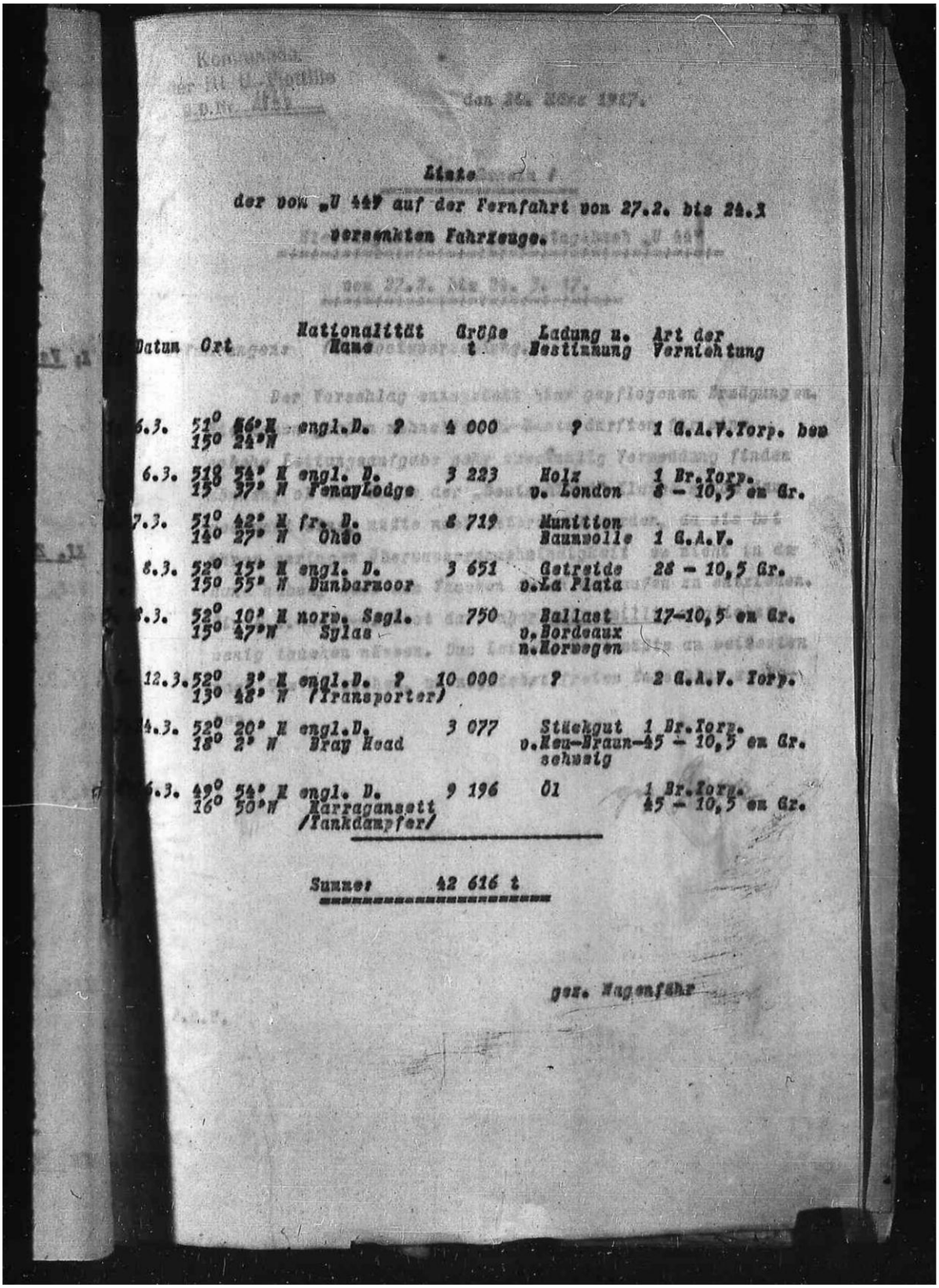
3. Archival extract: SS Ohio casualty and copper-consignment record, 7 March 1917.

4. SEATEC NV, Salvage Plan LIC230036.

5. SEATEC NV, multibeam, side-scan sonar, ROV and 2024 recovery records.

6. MARA, Maritime Usage Licence Assessment Report MUL230036, 26 June 2026.

Appendix A. Historical Documents



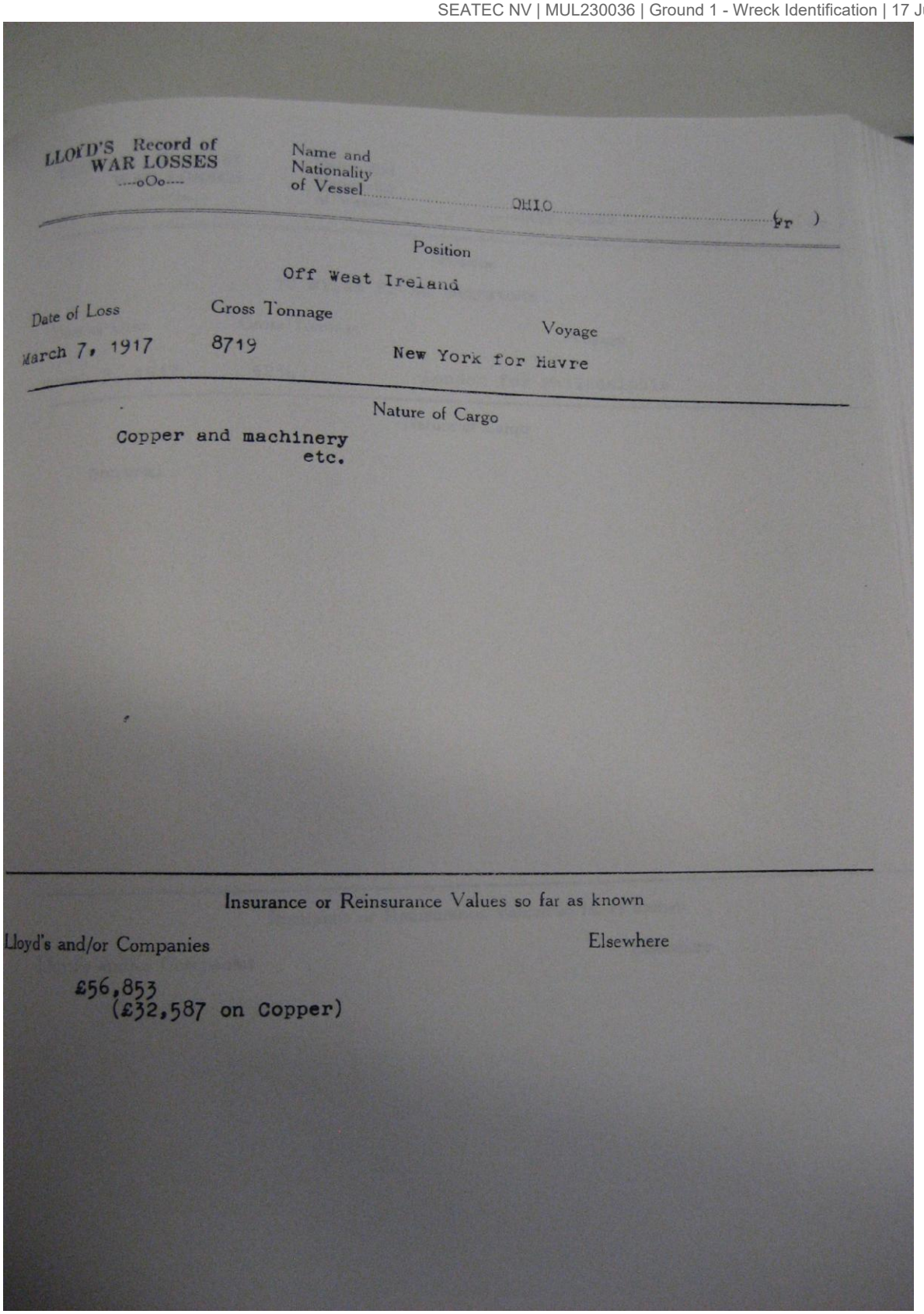
Liste

der von „U 44" auf der Fernfahrt von 27.2. bis 24.3 versenkten Fahrzeuge.

Datum	Ort	Nationalität Name	Größe t	Ladung u. Bestimmung	Art der Vernichtung
6.3.	51° 46' N 15° 24' W	engl. D. ?	4 000	?	1 G.A.V.Torp. bes
6.3.	51° 54' N 15° 37' W	engl. D. Fenay Lodge	3 223	Holz v. London	1 Br.Torp. 8 – 10,5 cm Gr.
7.3.	51° 42' N 14° 27' W	fr. D. Ohio	8 719	Munition Baumwolle	1 G.A.V.
8.3.	52° 15' N 15° 55' W	engl. D. Dunbarnoor	3 651	Getreide v. La Plata	28 – 10,5 Gr.
9.3.	52° 10' N 15° 47' W	norw. Segl. Sylas	750	Ballast v. Bordeaux n. Norwegen	17–10,5 cm Gr.
12.3.	52° 3' N 13° 48' W	engl.D. ? (Transporter)	10 000	?	2 G.A.V. Torp.
14.3.	52° 20' N 18° 2' W	engl.D. Bray Head	3 077	Stückgut v. Neu-Braun-schweig	1 Br.Torp. 45 – 10,5 cm Gr.
16.3.	49° 54' N 16° 50' W	engl. D. Narraganset /Tankdampfer/	9 196	Öl	1 Br.Torp. 45 – 10,5 cm Gr.
		Summe:	42 616 t		

ger. Wagenfahr

Figure A1. U-44 Kriegstagebuch patrol summary. The 7 March entry records the French steamer Ohio, 8,719 tons, munitions cargo and torpedo loss.



LLOYD'S Record of WAR LOSSES
----oOo----

Name and Nationality of Vessel OHIO (Fr)

Position
Off West Ireland

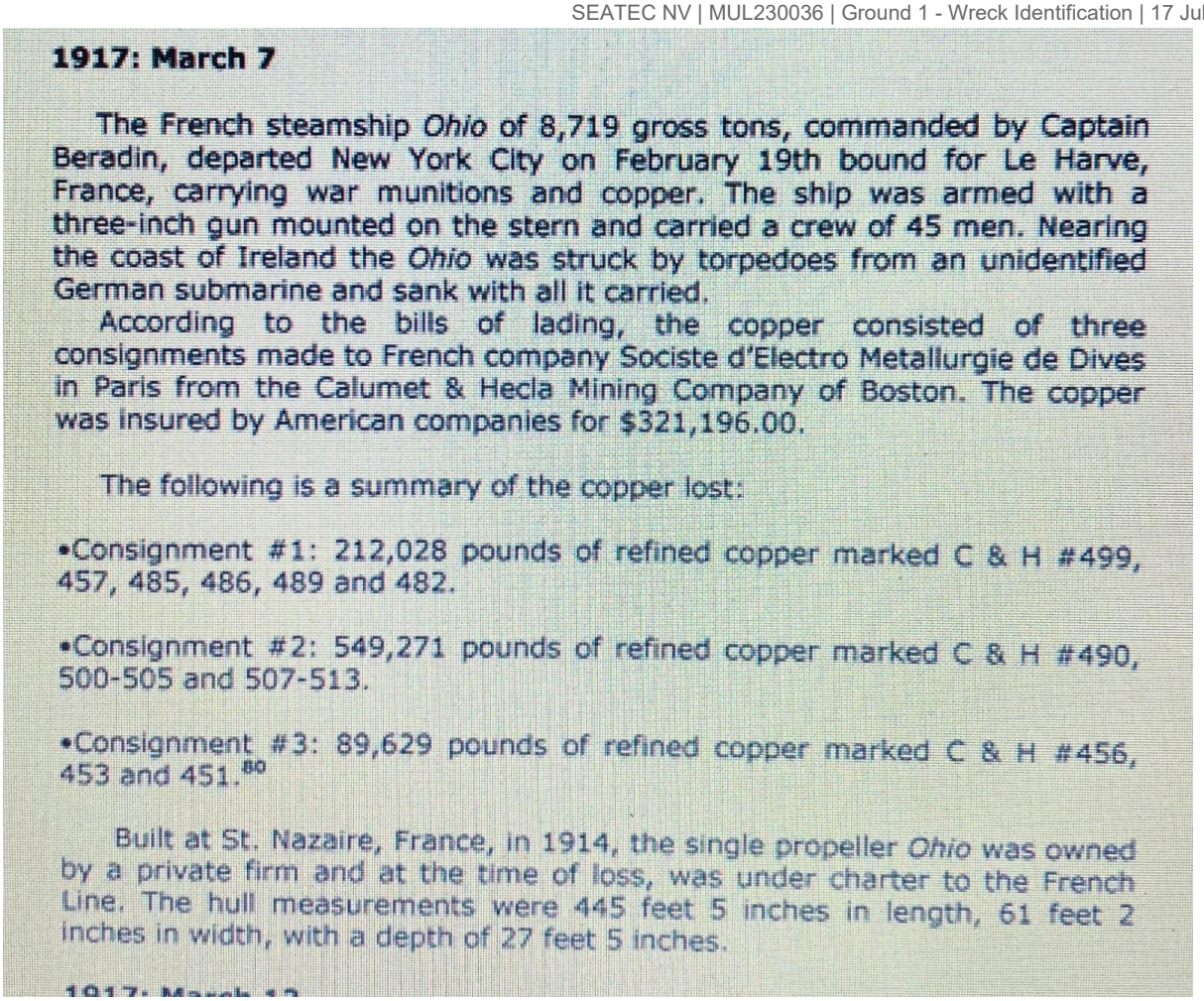
Date of Loss: March 7, 1917
Gross Tonnage: 8719
Voyage: New York for Havre

Nature of Cargo
Copper and machinery etc.

Insurance or Reinsurance Values so far as known

Lloyd's and/or Companies: £56,853 (£32,587 on Copper)
Elsewhere

Figure A2. Lloyd's Record of War Losses entry: Ohio (French), 7 March 1917, 8,719 grt, New York-Havre, copper and machinery, off west Ireland.



1917: March 7

The French steamship *Ohio* of 8,719 gross tons, commanded by Captain Beradin, departed New York City on February 19th bound for Le Harve, France, carrying war munitions and copper. The ship was armed with a three-inch gun mounted on the stern and carried a crew of 45 men. Nearing the coast of Ireland the *Ohio* was struck by torpedoes from an unidentified German submarine and sank with all it carried.

According to the bills of lading, the copper consisted of three consignments made to French company Sociste d'Electro Metallurgie de Dives in Paris from the Calumet & Hecla Mining Company of Boston. The copper was insured by American companies for $321,196.00.

The following is a summary of the copper lost:

•Consignment #1: 212,028 pounds of refined copper marked C & H #499, 457, 485, 486, 489 and 482.

•Consignment #2: 549,271 pounds of refined copper marked C & H #490, 500-505 and 507-513.

•Consignment #3: 89,629 pounds of refined copper marked C & H #456, 453 and 451.[80]

Built at St. Nazaire, France, in 1914, the single propeller *Ohio* was owned by a private firm and at the time of loss, was under charter to the French Line. The hull measurements were 445 feet 5 inches in length, 61 feet 2 inches in width, with a depth of 27 feet 5 inches.

Figure A3. Archival SS Ohio casualty and copper-consignment extract. The three consignments total 850,928 lb (385,974.45 kg).

Appendix B. Survey and Recovery Photographs

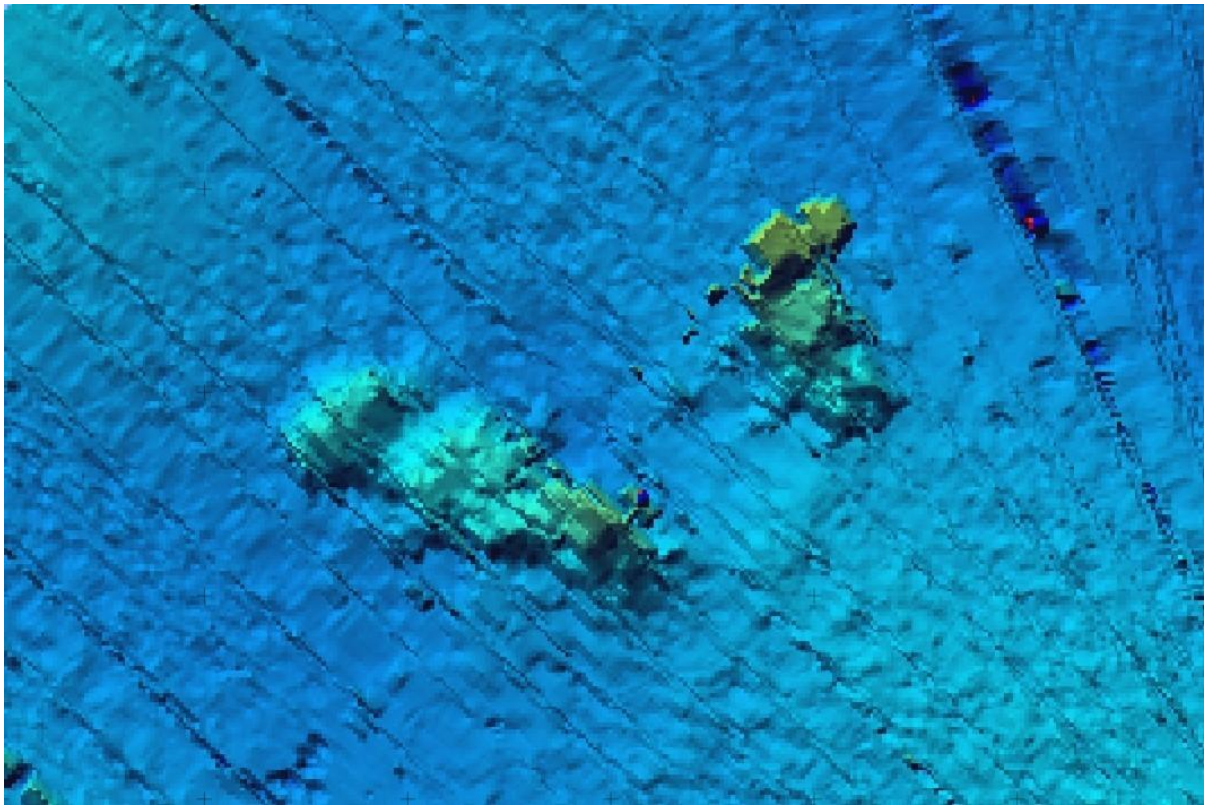


Figure B1. Side-scan/sonar image of the target wreck showing two principal sections and the midships separation.

Figure B2. Recovery grab returning repetitive tubular cargo from the target wreck.

Figure B3. Recovered cargo on the N35 during the 2024 operation.

Figure B4. Bulk recovered tubular metal cargo, consistent with the wartime cargo record.

Figure B5. Representative end profile of a recovered tubular cartridge case/cargo unit.

Signatures

This document is issued by SEATEC NV as the Applicant's final supplementary submission in relation to the stated subject matter.

Lead author	/s/ Matthias Leroy - MSc Marine and Lacustrine Sciences; Lead Survey Specialist
Technical contributors	/s/ Ben Lemeire - Survey Superintendent and Subsea Acoustic Systems Specialist; /s/ Captain Guy Pochet - Salvage Master and Lloyd's SCR
Approved for SEATEC NV	/s/ Captain Pim de Rhoodes - Founder and Managing Director, SEATEC NV

/s/ Captain Pim de Rhoodes

Founder and Managing Director, SEATEC NV
17 July 2026

SEATEC NV

Supplementary Assessment of Effects on the Marine Strategy Framework Directive

Descriptors 1, 3 and 11, including Annex IV Species and Underwater Noise

Applicant	SEATEC NV
Maritime Usage Licence	MUL230036
Location	Porcupine Bank, Irish Exclusive Economic Zone
Maritime usage	Survey and recovery of non-ferrous commercial cargo
Document reference	SEATEC-MUL230036-MSFD-02
Version	1.0 - Final
Date	17 July 2026
Submission basis	Supplementary material under section 119(6)(b) of the Maritime Area Planning Act 2021

Prepared and signed by the SEATEC NV Technical Team

Matthias Leroy, MSc Marine and Lacustrine Sciences
Ben Lemeire, Survey Superintendent and Subsea Acoustic Systems Specialist
Captain Guy Pochet, MSc Nautical Sciences, Salvage Master and Lloyd's SCR
Captain Pim de Rhoodes, Founder and Managing Director

Document Control

Version	Date	Issue	Prepared by	Approved by
1.0	17 July 2026	Final	Matthias Leroy; Ben Lemeire; Captain Guy Pochet	Captain Pim de Rhoodes

Contents

1. Purpose and Response to Ground 2

MARA's Minded to Determine Notice dated 26 June 2026 states that the potential impacts of the proposed maritime usage on Descriptors 1, 3 and 11 of the Marine Strategy Framework Directive could not be adequately assessed. This report supplies the project-specific information required to complete that assessment.

The assessment addresses the current status, Good Environmental Status characteristics, environmental targets, relevant pressures, sensitive receptors, operational controls and residual effects for each of the three descriptors. It incorporates a complete assessment of Annex IV species and expressly adopts the national guidance for underwater sound in Irish waters.

2. Applicant, Project Scope and Author Competence

2.1 Applicant and scope

SEATEC NV seeks a Maritime Usage Licence for survey and recovery of loose and recoverable non-ferrous commercial cargo located within the cargo holds of a target wreck on EEZ Waters. The proposed maritime usage does not include recovery of the vessel. Hull structure, machinery, fixtures, bunkers, personal effects and all non-cargo material are excluded from the recovery scope.

2.2 Technical team

Team member	Assessment responsibility	Relevant competence
Matthias Leroy	Lead author: Descriptors 1 and 3; integration of MSFD assessment	MSc Marine and Lacustrine Sciences; BSc Biology; marine legislation, biological oceanography, GIS, environmental monitoring and offshore survey experience.
Ben Lemeire	Descriptor 11, acoustic systems and Annex IV species	More than 15 years of international offshore experience with MBES, side-scan sonar, USBL, ROV systems and acoustic survey operations.
Captain Guy Pochet	Operational methodology, risk controls and feasibility review	MSc Nautical Sciences; Graduate in Advanced Maritime Law; STCW Master Unlimited; DPO; Salvage Master; Lloyd's Special Casualty Representative.
Captain Pim de Rhoodes	Applicant review and approval	Founder and Managing Director of SEATEC NV; more than 30 years in command, survey, ROV, salvage and cargo recovery operations.

3. Description of the Proposed Maritime Usage

3.1 Location and duration

The licence area is located at approximately 51°52.720'N, 014°16.880'W, approximately 265 km west of Valentia, County Kerry, in the Irish Exclusive Economic Zone. Water depth is approximately 330 m and the mapped licence area is 96.47 ha. A two-year licence is sought, with offshore work undertaken in seasonal, weather-limited operating windows.

3.2 Operational method

1. A non-intrusive multibeam echosounder and side-scan sonar survey establishes the current condition and confirms working positions.
2. ROV visual inspection identifies loose cargo and establishes USBL-referenced cargo recovery points and exclusion zones.
3. A crane-deployed grab fitted with camera, lighting and USBL positioning is lowered under continuous operator control.
4. The grab is placed on identified commercial cargo. It is not used to cut, dismantle, break up or recover the vessel.
5. If non-target structure is observed, the camera view is lost, or placement cannot be confirmed, the grab is withdrawn and repositioned.
6. ROV and repeat survey checks verify the condition of the working area. Recovered cargo is secured and discharged at port.

3.3 Equipment and pressures

Equipment/activity	Operating characteristic	Pressure considered	Descriptor
MV N35	80 m DP2 offshore supply vessel; no anchors used	Continuous vessel and thruster sound; vessel presence; accidental pollution risk	D1, D3, D11
MBES	Reson SeaBat T50/7150 class; 200-400 kHz; short, directional pulses	Non-impulsive high-frequency underwater sound	D1, D11

Equipment/activity	Operating characteristic	Pressure considered	Descriptor
Side-scan sonar	EdgeTech 4200 class; 300/600 kHz; towed survey passes	Non-impulsive high-frequency underwater sound	D1, D11
USBL	20-34 kHz; intermittent acoustic positioning interrogations	Non-impulsive underwater sound	D1, D11
ROV	Visual inspection, positioning and condition monitoring	Low-level equipment sound, light and local presence	D1, D11
Crane and grab	Controlled lowering and lifting; approximately five cycles per hour when conditions allow	Intermittent mechanical sound; localised sediment disturbance and seabed contact	D1, D3, D11

No blasting, explosives, seismic airguns, sparkers, boomers, sub-bottom profilers, drilling, trenching, ploughing or seabed anchoring form part of the proposed maritime usage. The crane system is cable-operated and introduces no hydraulic fluid at seabed level.

4. Assessment Framework and Good Environmental Status

The assessment follows Directive 2008/56/EC, Commission Decision (EU) 2017/848, Ireland's Marine Strategy Part 1 published in July 2025, MARA's Applicant Technical Guidance Note Version 8, and MARA's 2026 review of impacts of geophysical and geotechnical surveys on fish and shellfish in Irish waters.

Descriptor	Current Irish status	Relevant GES focus	Project assessment question
D1 Biological diversity	Partially achieved / not fully determined across all ecosystem components	Species abundance, distribution, habitat condition and ecosystem function are maintained and anthropogenic pressures do not cause adverse population effects.	Could the activity cause population-level mortality, sustained displacement, habitat loss or deterioration of biological diversity?
D3 Commercial fish and shellfish	Partially achieved	Fishing mortality and spawning stock biomass remain compatible with maximum sustainable yield and healthy stock structure.	Could the activity affect stock abundance, distribution, spawning, nursery function, access to fishing grounds or population structure?
D11 Introduction of energy, including underwater noise	GES achieved for the assessed impulsive and continuous noise components	Anthropogenic sound is at levels that do not adversely affect populations of marine animals.	Could project sound cause injury, biologically significant disturbance or a material contribution to cumulative underwater noise?

5. Descriptor 1 - Biological Diversity

5.1 Receiving environment and receptors

The seabed at the licence area is deep-sea mud to muddy san. The licence area does not overlap a European Site or Vulnerable Marine Ecosystem Area 51. The wider Porcupine Bank and Porcupine Seabight support cetaceans, marine turtles, pelagic seabirds, commercially exploited fish and soft-sediment benthic communities. Mobile animals may pass through or forage in the wider area; the licence area is not a breeding, nesting, haul-out or resting site for marine mammals, turtles or seabirds.

5.2 Assessment of effects

Receptor/feature	Potential effect	Scale and duration	Project controls	Residual assessment
Soft-sediment benthos	Local removal or burial of infauna; temporary turbidity at cargo recovery points	Confined to cargo-hold openings and immediately associated cargo field; intermittent over operating periods	DP2 eliminates anchors; camera-directed cargo placement; no dredging or trenching; ROV checks; cargo-only scope	Local and limited. No effect on regional habitat extent, condition or ecosystem function.
Pelagic fish	Temporary avoidance from vessel, thruster or acoustic sound; local turbidity	Short-term and reversible around one vessel and a 0.9647 km² licence area	Minimum safe acoustic power; no impulsive sources; controlled grab placement; weather limits	No mortality mechanism and no population-level effect.
Cetaceans and turtles	Disturbance, collision or pollution risk	Temporary exposure during seasonal vessel activity	NPWS 2014 measures; MMO; 500 m monitored zone; 60-minute pre-start monitoring at 330 m depth; controlled vessel speed; OSRP	No injury predicted; any behavioural response is local, short and reversible.

Receptor/feature	Potential effect	Scale and duration	Project controls	Residual assessment
Seabirds	Short-term displacement from vessel presence or light; collision/attraction risk	Single DP2 vessel with intermittent transits	Task lighting directed inboard/downward; no overboard food waste; bridge watch; pollution controls	No measurable effect on population abundance, distribution or breeding productivity.
Food-web function	Temporary displacement of individual prey or predators	Local and discontinuous	Limited footprint and duration; no extraction of living resources; no persistent habitat change	No change to trophic structure or ecosystem function.

5.3 Assessment against environmental targets

Target	Project finding
D1T1 - mortality from incidental bycatch remains below levels threatening long-term viability	The activity does not fish, capture or entangle marine fauna and introduces no unattended gear. It does not add to bycatch mortality.
D1T2 - population abundance is not adversely affected by anthropogenic pressures	No injury or mortality pathway is predicted. Local, temporary avoidance cannot affect population abundance.
D1T4 - species distributional range and pattern remain consistent with prevailing conditions	The project creates no barrier to movement and occupies a negligible, temporary area within the open Atlantic range of mobile species.
D1T5 - habitat extent and condition support species life stages	No designated or functionally critical habitat is removed. Local soft-sediment disturbance does not affect regional habitat availability.

5.4 Descriptor 1 conclusion

The proposed maritime usage will not cause population-level mortality, permanent habitat loss, fragmentation of species range or deterioration of ecosystem function. Residual effects are local, temporary and reversible. The activity will not prevent the achievement or maintenance of Good Environmental Status for Descriptor 1.

6. Descriptor 3 - Commercial Fish and Shellfish

6.1 Fisheries context identified by MARA

MARA identified overlap with gill-net and long-line fishing areas, proximity to Nephrops and demersal fishing grounds, overlap with spawning grounds for blue whiting, horse mackerel and megrim, and overlap with nursery grounds for blue whiting and megrim. Each pathway is assessed below.

Species/activity	Relevant sensitivity	Project interaction	Assessment of stock effect
Blue whiting	Spawning and nursery distribution overlaps the broad Porcupine region; pelagic eggs and larvae may occur in the water column	One stationary vessel, non-impulsive survey systems and localised cargo recovery at 330 m	No fishing mortality, extraction or broad water-column disturbance. The licence area is negligible relative to the stock's spawning and nursery distribution. No effect on recruitment or spawning-stock biomass.
Horse mackerel	Broad spawning distribution may overlap the licence area; adults and early life stages are pelagic	Temporary vessel and acoustic presence; no seabed-dependent spawning habitat is removed	No impulsive sound or pelagic sampling. Temporary local avoidance does not alter stock distribution or recruitment.
Megrim	Spawning and nursery distributions extend across large shelf and slope areas; demersal adults may occur regionally	Local grab contact within cargo areas and short-lived sediment suspension	Less than 1 km² licence area with a much smaller active footprint. No material loss of spawning/nursery habitat and no effect on abundance or stock structure.
Nephrops and demersal fisheries	Important grounds occur adjacent to the area	No trawling or extraction; temporary presence and safety separation around N35	No effect on stock status. Temporary access effects are managed through notices, liaison and avoidance of fishing gear.
Gill-net and long-line activity	Potential operational coexistence issue and risk of gear interference	Temporary vessel presence in a mapped fishing area	Fisheries Liaison Officer, Marine Notices, direct notification, bridge watch and prohibition on interference with third-party gear reduce the residual effect to short-term displacement only.

6.2 Scale of seabed interaction

The mapped licence area is 96.47 ha (0.9647 km²). The active cargo-recovery footprint is substantially smaller and is confined to existing cargo-hold openings and immediately associated cargo deposits. The activity does not remove fish, shellfish, spawning substrate or nursery habitat at a scale capable of affecting a commercial stock.

6.3 Fisheries coexistence measures

- A Fisheries Liaison Officer will be appointed before mobilisation and will remain the single point of contact for fishing organisations and vessels.

- Marine Notices and direct notifications will be issued before each offshore campaign, including the licence area, dates, vessel identity and contact details.
- Relevant Producer Organisations and fisheries representatives will receive the programme of works at the earliest practicable opportunity.
- The N35 will maintain a continuous navigational and gear watch and will not damage, move or interfere with fishing gear or third-party property.
- Where active fishing gear is identified within the immediate work area, recovery operations will be delayed or repositioned until safe coexistence is restored.

6.4 Assessment against environmental targets

Target	Project finding
D3T1 / D3T1-1 - fishing mortality remains at or below maximum sustainable yield levels	The project does not catch or remove fish or shellfish and therefore does not increase fishing mortality.
D3T2 - spawning-stock biomass remains above levels capable of producing maximum sustainable yield	No mortality, recruitment loss or habitat effect of stock-scale significance is predicted for blue whiting, horse mackerel, megrim, Nephrops or demersal species.
Healthy age and size distribution	The project does not selectively remove any age or size class and cannot alter stock demographic structure.

6.5 Descriptor 3 conclusion

The project may cause brief and local displacement of fish and temporary operational displacement of fishing activity, but it will not affect fishing mortality, spawning-stock biomass, recruitment, population structure or the productive capacity of spawning and nursery grounds. It will not prevent the achievement or maintenance of Good Environmental Status for Descriptor 3.

7. Descriptor 11 - Introduction of Energy, including Underwater Noise

7.1 Sound-source inventory

Source	Character	Frequency/operation	Potential effect
MBES	Non-impulsive, directional, short-duration pulses	200-400 kHz during initial and verification surveys	Local behavioural response in species able to detect part of the signal; rapid attenuation and narrow beam.
Side-scan sonar	Non-impulsive, directional pulses	300/600 kHz during survey lines	Very high frequency, short duty cycle and limited footprint.
USBL	Non-impulsive, intermittent acoustic positioning	20-34 kHz during ROV and grab positioning	Potential short-range behavioural response in cetaceans and fish.
N35 propulsion and DP thrusters	Continuous broadband vessel sound	Transit and station-keeping	Temporary masking or avoidance close to the vessel.
ROV	Continuous low-level motor and thruster sound	Intermittent inspection and monitoring	Localised and subordinate to vessel sound.
Crane and grab	Intermittent mechanical sound	Approximately five cycles per hour when operating	Short-duration startle or avoidance; no impulsive high-energy source.
Excluded sources	Not part of the project	No airguns, explosives, piling, sparkers, boomers, drilling or sub-bottom profiler	No addition to the impulsive-noise registry and no high-energy injury pathway.

7.2 Acoustic management

- All acoustic systems will be operated at the lowest practicable source level and duty cycle compatible with safe positioning and data quality.
- Manufacturer and mobilisation records will identify model, operating frequency, selected power, pulse length, beam configuration and operating periods for each source.
- Simultaneous operation of acoustic sources will be avoided where not operationally necessary.
- DP setup will minimise unnecessary thruster demand, heading changes and prolonged high-power manoeuvring.
- The acoustic survey provisions of NPWS (2014) will be implemented, including a qualified MMO, a 500 m monitored zone, a 60-minute pre-start watch in water deeper than 200 m, and ramp-up/soft-start where the equipment permits.
- Following a break in relevant acoustic output exceeding 30 minutes, the applicable pre-start procedure will be repeated before recommencement.
- Operations and MMO reports will be submitted to the competent authority within the reporting period specified by NPWS guidance or the licence.

7.3 Assessment against environmental targets

Target	Project finding
D11T1 - spatial distribution, temporal extent and levels of anthropogenic impulsive sound do not adversely affect populations	The project introduces no impulsive high-energy source and produces no event requiring entry in the impulsive-noise register.
D11T1-a - guidance for continuous and impulsive sound is developed and implemented	SEATEC NV expressly commits to full implementation of the NPWS 2014 national guidance for acoustic surveys and any licence-specific requirements.
Continuous low-frequency sound does not adversely affect populations	N35 and ROV sound is temporary, local and comparable to ordinary offshore vessel operations. The project does not create a permanent or regionally persistent sound source.

7.4 Descriptor 11 conclusion

The sound sources are temporary, non-impulsive and spatially confined. No permanent source is installed and no high-energy impulsive source is used. With the specified acoustic management measures, the activity will not cause injury or biologically significant population disturbance and will not prevent the maintenance of Good Environmental Status for Descriptor 11.

8. Annex IV Species Risk Assessment

8.1 Species considered

The assessment covers all cetaceans and marine turtles that may reasonably occur in the wider Porcupine Bank region, including bottlenose dolphin, common dolphin, harbour porpoise, long-finned pilot whale, sperm whale, fin whale, minke whale, other transient cetaceans and leatherback turtle. The assessment considers sound, collision, physical interaction, entanglement, lighting, pollution and disturbance.

Impact pathway	Cetaceans	Marine turtles	Conclusion
Underwater sound	Potential temporary avoidance close to the vessel; no injury mechanism predicted for the proposed non-impulsive sources under managed operation.	Possible short-range behavioural response; high-frequency MBES/SSS energy is outside or above much of the most sensitive hearing range.	No deliberate disturbance; local and reversible response only.
Collision	One vessel in transit and on DP; animals can be detected by bridge watch and MMO.	Surface-swimming turtles may be visible during daylight transit.	Low residual risk with speed and watch controls.
Entanglement or capture	No unattended lines, nets or sampling gear. Crane wire remains under active control.	No capture gear or loose line introduced.	No credible entanglement pathway.
Physical contact with grab	Grab operates at 330 m on visually confirmed cargo under camera control.	Same assessment.	Marine fauna are not targeted and can move away; no material risk.
Lighting	Deck and ROV lighting may cause local attraction or avoidance.	Potential local attraction to light.	Task lighting only, directed and limited to operational need.
Accidental pollution	Fuel and oils are carried by N35, not released by the cargo.	Same pathway.	Tier 2 OSRP, SOPEP and MARPOL controls reduce probability and consequence.
Habitat or resting/breeding sites	No cetacean breeding or resting structure is present at the site.	No turtle nesting habitat exists offshore.	No damage to a breeding site or resting place.

8.2 Strict-protection conclusion

The proposed maritime usage is not expected to capture, kill or injure an Annex IV animal, deliberately disturb an animal in a manner significant to the maintenance of the species, or damage or destroy a breeding site or resting place. A derogation is not required for the activity as assessed. Any material change to equipment or method that could alter this conclusion will be risk-assessed before use and referred to the relevant authority where required.

9. Cumulative and In-combination Effects

The cumulative assessment considers the two-year licence period, commercial fishing, normal shipping and publicly available maritime usage applications in the wider Porcupine region. The project comprises one DP2 vessel at one site and does not overlap a permanent offshore installation. Temporary sound and presence may coincide with fishing vessels or research traffic, but the incremental contribution is local and intermittent.

The main cumulative pressure is vessel sound. The project will not add impulsive sound, permanent habitat loss or extraction of living resources. Marine Notices, Fisheries Liaison Officer arrangements, limited acoustic duty cycles and operational coordination prevent material temporal clustering. No cumulative effect capable of changing the conclusions for Descriptors 1, 3 or 11 is identified.

10. Environmental Commitments and Monitoring

Commitment	Responsible person	Record
Cargo-only recovery; no recovery, dismantling, cutting or removal of the vessel or non-cargo structure.	Salvage Master	Daily operations log; camera and ROV record
DP2 positioning; no seabed anchors.	Master / DPO	DP log
Camera and USBL guidance on every grab cycle; withdraw and reposition if target placement is not confirmed.	Crane operator / Survey Superintendent	Grab-cycle and USBL log
ROV condition checks at least every 48-72 operational hours and after any abnormal contact.	Survey Superintendent	ROV video and survey report
No cargo recovery at Beaufort Force 6 or above; suspend earlier if safe control cannot be assured.	Master / Salvage Master	Bridge and operations log
Qualified MMO, 500 m monitored zone and 60-minute pre-start watch for acoustic operations in water deeper than 200 m.	MMO / Survey Superintendent	NPWS MMO forms and acoustic log
Lowest practicable acoustic power and duty cycle; equipment settings documented.	Survey Superintendent	Mobilisation and daily equipment records
Fisheries Liaison Officer and pre-campaign Marine Notice and fisheries notifications.	Project Manager / FLO	Notice and correspondence register
No interference with fishing gear or third-party property.	Master	Bridge log and incident register
Tier 2 OSRP, SOPEP, MARPOL and waste-management procedures maintained throughout.	Master / DPA	Drill, inspection and waste records
Post-campaign report covering survey effort, cargo recovery footprint, marine-fauna observations, acoustic use and incidents.	Project Manager	Report to MARA

11. Conclusions

- Descriptor 1: residual effects on biodiversity are local, temporary and reversible and do not affect population abundance, distribution, habitat availability or ecosystem function.
- Descriptor 3: the project does not increase fishing mortality, remove living resources or affect spawning-stock biomass, recruitment or stock structure. Temporary coexistence effects are managed through fisheries liaison and notices.
- Descriptor 11: all project sources are temporary and non-impulsive. No high-energy impulsive source is used and the project will implement NPWS 2014 acoustic-survey measures.
- Annex IV species: no capture, killing, injury, significant deliberate disturbance or damage to breeding or resting sites is predicted.
- The proposed maritime usage will not prevent the achievement or maintenance of Good Environmental Status for Descriptors 1, 3 or 11.

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Signed for and on behalf of SEATEC NV

/s/ Matthias Leroy MSc Marine and Lacustrine Sciences; BSc Biology *Lead Environmental Author* Date: 17 July 2026	**/s/ Ben Lemeire** BSc; Survey Superintendent and Subsea Acoustic Systems Specialist *Underwater Acoustics and Annex IV Species* Date: 17 July 2026
/s/ Captain Guy Pochet MSc Nautical Sciences; Graduate Advanced Maritime Law; Lloyd's SCR *Salvage Master and Operational Reviewer* Date: 17 July 2026	**/s/ Captain Pim de Rhoodes** Maritime Captain; Founder and Managing Director *Approved for SEATEC NV* Date: 17 July 2026

SEATEC NV

Natura Impact Statement

Porcupine Bank Commercial Cargo Recovery Operation

Applicant	SEATEC NV
Maritime Usage Licence	MUL230036
Location	Porcupine Bank, Irish Exclusive Economic Zone
Maritime usage	Survey and recovery of non-ferrous commercial cargo from the seabed
Document reference	SEATEC-MUL230036-NIS-01
Version	1.0 - Final
Date	17 July 2026
Submission basis	Supplementary material under section 119(6)(b) of the Maritime Area Planning Act 2021

Prepared and signed by the SEATEC NV Technical Team

Matthias Leroy, MSc Marine and Lacustrine Sciences
Ben Lemeire, Survey Superintendent and Subsea Acoustic Systems Specialist
Captain Guy Pochet, MSc Nautical Sciences, Salvage Master and Lloyd's SCR
Captain Pim de Rhoodes, Founder and Managing Director

Document Control

Version	Date	Issue	Prepared by	Approved by
1.0	17 July 2026	Final	Matthias Leroy; Ben Lemeire; Captain Guy Pochet	Captain Pim de Rhoodes

Contents

1. Introduction and Appropriate Assessment Scope

This Natura Impact Statement accompanies the Supporting Information for Screening for Appropriate Assessment submitted for MUL230036. The screening report concludes, on a precautionary basis and without reliance on mitigation, that Likely Significant Effects cannot be excluded for bottlenose dolphin Qualifying Interests of identified SACs and for wide-ranging seabird Special Conservation Interests of identified SPAs.

This NIS provides the information required for Stage 2 Appropriate Assessment. It evaluates the implications of the project for the conservation objectives and integrity of those European Sites, alone and in combination, and specifies mitigation measures that are integral commitments of SEATEC NV.

2. Project Description

The project is located at approximately 51°52.720'N, 014°16.880'W, approximately 265 km west of Valentia, County Kerry, at approximately 330 m water depth. The licence area is 96.47 ha.

The project consists of non-intrusive acoustic and ROV survey followed by recovery of loose and recoverable non-ferrous commercial cargo using a camera- and USBL-guided crane grab. The vessel is not the object of recovery. The project excludes recovery, cutting, dismantling or removal of hull structure, machinery, fixtures, bunkers, personal effects and other non-cargo material.

Phase	Activity	Duration/extent relevant to AA
Survey	MBES, side-scan sonar, ROV and USBL positioning	Short survey periods within the 96.47 ha licence area
Cargo recovery	DP2 station-keeping and controlled grab cycles at identified cargo points	Seasonal and weather-limited; approximately five cycles per operating hour
Transit and discharge	N35 transits between the site and port	Intermittent vessel transits during the two-year licence period
Close-out	ROV and acoustic verification survey	Short-duration final condition record

3. European Sites and Features Assessed

3.1 Bottlenose dolphin SACs

Site code	SAC	Feature assessed
000191	St. John's Point SAC	Bottlenose dolphin [1349]
000328	Slyne Head Islands SAC	Bottlenose dolphin [1349]
000495	Duvillaun Islands SAC	Bottlenose dolphin [1349]
002074	Slyne Head Peninsula SAC	Bottlenose dolphin [1349]
002165	Lower River Shannon SAC	Bottlenose dolphin [1349]
002327	Belgica Mound Province SAC	Bottlenose dolphin [1349]
002329	South-west Porcupine Bank SAC	Bottlenose dolphin [1349]
002998	West Connacht Coast SAC	Bottlenose dolphin [1349]
003001	Porcupine Bank Canyon SAC	Bottlenose dolphin [1349]

3.2 Seabird SPAs

Site code	SPA	Features assessed	Screening basis
004236	North-west Irish Sea SPA	Fulmar [A009]; Manx shearwater [A013]	Published foraging ranges
004170	Cruagh Island SPA	Manx shearwater [A013]	Published foraging range
004008	Blasket Islands SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004003	Puffin Island SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004175	Deenish Island and Scariff Island SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]	Published foraging ranges
004007	Skelligs SPA	Fulmar [A009]; Manx shearwater [A013]; Storm petrel [A014]; Gannet [A016]	Published foraging ranges

Site code	SPA	Features assessed	Screening basis
004237	Seas off Wexford SPA	Fulmar [A009]; Manx shearwater [A013]; Gannet [A016]	Published foraging ranges
004136	Clare Island SPA	Fulmar [A009]	Published foraging range
004189	Kerry Head SPA	Fulmar [A009]	Published foraging range
004002	Saltee Islands SPA	Fulmar [A009]; Gannet [A016]	Published foraging ranges
004154	Iveragh Peninsula SPA	Fulmar [A009]	Published foraging range

4. Conservation Objectives and Assessment Criteria

4.1 Bottlenose dolphin

The assessment tests whether the project could prevent maintenance of the favourable conservation condition of bottlenose dolphin, including population abundance and distribution, access to suitable habitat, use of the wider marine area, prey availability and the absence of significant disturbance that would reduce site use or ecological functionality.

4.2 Seabirds

The assessment tests whether the project could adversely affect breeding population abundance, productivity, distribution, colony function, prey availability, mortality, disturbance levels or access to marine foraging habitat for Manx shearwater, Fulmar, Storm petrel and Gannet associated with the identified SPAs.

4.3 Integrity test

An adverse effect on site integrity would arise where the project undermines the coherent ecological structure and function of a European Site or its ability to achieve the conservation objectives for the relevant QI or SCI. The assessment applies the precautionary principle and considers residual effects after mitigation.

5. Impact Assessment

5.1 Underwater sound and bottlenose dolphin

The project's underwater sound sources comprise high-frequency MBES and side-scan sonar, intermittent USBL positioning, vessel propulsion and DP thrusters, ROV thrusters and intermittent crane/grab sound. No airguns, explosives, pile driving, sparkers, boomers or other high-energy impulsive sources are proposed.

MBES and side-scan sonar are directional, short-duty-cycle systems operating at high frequencies. USBL operates at lower frequencies but intermittently. The credible effect is temporary behavioural avoidance close to the source. Permanent or temporary hearing injury is not predicted for the proposed equipment operated under the controls in Section 6. The operation cannot create a barrier across the Oceanic Waters Management Unit and will not prevent access to any SAC or to supporting habitat.

5.2 Vessel presence, collision and displacement

N35 is a single DP2 vessel. On site it remains within a small operational area; in transit it follows ordinary navigation routes. Collision risk is low and is further reduced by bridge watch, MMO observations and controlled speed. Temporary displacement around the vessel does not remove habitat or prevent animals from moving through the wider oceanic area.

5.3 Seabird disturbance and lighting

The project introduces one vessel into offshore foraging waters for discontinuous periods. Birds may temporarily alter flight or foraging behaviour near the vessel. The effect is restricted to the immediate vessel vicinity and does not remove prey, create a barrier, affect colonies or occupy a material proportion of the marine foraging range of any SCI.

Lighting is limited to navigational and task requirements. No permanent illuminated structure is installed. With directed lighting and waste controls, the project will not cause sustained attraction, collision mortality or alteration of foraging behaviour at a population scale.

5.4 Cargo recovery, sediment and prey availability

Grab contact is localised to existing cargo areas. Sediment suspension is temporary and settles close to the point of disturbance. The project does not remove living resources or a significant area of benthic prey habitat. There is no pathway by which local cargo recovery could reduce prey availability for bottlenose dolphin or seabird populations associated with the screened-in sites.

5.5 Accidental pollution

The target cargo is solid non-ferrous material. The vessel carries marine fuel and operational oils, creating a low-probability accidental release pathway. N35 operates under SOPEP and a Tier 2 Oil Spill Response Plan coordinated with the Irish Coast Guard. The distance offshore, small probability of a release and rapid response arrangements make a significant effect on a European Site unlikely; the prevention and response measures below reduce the residual risk further.

6. Mitigation Measures

6.1 Underwater sound and marine mammals

1. A qualified and experienced Marine Mammal Observer will be appointed for acoustic survey operations and will use the NPWS standard data forms.
2. Acoustic survey activity will commence only in daylight and when the MMO confirms that effective visual monitoring is possible.
3. A 500 m Monitored Zone will apply around the relevant sound source unless a different distance is agreed in writing by the competent authority.
4. Because water depth exceeds 200 m, constant-effort pre-start monitoring will be undertaken for at least 60 minutes. Acoustic activity will not commence until 60 minutes have elapsed with no marine mammal detected within the Monitored Zone.
5. Where equipment permits, acoustic output will be ramped up progressively from the lowest practicable setting. The delay between completion of pre-start monitoring, ramp-up and necessary operating output will be minimised.
6. If relevant acoustic output ceases for more than 30 minutes, the applicable pre-start procedure will be repeated before recommencement.
7. Acoustic equipment will be operated at the lowest practicable power, pulse length and duty cycle consistent with safe positioning and required data quality.
8. Simultaneous use of multiple acoustic sources will be avoided unless operationally necessary.
9. N35 will use the minimum safe DP thruster demand and avoid unnecessary manoeuvring or prolonged high-power station-keeping.
10. The operator and MMO reports required by NPWS guidance will be submitted to MARA within 30 days of completion of each campaign, unless the licence specifies a shorter period.

6.2 Vessel and seabird controls

- Continuous bridge watch will be maintained for cetaceans, turtles, seabirds and fishing gear.
- Transit speed will not exceed 10 knots except where required for navigational safety; active acoustic survey speed will not exceed 4 knots.
- Deck and work lighting will be limited to navigational and operational need and directed downward and inboard where safe and practicable.
- No food waste, plastics, loose line or other attractant will be discharged overboard.
- Any bird collision, mortality or unusual aggregation will be recorded and reported in the campaign environmental report.
- No flares or unnecessary high-intensity external lighting will be used except in an emergency.

6.3 Cargo recovery and seabed controls

- Recovery is restricted to commercial cargo; the vessel and non-cargo material are excluded.
- Every grab placement will be camera- and USBL-guided. The grab will be withdrawn if cargo cannot be positively distinguished from structure.
- No cutting, blasting, drilling, dredging, trenching or anchoring will occur.
- ROV condition surveys will be completed at least every 48-72 operational hours and after abnormal contact.
- Cargo recovery will not commence or continue at Beaufort Force 6 or above and will be suspended at lower sea states where safe precision control cannot be assured.

6.4 Pollution prevention and response

- N35 will maintain valid MARPOL, SOPEP and vessel certification and the Tier 2 Oil Spill Response Plan throughout the licence period.
- Fuel-transfer and machinery procedures will follow vessel safety management controls; spill equipment will remain immediately available.
- No hydraulic fluid is introduced at seabed level by the cable-operated grab system.
- All recovered non-cargo waste will be retained on board, segregated and disposed of at an authorised port facility.
- Any pollution incident will be reported immediately in accordance with the OSRP communication matrix, including notification to the Irish Coast Guard.

7. Residual Effects on Site Integrity

European Site feature	Residual effect after mitigation	Effect on conservation objectives	Integrity conclusion
Bottlenose dolphin QIs of nine SACs	At most, short-term local avoidance close to N35 or an active acoustic source. No injury, mortality, habitat loss or barrier effect.	Population abundance, distribution, habitat access and site use remain unaffected at a site or management-unit scale.	No adverse effect on integrity.
Manx shearwater SCIs	Brief local displacement from one vessel; no colony effect, prey removal or material loss of foraging area.	Breeding population, productivity, distribution and marine habitat access remain unaffected.	No adverse effect on integrity.
Fulmar SCIs	Same temporary vessel-presence pathway; wide foraging distribution and no permanent structure.	No effect on population trend, productivity or foraging-habitat availability.	No adverse effect on integrity.
Storm petrel SCIs	Lighting and vessel presence controlled; no overboard attractants and no permanent illumination.	No effect on breeding population, colony function or offshore habitat access.	No adverse effect on integrity.
Gannet SCIs	Temporary vessel avoidance possible; no prey extraction, collision mechanism or barrier.	No effect on population, productivity or foraging distribution.	No adverse effect on integrity.
All screened-in QIs/SCIs - pollution pathway	Residual spill risk is low following prevention and Tier 2 response measures.	No likely contamination of supporting habitat at a scale affecting conservation objectives.	No adverse effect on integrity.

8. In-combination Assessment

Background fishing, shipping and occasional research activity contribute vessel presence and underwater sound in the wider Atlantic. No project with a permanent or concentrated footprint has been identified within the immediate licence area. The proposed activity is intermittent, uses no impulsive source and will be coordinated through Marine Notices and fisheries liaison.

The marine mammal measures prevent commencement when animals are within the Monitored Zone, minimise acoustic output and document actual exposure. The seabird measures minimise lighting and attraction. Consequently, the project's residual contribution cannot combine with background activity to cause population-level disturbance, reduce habitat access or undermine the conservation objectives of any screened-in European Site.

9. Monitoring, Reporting and Adaptive Management

Monitoring item	Frequency	Action threshold and response
MMO visual monitoring and standard forms	Before and during acoustic survey operations	No start until the prescribed clear pre-start period is achieved; repeat after breaks exceeding 30 minutes.
Acoustic equipment log	Continuous daily record	Unexpected setting, source or simultaneous operation: stop, verify and re-authorise before use.
Marine fauna and seabird incident log	Continuous bridge and MMO record	Injury, collision, mortality or unusual behaviour: cease relevant activity where safe, notify MARA/NPWS and review method.
ROV cargo-area condition survey	Every 48-72 operational hours and after abnormal contact	Unplanned structural contact or material environmental change: suspend recovery in the area and revise exclusion limits.
Pollution readiness and equipment	Pre-mobilisation and routine vessel checks	Deficiency in spill-response capability: no commencement until rectified.
Campaign environmental report	Within 30 days of campaign completion unless otherwise conditioned	Submit effort, sightings, acoustic use, cargo footprint, incidents, mitigation performance and corrective actions to MARA.

If monitoring identifies an effect materially different from that assessed, SEATEC NV will suspend the relevant activity, notify MARA and implement an agreed revised method before recommencement.

10. Conclusion

The project has been assessed against the conservation objectives of the bottlenose dolphin Qualifying Interests and wide-ranging seabird Special Conservation Interests identified in the SISAA. The project is a temporary, cargo-only recovery operation using one DP2 vessel, non-impulsive acoustic systems and a highly localised seabed footprint.

With the mitigation measures in Section 6 implemented in full, the project will not cause injury or mortality, sustained displacement, a barrier to movement, material loss of supporting habitat, reduction in prey availability, pollution at a significant

scale, or any population-level effect. It will not undermine the structure, function or conservation objectives of any European Site.

SEATEC NV therefore concludes, on the basis of the best available scientific information and beyond reasonable scientific doubt, that MUL230036, alone and in combination with other plans and projects, will not adversely affect the integrity of any European Site.

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Signed for and on behalf of SEATEC NV

/s/ Matthias Leroy MSc Marine and Lacustrine Sciences; BSc Biology *Lead Author* Date: 17 July 2026	**/s/ Ben Lemeire** BSc; Survey Superintendent and Subsea Acoustic Systems Specialist *Acoustic Systems Reviewer* Date: 17 July 2026
/s/ Captain Guy Pochet MSc Nautical Sciences; Graduate Advanced Maritime Law; Lloyd's SCR *Operational Reviewer* Date: 17 July 2026	**/s/ Captain Pim de Rhoodes** Maritime Captain; Founder and Managing Director *Approved for SEATEC NV* Date: 17 July 2026