

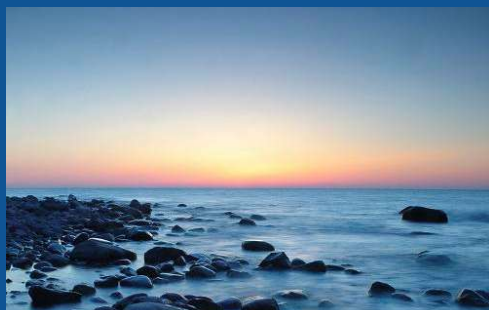


WORKSHOP

Potential impact of seismic activities on fish stocks

SCENE SETTER : THE EU FRAMEWORK ON UNDERWATER NOISE

Online Meeting, 10 May 2022



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What is underwater noise ?



TODAY'S OCEAN SOUNDSCAPE

● ANTHROPOGENIC SOURCES

- 1 Acoustic deterrent devices
- 2 Fishing vessels
- 3 Recreational vessels
- 4 Cruise ships
- 5 Commercial shipping
- 6 Offshore oil & gas
- 7 Seismic airgun surveys
- 8 Military & civilian sonar
- 9 Offshore renewable energy
- 10 Underwater explosions
- 11 Construction and pile-driving

● NATURAL SOURCES

- A Waves
- B Wind
- C Rain
- D Marine mammals
- E Currents
- F Underwater landslides, volcanos and earthquakes
- G Fishes
- H Invertebrates



Illustrated by Amy Elizabeth Dozier



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Advancing Seas & Ocean Science



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What is done at EU level to reduce underwater noise ?

- ❑ Birds and habitats directive : to ensure protection of species and avoid their disturbance.
- ❑ Strategic environmental and environmental impact assessment directives (SEA/EIA) : to ensure protection of the environment and integration of environmental consideration.
- ❑ Marine strategy framework directive (MSFD) : to achieve good environmental status of marine waters.

MSFD descriptor 11



1	Biological diversity
2	Non-indigenous species
3	Commercial fish and shellfish
4	Food-webs
5	Eutrophication
6	Sea-floor integrity
7	Hydrography
8	Contaminants
9	Contaminants in seafood
10	Marine litter
11	<u>Energy, including underwater noise</u>



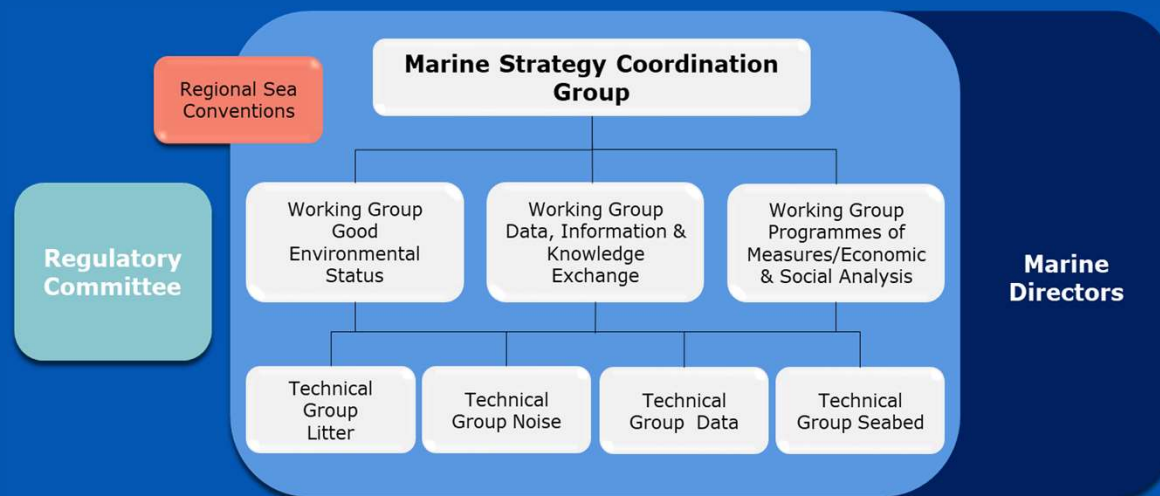
Commission decision 2017/848

- ❑ New criteria, specifications and standardised methods for underwater noise monitoring and assessment, to assess the extent to which good environmental status is being achieved for impulsive and continuous noise.
- ❑ D11 criteria 1 and 2 : the spatial distribution, temporal extent, and levels of anthropogenic impulsive and continuous low-frequency sound sources do not exceed levels that adversely affect populations of marine animals.
- ❑ Cooperation at EU level to define EU threshold values for these levels.

Technical Group on Underwater Noise

Towards a coordinated implementation of D11

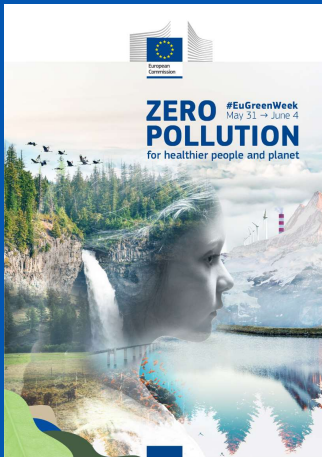
- ❑ Expert group of the common implementation strategy (CIS) for MSFD descriptor 11
- ❑ SVE, FR, IT chairmanship since January 2020.



Action on underwater noise at regional level

- ❑ Regional cooperation is essential to ensure coherence in MSFD implementation.
- ❑ Intensive work in regional seas conventions on underwater noise for assessment, joint monitoring, inventory of noise sources, regional action plans in HELCOM and OSPAR.
- ❑ Regional projects under EMFF for the implementation of MSFD D11 : QUIETMED, QUIETMED II, QUIETSEAS, HARMONIZE, HELCOM BLUES, Cenobs.

Zero Pollution Action Plan for air, soil and water



Key actions to reduce marine pollution

- Review the **MSFD** by 2023, taking into account the state of implementation of EU laws addressing **key pollution sources** and the need to reduce plastic and other litter, **underwater noise** and contaminants
- The Commission will work with Member States on EU **threshold values for maximum levels of underwater noise** stemming from maritime transport, construction, dredging and other offshore, to be set by 2022

Living within
our **planetary**
boundaries

Thank you



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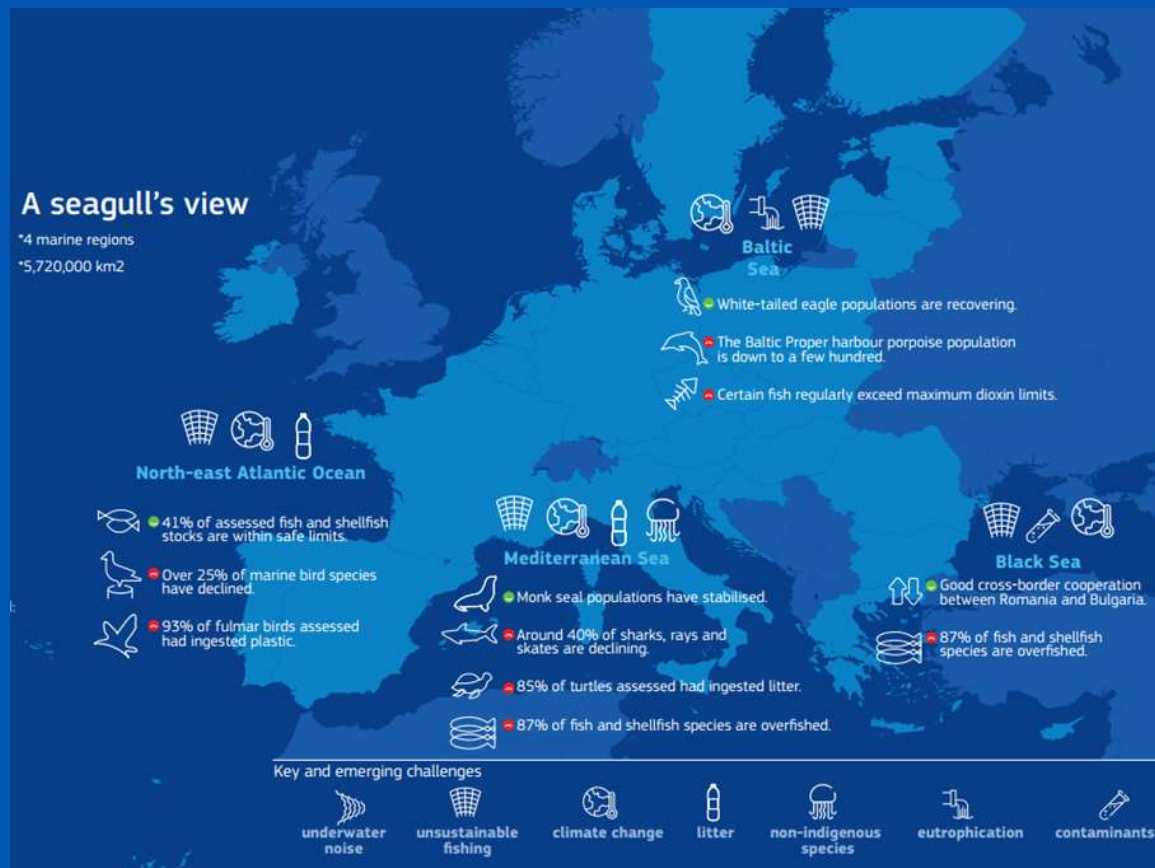


TG Noise priorities

- ❑ Support MS and RSC in implementing operational monitoring.
- ❑ Ensure regional coherence and complementarity through active coordination.
- ❑ Define EU threshold values for underwater noise :
 - ✓ *Common methodologies and recommendations adopted in 2021.*
 - ✓ *Ongoing work to define options for EU threshold values by 2022 (= objective of the Zero Pollution action plan under the European Green Deal).*
 - ✓ *Cooperation with regional seas conventions.*

State of the marine environment in Europe

Art 20 report on MSFD implementation



State of the marine environment in Europe

Underwater noise pollution

- ❑ Maritime traffic is the main source of continuous underwater noise.
- ❑ Only 9% of EU's sea area has no shipping traffic.
- ❑ Impulsive underwater noise is spatially restricted (likely occurs in 8 % of EU's sea area) but still likely present in large areas of the EU.
- ❑ The trend in pressure from underwater noise will very likely increase.

References

- MSFD assessments and reports :

[Reports - Implementation of EU Marine Policy - European Commission \(europa.eu\)](#)

[EUR-Lex - 52020DC0259 - EN - EUR-Lex \(europa.eu\)](#)

- HELCOM regional action plan on underwater noise :

[Att.-HELCOM-Recommendation-42-43-1.pdf](#)

- European Marine Board policy brief on underwater noise :

[Addressing underwater noise in Europe: Current state of knowledge and future priorities | European Marine Board](#)