

Tender for Decommissioning Effects Project

Introduction to requirement

The INSITE Programme is an innovative European-wide research programme that has so far attracted nearly £10 Million total funding and delivered 18 projects, with 17 research institutions from the UK, Netherlands, Germany Belgium and Norway. Since 2015, INSITE has established a model of collaboration between the scientific community and the oil and gas industry.

INSITE Phase 2 is due to end in August 2025 and has produced research on a variety of topics including the Connectivity of Hard Substrate Assemblages in the North Sea (CHASANS¹), Ecosystem level importance of STructures as Artificial Reefs (EcoSTAR²) & North Sea 3D (NS3D³). This call is to continue Phase 3 of this critical work. INSITE Phase 3 is also partnered with the Natural Environment Research Council-funded Value of the Marine Artificial Structures (ValMAS⁴) programme, which is looking to develop an enhanced understanding of the environmental effects and ecological consequences of MAS in the North Sea basin.

INSITE Phase 3 research is looking to align with this by focusing on the effects of decommissioning Marine Artificial Structures (MAS) to provide evidence to inform decommissioning strategies, individual asset decommissioning, environmental risk associated with topics of interest (e.g. fates of contaminants), and engagement with regulators and advisory bodies.

INSITE Phase 3 has two operational stages: the **project phase** (19 months) and the **impact phase** (6 months). During the project phase, successful projects are expected to commence research activity in September 2025 and to deliver their research outputs by March 2027. During the impact phase, commencing April 2027, project and wider-programme activity will focus on dissemination of research findings, stakeholder and policy engagement until the end of the programme in September 2027.

Background of the project

A key legislative driver for decommissioning of MAS across North West Europe is OSPAR decision 98/3⁵, which requires removal of offshore installations, to be recycled or disposed of onshore, unless there are sufficient grounds for a derogation as evidenced through the Comparative Assessment process managed by, if in the UK, the UK Government's Offshore Petroleum Regulator for Environment and Decommissioning authority (OPRED⁶). Although the dumping or leaving in place of offshore installations is prohibited by OSPAR 98/3, growing scientific evidence suggests there may be benefits to retaining part of, or all of a structure in situ at the end of its operational life, known as

¹ <https://insitenorthsea.org/project/connectivity-of-hard-substrate-assemblages-in-the-north-sea-chasans/>

² <https://insitenorthsea.org/project/ecostar-ecosystem-level-importance-of-structures-as-artificial-reefs/>

³ <https://insitenorthsea.org/project/application-of-novel-3d-imaging-techniques-to-quantify-biomass-associated-with-north-sea-artificial-structures-ns3d/>

⁴ <https://www.ukri.org/opportunity/value-of-marine-artificial-structures-valmas/>

⁵ <https://www.ospar.org/documents?v=57729>

⁶ <https://www.gov.uk/government/organisations/offshore-petroleum-regulator-for-environment-and-decommissioning/about>

“partial removal” or “leave in place” decommissioning scenarios. Suggested benefits include provision of artificial reef habitat, enhancing local food availability, providing nursery functions for certain species, and assisting cross-basin connectivity of populations (Fortune et al., 2024⁷; Knights et al., 2024⁸; Lemasson et al., 2024⁹), but these will depend on the prevailing biogeography and hydrodynamic conditions on site.

In order to develop and operate the most environmentally sustainable practices it is important that regulators, such as OPRED for decommissioning, and Department for Environment, food and Rural Affairs (Defra) for nature conservation, are informed by recent, relevant scientific findings. The aim of this research is, therefore, to provide policymakers and regulators with crucial insights into the potential environmental consequences of three decommissioning strategies for oil and gas structures, “full removal”, “partial removal” and “leave in place”, and provide recommendations for the key environmental variables that best capture critical environmental changes so that the environmental harm of such activity can be reduced.

This research will focus on the decommissioning oil and gas structure primarily made from steel and investigate the environmental effects of removing the supporting substructures (jackets), footings (the base of the jackets where they connect to the seabed), pipelines, and associated infrastructure. Topsides, i.e. the parts of the structure above the surface of the water, will not be included in this study.

The study will evaluate short-term impacts (0-5 years), including the release of contaminants (disposal vs. disturbance/remobilisation), emissions, and ecological changes. These changes will encompass shifts in biodiversity, alterations in biomass, ecosystem functions and services, and network connectivity. The research will provide a comprehensive, quantitative analysis of these individual and combined effects on the decommissioning of defined oil and gas structures.

The project will utilise a range of data sources, including Environmental Impact Assessments (EIAs), and Strategic Environmental Assessments (SEA), academic research, the North Sea Environmental Portal, and industry partnerships. The project will also collaborate with other INSITE initiatives. The research focus will be on assessing contaminant levels, emissions, underwater noise, and ecological changes, particularly in sediment composition and marine biodiversity, with special attention to fish and epibenthic and infaunal species.

Scope of project requirements

All objectives and their stated requirements must be addressed in your proposal.

1. Objective 1: Define decommissioning scenarios

Co-develop the parameters for the following seven decommissioning approaches for oil and gas subsea structures (i.e. no topsides) with regulators and industry representatives:

⁷ <https://journals.plos.org/sustainabilitytransformation/article?id=10.1371/journal.pstr.0000104#sec021>

⁸ <https://www.sciencedirect.com/science/article/pii/S0301479723024325>

⁹ <https://www.nature.com/articles/s41893-024-01311-z>

Structural component	Decommissioning scenario
Steel jackets and footings	Full removal
	Partial removal (Jacket removed, just Footings Remaining)
	Abandon In Place (Jacket and Footings Remaining)
Surface-laid, unburied pipelines	Full removal
	Abandon In Place

These parameters will be used throughout the project, so it is important they are realistic and relevant to regulators concerns. The INSITE programme team will facilitate access to relevant contacts in OPRED, Defra, Scottish Government, the UK Statutory Nature Conservation Bodies (SNCBs) and Industry to support collaborative working.

2. Objective 2: Determine the environmental effects of decommissioning scenarios

Determine the short-term effects (0-5 years) from decommissioning subsea oil and gas structural components for a typical steel-based structure North Sea oil and gas installation according to the different decommissioning scenarios described in Objective 1.

The following environmental factors must be investigated in this project, using quantitative data where possible:

Environmental factors	Required effects
Contaminants	Changes to levels for hydrocarbons, heavy metals, plastics and Naturally Occurring Radioactive Materials (NORM)
Emissions, discharges and underwater noise	Changes to ranges, durations, maximum and minimum values of emissions/discharges and underwater noise, measured in appropriate units.
Ecological changes	Changes to sediment characteristics, benthic biodiversity (epibenthos and infauna) and biomass on structures and seabed (including species of conservation interest), fish assemblages around oil and gas platforms, occurrence of marine mammals

To investigate these factors, the project will utilise a wide range of data sources to define a (preferably quantified) baseline and subsequent environmental effects to be measured against that baseline. The following sources must be utilised for this information, however, this list is not exhaustive and if other sources are relevant, they should be stated in the proposal:

- Environmental Impact Assessments (EIAs);
- Strategic Environmental Assessments (SEA¹⁰);
- Academic research (especially those from the DREAMS¹¹ and Synthesis¹² projects of INSITE – publications available on INSITE website¹³);
- Data from the North Sea Environmental Portal¹⁴;
- Data from industry partnerships (INSITE Programme team to support collaboration with Industry to share relevant work, e.g. biomass estimation).

Where data gaps are identified, the project will make use of modelling approaches to develop robust estimates of environmental effects, noting these as ‘modelled’ in the results with a supporting confidence estimate.

3. Objective 3: Recommendations for key environmental variables

Develop recommendations for the key environmental variables that best capture critical environmental changes that should be monitored before, during and after decommissioning activity of a typical oil and gas installation, so that environmental impact of such activity can be better understood. To ensure the recommendations align with regulatory needs, the project will work collaboratively with SNCBs, UK Government (Defra and DESNZ) and OSPAR.

The project will need to develop a **suitable data analysis approach** to identify key environmental variables for future monitoring of decommissioning impacts. This may require the co-development of thresholds with experts in the SNCBs and academia to be aligned with environmental assessment expectations. The project should also work collaboratively with industry to incorporate relevant modelling and assessment approaches of value to this objective. The INSITE programme team will facilitate access to relevant contacts in Industry to support this collaboration.

4. Objective 4: Support INSITE collaboration and stakeholder engagement

The project will work collaboratively with the INSITE programme team and INSITE project teams, including the “Value of Marine Artificial Structures” programme

¹⁰ <https://www.gov.uk/government/collections/offshore-energy-strategic-environmental-assessments>

¹¹ <https://www.plymouth.ac.uk/research/marine-eco-engineering-research-unit/dreams>

¹² <https://www.plymouth.ac.uk/research/marine-eco-engineering-research-unit/insite-synthesis>

¹³ <https://insitenorthsea.org/publications/>

¹⁴ <https://www.northseaenvironmentportal.eu/>

(ValMAS¹⁵), to co-deliver the objectives of the INSITE programme and projects (as stated in INSITE website¹⁶).

The project team will need to attend programme co-ordination meetings (approx. twice a year) to share updates and actively contribute to programme discussions. There is an expectation that findings from all INSITE projects, including this one, will be communicated with the other INSITE projects, where appropriate, to create greater cohesion across the programme. Note that academic credit and acknowledgement of any shared findings will be ensured where this happens.

During the impact phase of INSITE, March 2027-September 2027, the project will work with the INSITE programme team to co-deliver a range of activities that best communicate findings, engage with stakeholders and policy makers using effective impact pathways.

Deliverables and expected outcomes of the project

All expected deliverables and outcomes must be addressed in your proposal.

Expected deliverables

- **Main project report** to contain background context for project, objectives, methods, results, discussion and recommendations.
- **Policy brief** – a summary (2-4 pages) of the key findings from this project intended for communication with regulator and policy-focused audiences (for examples see INSITE policy briefs¹⁷).
- **Conference presentations** at the INSITE Structures in the Marine Environment conference (SIME), held in May/June 2026 and 2027, and others where relevant.
- **Project webinar** to communicate key findings, with a panel question session for discussion. Webinar will be recorded and posted on YouTube for added viewing afterwards.
- **Content updates for INSITE webpage** to present key findings as project progresses and to keep stakeholders up-to-date.
- **Key stakeholder briefings** to communicate key findings to selected stakeholders, e.g. regulators, policy makers, SNCBs, targeting areas of policy need.

Although not a stated deliverable for this project, the publication of articles in scientific journals is strongly encouraged for all INSITE projects.

Expected impact outcomes

1. Essential comparative evidence is created for policy and decision-makers to better understand the different effects of alternative decommissioning outcomes for oil and

¹⁵ <https://www.ukri.org/opportunity/value-of-marine-artificial-structures-valmas/>

¹⁶ <https://insitenorthsea.org/>

¹⁷ <https://insitenorthsea.org/webinars/>

gas installations/ substructures: full removal, partial removal and leave-in-place approaches.

2. Policy and decision-makers better understand the potential consequences of oil and gas substructures left in place or only partially decommissioned as options for decommissioning. Note these alternative outcomes are not currently fully considered under OSPARs Decision 98/3.
3. Recommendations for key environmental variables to be monitored during decommissioning activity can lead to better practice in EIAs, Environmental Appraisals and Comparative Assessments.
4. Creation of a base effects assessment and framework for oil and gas structure decommissioning, which could be built on to consider the combined impacts of multiple projects and activities such as shipping activities, fishing operations, nature conservation and the decommissioning of offshore wind farms.
5. Provides knowledge and learnings which could be carried across to other offshore development sectors for future use and design, e.g. offshore wind farm decommissioning.

Commissioning process

The INSITE Programme currently has 3 live invitations for tender. Interested parties are invited to tender for any or all of these opportunities. The cost of any submission should be in the range of £50,000 to £500,000. Bids at the upper end of this range should address more than one of the invitations to tender. You must declare any third-party funding being used to supplement this research.

You as the Research Provider will be asked to sign a Research Contract upon submission of the detailed proposal should you be successful at the outline stage. By submitting an application to INSITE Phase 3 you agree to the terms within that contract without variation. If there are any variations you as Research Provider would require to enable participation in INSITE Phase 3, these must be stated within your application.

This commissioning process will be carried out in two stages:

1. An open call for **outline proposals** goes live on 17 April 2025 and will close on 01 June 2025 (5 weeks). Any documents submitted after this will not be considered. The assessment for outline proposals will be within 5 weeks of this date, any clarifications and/or notification of invitation to the next stage will be provided by 26 June 2025. Failure to respond to clarifications within this period may result in your proposal being removed from consideration.
2. The second stage of commissioning will be closed to only selected proposals, who will be invited on or before 04 July 2025 to submit a full, **detailed proposal** by 10 August 2025 (5 weeks). Any documents submitted after 10 August 2025 will not be considered. Assessment of the detailed proposals will be from 11 August to 11

September 2025. Any clarifications and/or notification of award will be within 4 weeks of final submission. Failure to respond to clarifications within this period may result in your proposal being removed from consideration.

Dates for these two commissioning stages are summarised here:

Commissioning stage	Dates
Open call for outline proposals	17 April – 01 June 2025
Assessment and feedback for outline proposals	02 June – 04 July 2025
Closed call for detailed proposals (to successful outline proposals only)	04 July – 10 August 2025
Assessment and feedback for outline proposals	11 August – 15 September 2025
Project awards	From 19 September 2025

Preparation of project tenders

1. Outline call proposals

The requirements for outline call proposals are to submit the following by 01 June 2025:

- 500-word summary of the proposed project and how it answers the ‘challenges’,
- The core team with assigned roles,
- 500 words on their capability to deliver,
- 1000 words on the outline vision and how it aligns with the ‘Expected Outcomes & Impact’
- 1000 words on the approach,
- A timeline for proposed delivery and a table of outline costs.

2. Detailed call proposals

The requirements for detailed call proposals are to submit the following by 10 August 2025:

- A maximum of 5000-word project proposal which summarises the project, shows the vision of the project, details the approach they will take.
- A maximum of 1000 words as to how the outputs for this project proposal will achieve impact.
- Up to 500-word mini-CVs for the core applicant delivery team, showing they have relevant experience, and balance of skills.

- List of any project partners and their contributions, with letters of support to be uploaded alongside the application as a separate PDF.
- A full project delivery plan, with clearly defined milestones for payment.
- A full cost breakdown of the proposed project including any subcontractor, facility, additional funding, partner contributions and equipment needs.
- A project risk assessment including if there are any ethical or responsible research and innovation concerns relating to the proposed project.
- Quality standards of the lead organisation
- Data Management and sharing approach

Tender evaluation process

Project proposals will be assessed in a two-step process. First, they will be assessed against **scientific excellence and engagement criteria**. This will be carried out by the INSITEs independent Science Advisory Group. All proposals must pass this first assessment to be considered for the second assessment.

The second step assesses against **industry relevance criteria**. This assessment will be carried out by INSITEs Industry Executive Committee. The final decision to award a project will be made in this second assessment step, after a project has demonstrated scientific excellence and engagement, as well as industry relevance.

The following describe the INSITE assessment criteria against which project proposals will be assessed.

Project assessment criteria:

Step 1 - Science excellence & engagement (Pass 55/80)

Category	Description	Score
Approach	<p>The proposal must demonstrate how the proposed work:</p> <ul style="list-style-type: none"> - Is the project design appropriate, valid, and reliable for addressing the research question? - Is the proposed budget and timeline realistic? - Are the proposed data collection methods accurate and reliable? - Is there strong Quality Management Processes built into the proposal? - Are the proposed methods for data analysis appropriate and statistically sound? - Is the research is designed in a way that allows for replication and verification by other researchers? - Is the proposal clearly written and easy to understand? - Is the proposed project logically structured? Do you think it will successfully address the requirement? 	<p>40</p> <p>(Pass 30/40)</p>

	<ul style="list-style-type: none"> - Does the proposal summarise any relevant previous work by the Research Team and describes how this will be built upon and progressed? - Will the research outputs be effectively communicated to deliver project impact? 	
Vision	<p>The proposal must demonstrate how the proposed work:</p> <ul style="list-style-type: none"> - Does the proposed research address the questions in the project tender document? - Is the proposed solution novel, does it have the potential to advance current understanding, or generate new knowledge, thinking or discovery within or beyond the field? - Does the proposed research contribute to the outcomes in the project tender document? - Does the proposed research have the potential to influence future research, practice, society, the economy or the environment? - Does the proposed research demonstrate it is of excellent quality and importance within or beyond the field of decommissioning science? 	<p>20 (Pass 15/20)</p>
Capacity to deliver	<p>The proposal must provide evidence of how the delivery team have:</p> <ul style="list-style-type: none"> - Do the proposed Research Team have the right skill sets to deliver this work? - Do the proposed Research Team have the right background, experience and expertise to address the research question? - Do the proposed Research Team have the appropriate leadership and management skills to deliver the work and their approach to develop others? 	<p>20 (Pass 10/20)</p>

Step 2 - Industry relevance (Pass 15/20)

Category	Description	Score
Industry Relevance	<ul style="list-style-type: none"> - Does the proposal address the Research Question? - Do the proposed project deliverables provide something of value to you? - Does the proposal approach clearly demonstrate what the impact of the project will be once complete? - As a member of the IEC do you feel this proposal delivers to the tender requirements the IEC approved? 	<p>20 (Pass 15/20)</p>
Total		<p>100 (Pass 70/100)</p>