

Cetacean study within the Irish and Celtic Sea
LIC230006

RISK ASSESSMENT FOR ANNEX IV SPECIES

Introduction

Under Article 12 of the Habitats Directive (92/43/EEC) Member States are required to establish a system of strict protection for species listed in Annex IV of that directive. This protection is afforded to these species at all stages of the life cycle and wherever they occur. This protection includes deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation, and migration. This has been transposed into Irish Law by Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations 2011.

The Project

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. The maritime usage is for 1) the deployment of four (4) moorings, in a latitudinal gradient from east of Arklow bank, and southwards around the latitude of Gorey and 2) In the Celtic Sea, at one single deployment site, SW off the Old Head of Kinsale, off Courtmacsherry bay.

The practical activities involve deploying and monitoring the moorings, consisting of hydrophones for acoustic monitoring. 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.

Receiving Environment

The temporary moorings with hydrophones will be deployed in two main areas, one study site in the Irish Sea, and a second in the Celtic Sea. The Irish Sea study site will consist of four hydrophone moorings, deployed 2km east of the Arklow bank, in a latitudinal gradient as southwards to Gorey, in Co. Wicklow. The benthic substrate in the wider area consists mainly of deep circalittoral sand, and depths vary between 30-60m. The Celtic Sea study will consist of one mooring deployed ca 10km SW off Old Head on the Co. Cork coastline in the open sea. The benthic substrate in the wider area consists of rock, sand, and gravel substrates, with depths in the area ranging from ca. 60 – 80m. The proposed moorings are not located within any European designated site(s) (i.e SAC or SPA) or ferry routes.

Article 12 Assessment

In Ireland, Annex II marine mammal species are European otter (*Lutra lutra*), Grey seal (*Halichoerus grypus*), Harbour seal (*Phoca vitulina*), Harbour porpoise (*Phocoena phocoena*), and Bottlenose dolphin (*Tursiops truncatus*). Leatherback sea turtle (*Dermochelys coriacea*) and the Loggerhead sea turtles (*Caretta caretta*), regularly reported in Irish waters, are also listed as Annex II species. All cetacean species are listed as Annex IV in Ireland. The potential impact on these animals, due to our proposed maritime activity is related to vessel operations during the deployment and retrieval of moorings.

Potential impacts from the vessel includes visual and acoustic disturbance to the environment, and the risk of injury from collisions with the vessel. Considering the vessel activity levels in the regions, the temporary addition of a single vessel is not regarded as having any substantial effect. Consequently, the likelihood of significant impacts on Annex II species resulting from the proposed initial deployments and maintenance of the proposed moorings is very low.

During the operational phase, the mooring will be equipped with non-invasive, silent environmental sensors. Consequently, there is no potential for underwater noise to impact marine mammals or other Annex II species in the area.

The moorings themselves will be sub-surface, with an acoustic release system, resulting in no surface buoy or a rising line leading up to it. This mooring set up minimizes the risk for entanglement in the rising line leading up to a surface buoy through the water column, by any of the Annex II or IV species, or other animals.

Because of the non-invasive nature and small scale of the temporary moorings, it can be concluded that the proposed project will not result in killing or disturbance of Annex IV species, or result in the deterioration or destruction of their breeding sites or resting places.