

Protecting and conserving the North-East Atlantic and its resources

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Experiences from the **Northeast Atlantic**

Dr Nathan Merchant

Co-convenor, OSPAR ICG-NOISE Principal Scientist, Cefas, UK

Centre for Environment Fisheries & Aquaculture Science

Overview

Introduction

- Management indicators and the DPSIR framework
- OSPAR and the Common Indicators
- Impulsive and continuous sources

Impulsive noise

- OSPAR 3-year assessment
- Candidate impact indicator

Continuous noise

- Ship noise maps of NE Atlantic
- Joint monitoring: JOMOPANS and JONAS

Summary



OSPAR Commission

16 Contracting Parties

Belgium	Ireland	Spain
Denmark	Luxembourg	Sweden
Finland	The	Switzerland
France	Netherlands	The United
Germany	Norway	Kingdom
Iceland	Portugal	European Union

Observer organisations

Intergovernmental organisations and international non-governmental organisation

Underwater Noise

Intersessional Correspondence Group on Underwater Noise (ICG-NOISE) established in 2014

One **Common Indicator** and two **Candidate Indicators** for underwater noise



OSPAR Maritime Area and Regions:

Region I: Arctic Waters
Region II: Greater North Sea
Region III: Celtic Seas
Region IV: Bay of Biscay/Iberian Coast
Region V: Wider Atlantic





- Kanal

impulsive

Explosions

Seismic surveys Shipping

impulsive





Management indicators and the DPSIR loop







Impulsive noise: OSPAR Noise Registry

- OSPAR commissioned ICES to develop **impulsive noise registry** in 2015
- Interactive database with time and location of impulsive noise sources in OSPAR area
- Registry is hosted on open online portal: <u>http://underwaternoise.ices.dk</u>
- HELCOM (Baltic Sea) now uses the same ICES registry



2015-2017: Total PBDs per region







2015-2017: PBDs by source type overall





OSPAR Impulsive noise impact indicator

- What is **risk** of **impact** on marine life?
- Impact Indicator for impulsive noise to be assessed in 2019/20



OSPAR Impact indicator methodology example





OSPAR Impact indicator methodology example







Impulsive noise: Summary

Pressure from impulsive noise sources now regularly assessed using data in OSPAR Impulsive Noise Registry under OSPAR Common Indicator

Impact: First assessment of risk of impact expected April 2020



Continuous noise pollution

- Shipping noise expected to be dominant
- Currently an OSPAR Candidate Indicator
- Full Common Indicator expected 2020
 - **First assessment expected 2021**



Shipping noise maps of the NE Atlantic





Median level of broadband noise, including wind

Median ship noise excess: level of ship noise above wind

• Cefas acoustic modelling based on ship-tracking data for 2017



Continuous noise: joint monitoring programmes



North Sea

- JOMOPANS project funded by EU INTERREG
- Started Jan 2018
- Field measurements and noise maps for 2019, plus management tools

Atlantic Area

- JONAS EU INTERREG project
- Large scale, open ocean habitat
- Started May 2019



Arctic

- No current project proposals
- OSPAR Secretariat in joint initiative with Canada under Arctic Council to address ocean noise



Summary

Impulsive noise

- Pressure from impulsive noise sources monitored since 2015 under OSPAR Common Indicator
- Impact indicator assessment expected April 2020

Continuous noise

- Currently an OSPAR Candidate Indicator
- Full Common Indicator expected 2020
- Joint monitoring is ongoing under EU INTERREG projects JOMOPANS and JONAS

