
Abatement of underwater noise pollution from pile-driving and explosions in UK waters

Tuesday 12 November 2019

The Royal Society, 6-9 Carlton House Terrace, St. James's, London SW1Y 5AG

Draft agenda

8:30 **Coffee and register**

9:15 **Welcome and housekeeping:** Stephen Robinson (NPL)

9:20 **Introduction and aims:** Nathan Merchant (Cefas)

Session 1: Noise abatement technologies in practice. Chair: Prof. Peter Liss (UEA)

9:35 **Bubble curtains attenuate noise from offshore wind farm construction and reduce temporary habitat loss for harbour porpoises:** Michael Dähne (German Oceanographic Museum)

9:50 **Overview of the efficiency of previously applied noise mitigation systems and outlook:** Michael Bellman (ITAP)

10:05 **The IHC Noise Mitigation System:** Bob Jung (IHC)

10:20 **Review of noise abatement systems and low-noise installation methods for offshore wind turbine foundations:** Ursula Verfuss (SMRU Consulting) & Ian Gloyne-Phillips (NIRAS)

10:35 **Measurements of UXO detonation and deflagration:** Paul Lepper (Loughborough University)

10:50 **Panel discussion:** Technical feasibility of noise abatement systems in UK waters

11:10 **Coffee**

Session 2: Stakeholder perspectives on noise abatement. Chair: Prof. Peter Liss (UEA)

11:30 **An offshore windfarm developer perspective:** Matej Simurda (Ørsted)

11:40 **An NGO perspective:** Tania Davey (The Wildlife Trusts)

11:50 **Monitoring of compliance with German noise threshold regulations:** Carina Juretzek (BSH)

12:05 **An SNCB perspective:** Rebecca Walker (Natural England) & Caroline Carter (SNH)

12:15 **A regulatory perspective:** Paul Stevenson & Jessica Duffill Telsnig (MMO)

12:30 **Panel discussion:** Feasibility of noise abatement in a UK regulatory context

12:50 **Lunch**

13:50 **Set up break-out groups**

14:00 **Break out discussion:** Next steps to manage underwater noise pollution from piling and UXO

14:45 **Coffee**

15:15 **Breakout group rapporteurs report back. Plenary discussion.**

16:00 **Organizers summarise and set out next steps:** Nathan Merchant and Stephen Robinson

16:15 **Finish**

Abatement of underwater noise pollution from pile-driving and explosions in UK waters

Underwater noise pollution from the pile-driving of offshore wind turbine foundations and the detonation of unexploded ordnance (UXO) is recognised as an issue of growing concern by UK regulators and policymakers responsible for the stewardship of the marine environment. Marine mammals, fish and invertebrate species can be adversely affected by exposure to noise from these activities. Some of these species are protected under the Habitats Regulations, which require as a licence condition that there is no satisfactory alternative to the activity. However, for both pile-driving and UXO, technologies are available which reduce the amount of noise emitted at source (noise abatement). Such technologies are being routinely deployed in other parts of the North Sea in order to reduce the risk of impact on marine life, particularly marine mammals.

This workshop aims to explore the technical feasibility of applying noise abatement measures to offshore windfarm construction and UXO detonation to improve the quality of the acoustic habitat in UK seas. Drawing on expertise developed by operators implementing noise abatement measures elsewhere in the North Sea, the programme will consider the technologies available and their benefits, and assess what technical challenges there may be to implementation in UK waters. As well as technical input, representatives from industry, non-governmental organisations, government agencies, and Statutory Nature Conservation Bodies will offer perspectives on the issue, and a structured break-out session will allow time in smaller groups to discuss ways forward.

