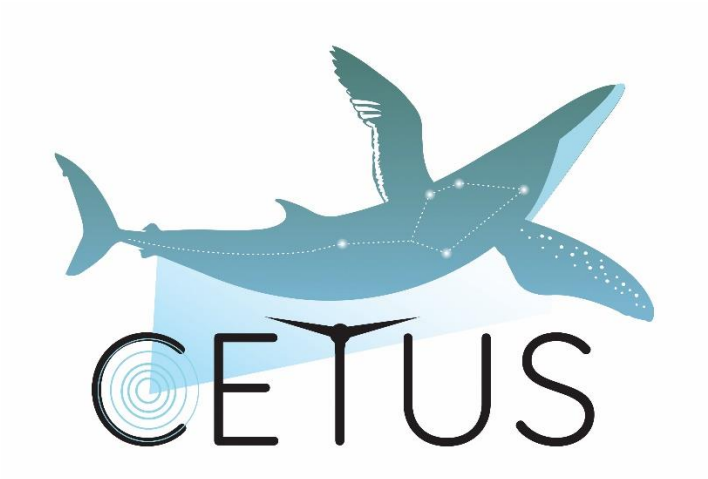

Cetacean study within the Irish and Celtic Sea
LIC230006

Assessment of Impacts of the Maritime Usage (AIMU) Report

October 2023

Contents

Introduction

To ensure MARA can fully assess all potential impacts of a proposed maritime usage, all applicants are required to submit the AIMU report in support of their maritime usage license application. The scale and complexity of the AIMU should reflect the scale and complexity of the project. This report contains an analysis of the likely effects (positive and negative) for the proposed maritime activities involved in the deployment and monitoring of five temporary moorings equipped with hydrophones in the Irish Sea and Celtic Sea to record sounds of cetaceans (whales, dolphins and porpoises). The research is conducted by University College Cork. The research has a conservation objective, with the purpose to understand how these protected species are using the areas, to understand potential effects of offshore renewable energy in the area.

Project Description

The proposed maritime usage aims to describe seasonal and diurnal occurrence of whales, dolphins and porpoises (cetaceans) in the Irish and Celtic Sea, in areas in proximity to existing or planned offshore wind farms. The work is being carried out as part of a large multidisciplinary research project called CETUS. The CETUS project: Cetacean, Elasmobranch, Turtle, and Seabird distribution modeling platform supporting the sustainable development of offshore renewable energy and is funded by SEAI. This maritime usage forms the basis of the cetacean element of the work and is part of a PhD by [redacted] at University College Cork (UCC).

The practical activities involve deploying four moorings in the Irish Sea, and one in the Celtic Sea, consisting of hydrophones with an acoustic release system. Each mooring consists of a mooring weight, an acoustic release system, one or two hydrophones to record cetaceans, and two subsurface trawl floats. The set up is anchored in the seabed with a Bruce type anchor. The moorings will be recovered every 3-4 months for maintenance and redeployment, with the aim of recording sounds from whales across all seasons for at least one year, up to three years.

Programme of Works

The start date for the maritime usage would preferably be in October 2023. A vessel will be contracted, to deploy the moorings at the relevant sites. The vessel for operational activities, or company contracted is subject to budget, weather, and vessel availability. The moorings will be recovered every 3-4 months for maintenance and redeployment, for at least one year, up to three years.

Consideration of the

EIA Directive

Under the EU's Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU), major building or development projects in the EU must first be assessed for their impact on the environment. For our study, the design of the temporary mooring systems, and the technical equipment used, are non-invasive and small in scale, and therefore their impact on the seabed and the marine ecosystem is assessed as negligible. Therefore, there is no need consider an EIA for our proposed project.

WFD Directive

The Water Framework Directive (WFD) focuses on ensuring good qualitative and quantitative health i.e. on reducing and removing pollution and on ensuring that there is enough water to support wildlife at the same time as human needs. The WFD is the main law for water protection in Europe. It

applies to inland, transitional and coastal surface waters as well as groundwaters. Our study sites are offshore, and not connected to any areas relevant for the WFD. Therefore, there is no need to consideration the WFD for our proposed project.

MSFD Directive

The EU Marine Strategy Framework Directive (MSFD) was put in place to protect the marine ecosystem and biodiversity upon which our health and marine-related economic and social activities depend. In the directive it is stated that ”The marine environment is a precious heritage that must be protected, preserved and, where practicable, restored with the ultimate aim of maintaining biodiversity and providing diverse and dynamic oceans and seas, which are clean, healthy and productive”.

Our research objective, to gain knowledge about distribution of protected whales, dolphins and porpoises, provides information about how top predators, which are key indicators of ocean health, could potentially be affected by offshore renewable energy. Therefore, our objectives align with those stated in the MSFD directive.

Negative impacts stated in the MSFD is for example pollution, biodiversity loss, seabed damage, overexploitation, spread of non-indigenous species, marine litter, underwater noise, and ocean warming and acidification. The design of our temporary mooring systems, and the technical equipment used, are non-invasive, silent and small in scale. The design of the mooring set up is a sub-surface system hydrophone deployment, with no surface buoy, and a Bruce type anchor that digs into the seabed. Because of the sub-surface system, there is no surface buoy, meaning that the entanglement risk in a rising line through the water column is minimized. The moorings will be deployed on sediment habitats only, and the only effect of the mooring will be in direct relation to where the anchor is set in the seabed. Overall, because of the non-invasive design of our temporary moorings, the negative environmental impact from the proposed maritime activity is assessed as negligible. Therefore, we do not assess any negative impacts on the objectives of the MSFD from our research project.

Planning & Development (including Statement of consistency with the National Marine Planning Framework (NMPF)

We assess that there will be no impact on planning and development in the area, due to our temporary moorings.

Land & Soils

The anchors of our deployments will dig into the seabed where the moorings are deployed, where there are sandy bottom substrates, and the depth ranges between 30-50m. The only effect of the mooring will be in direct relation to where the anchor is set in the seabed. We assess that there will be no impact on the land and soils in the area, due to our temporary moorings.

Water

We assess that there will be no impact on the water quality in the area, due to our temporary moorings.

Biodiversity

We assess that there will be no significant impact on the biodiversity in the area, due to our temporary moorings.

Fisheries and Aquaculture

We assess that there will be no significant impact on the fisheries and aquacultures in the area, due to our temporary moorings.

Air Quality

We assess that there will be no impact on the air quality in the area, due to our temporary moorings.

Noise & Vibration

Due to our technical equipment being silent, we assess that there will be no impact on the noise and vibrations in the area, due to our temporary moorings.

Landscape/Seascape

We assess that there will be no impact on the landscape/seascape in the area, due to our temporary moorings.

Traffic & Transport (including navigation)

We assess that there will be no significant impact on the traffic and transport in the area, due to our temporary moorings and sub-surface deployment.

Cultural Heritage (including underwater archaeology)

We assess that there will be no impact on the cultural heritage, including archaeology in the area, due to our temporary moorings.

Population & Human Health

We assess that there will be no impact on population and human health due to our temporary moorings.

Major Accidents & Disasters

We assess that there will be no risk for major accidents and disasters due to our temporary moorings.

Climate

We assess that there will be no significant impact on the climate, due to our temporary moorings.

Waste

We assess that there will be no risk for waste due to our temporary moorings.

Material Assets

We assess that there will be no risk for material assets due to our temporary moorings.

Interactions

We see no potential interactions to consider, due to our temporary moorings.

Summary of Mitigations

Our moorings are temporary, small, sub-surface, silent, and non-invasive in nature, and they will have no, or no significant impact on the environment, people or animals in the area itself, or more broadly. Therefore, no mitigation measures with regard to our proposed research project are needed.