

The INSITE PhD Scholarship Programme

Research Topics and Scope Statement

The INSITE Programme was launched in 2014, with the aim of providing stakeholders with the independent scientific evidence-base needed to better understand the influence of man-made structures on the ecosystem of the North Sea¹. The first INSITE Call for Proposals led to a Phase 1 research programme consisting of nine projects that concluded in 2017. In 2018, Phase 2 of INSITE was developed in partnership with NERC. NERC launched its INSITE Call for Proposals in 2019 and in April 2020 awarded around £5Million in grants to seven projects addressing the three *Challenges* in the NERC Announcement of Opportunity².

As part of INSITE's Industry-Science partnership, the *INSITE PhD Scholarship Programme* is being established which will award funding for PhD's addressing specific research topics covered by the NERC INSITE science *Challenges*. The *INSITE PhD Scholarship Programme* is led by the *INSITE Programme Advisory Group (PAG)*, the group responsible for the scientific direction of INSITE.

Research Topic Areas

The PAG is interested in proposals from universities and research institutions³ for PhD's which increase the understanding of the ecosystems on and around man-made structures in the North Sea⁴. Topics of particular interest under the INSITE Scholarship Programme are:

- Changes in the ecosystem which occur due to the placement of man-made structures in the marine environment or as a consequence of their removal;
- Comparisons between the ecosystem structure and function on native and non-native hard substrate;
- Variability in ecosystem structure and function on man-made structures against varying temporal scales.

Interdisciplinarity within projects is encouraged, so that the wider influence of man-made structures can be included in the research, e.g. social science, environmental economics and natural capital concepts and supply chain interaction.

INSITE is offering up to 50% funding to support PhD's which address these topics, which must start before 31 October 2021 and aim to be concluded in 2025.

Industry Partnerships

In addition to providing funding, INSITE is able to provide industry-acquired data from offshore North Sea infrastructure (via INSITE Interactive⁵) and the potential for further in-kind support from industry partners. Subject to individual industry partner agreement, such support may include access to partner personnel, new offshore surveys or access to offshore facilities to support research projects.

¹ <https://www.insitenorthsea.org/>

² <https://nerc.ukri.org/research/funded/programmes/insite/news/ao-insite/ao/>

³ This call is open to universities and research institutions in countries bordering the North Sea; i.e. Denmark, the Netherlands, Belgium, Germany, Norway and the UK.

⁴ Please refer to Scope Definition Statement in Annex 1

⁵ <https://www.insitenorthsea.org/blog/2019/press-release-insite-programme-launches-major-industry-science-collaboration/>

Annex 1

The INSITE PhD Scholarship Programme - Scope Definition Statement

There are many **man-made structures** in the North Sea region, some of which (e.g., shipwrecks) have been there for many decades. For the INSITE Programme the man-made structures of interest are primarily steel and concrete oil and gas installations, pipelines and renewable energy structures. Shipwrecks could provide an analogue of a structure of known age.

The **ecosystem** is defined as the complex of species inhabiting the North Sea and their interactions with each other and their environment, from bacteria to marine mammals, organisms that range in position from the subsurface sediments, through the water column and into the atmosphere (to include birds). The effects of fishing activity may be included but only in so far as they have a direct impact on the influence of man-made structures on the North Sea ecosystem.

The **North Sea** is semi-enclosed with open boundaries to the northwest, southwest and the Skagerrak; the area of primary interest broadly coincides with OSPAR Region II 'the Greater North Sea'. Determining fluxes through the boundaries of the region is important for modelling purposes. The deep water off the shelf-break west of Shetland is outwith the study area, but studies of other areas such as the east Irish Sea may be included where they can be shown to provide relevant information. As an operational definition, this study extends from the 12 nautical mile limit from the coast although, naturally, connectivity of pipelines to the shore is recognised, along with the relevance of renewable energy structures which extend closer to the coastline. For clarity, near shore structures such as jetties, wharves and coastal defences are excluded. It is recognised that learning from other regions, including recent and on-going work in the Gulf of Mexico, may be relevant.