

JPI OCEAN PROJECTS :

“Underwater noise in the marine environment : kick-off meeting”

14 February 2023



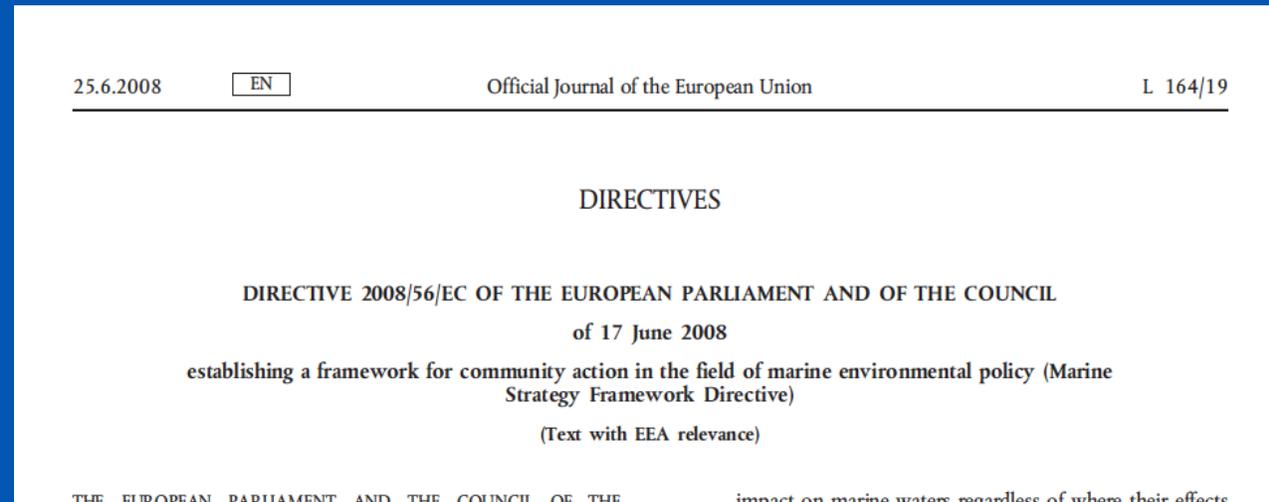
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What is done at EU level to reduce underwater noise ?

- ❑ 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.

What is done at EU level to reduce underwater noise ?

- ❑ Marine strategy framework directive (MSFD) : to achieve good environmental status of marine waters.



MSFD Descriptor 11 (D11)



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>

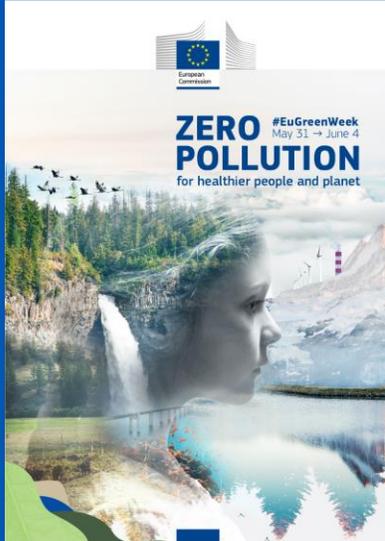


Commission decision 2017/848

- ❑ New criteria, specifications and standardised methods for underwater noise monitoring and assessment
- ❑ D11: DEFINITION of CRITERIA 1 FOR IMPULSIVE and of CRITERIA 2 for CONTINUOUS SOUND
- ❑ Cooperation at EU level to define EU threshold values for these levels.



Zero Pollution Action Plan for air, soil and water



Key actions to reduce marine pollution

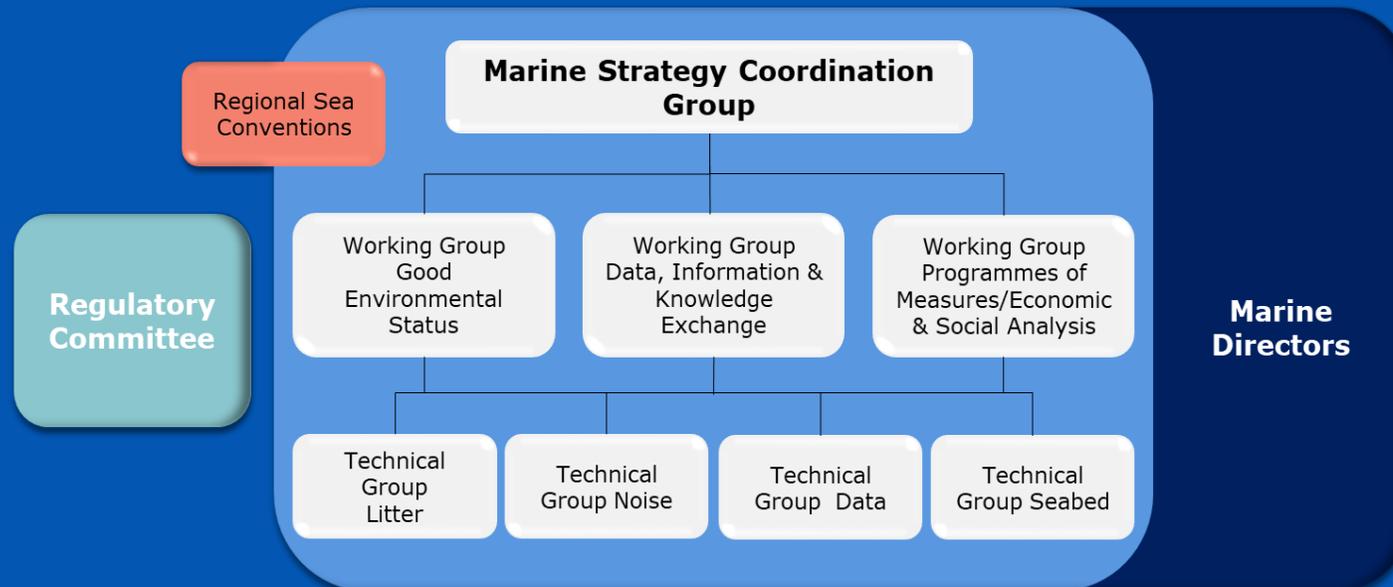
- ❑ The Commission will work with Member States on EU **threshold values for maximum levels of underwater noise** stemming from maritime transport, construction, dredging and other offshore, to be set by 2022

Living within
our **planetary**
boundaries

Technical Group on Underwater Noise

Towards a coordinated implementation of D11

- ❑ Expert group of the common implementation strategy (CIS) for MSFD descriptor 11.
- ❑ Ensures regional coherence and complementarity through active coordination.



Eu threshold values for underwater noise

- ❑ Adoption in 2021 of two assessment frameworks for the definition of EU threshold values for impulsive and continuous sound = TG Noise deliverables 1 and 3

- ❑ Adoption in November 2022 of recommendations for EU threshold values for impulsive and continuous sound = TG Noise deliverables 2 and 4

Eu threshold values for underwater noise

Key principles

- Noise potentially affects the environment : The objective is to identify the areas that are subjected to too high pressure from noise
- Introduction of a new concept : Level of onset of biological effects
- Flexible framework (one size fits all) :
 - ✓ (sub) regions decides on the specifics (habitats, indicator species)
 - ✓ Threshold values are decided at Union Level
 - ✓ Member States assess good environmental status and report on marine reporting units

Eu threshold values for underwater noise

Based on EU funded projects

- ✓ QUIETMED, QUIETMED 2, QUIETSEAS
- ✓ BIAS
- ✓ JOMOPANS
- ✓ JONAS
- ✓ RAGES
- ✓ SATURN,
- ✓ HARMONIZE

How does it work?



Select the indicator species (regional decision)

Determine the habitat (regional decision)

Determine the sound level where adverse effect is observed = LOBE (regional decision)

How large AREA has sound levels higher than LOBE

IF AREA > TVs then habitat in non-tolerable status.
IF AREA < TVs then habitat in tolerable status (EC)

The status of the habitat is taken into account by the MS when assessing GES in the MRUs (MS)

Eu threshold values for underwater noise

TG Noise recommendations

Summary of TVs for impulsive sound

TG Noise advice is to set the threshold values to:

- ✓ For short-term exposure the maximum proportion of a habitat area that is accepted to be exposed to impulsive noise levels higher than LOBE, is 20% or lower ($\leq 20\%$).
- ✓ For long-term exposure the maximum proportion of a habitat area that is accepted to be exposed to impulsive noise levels higher than LOBE is 10% or lower ($\leq 10\%$).

Summary of TVs for continuous sound

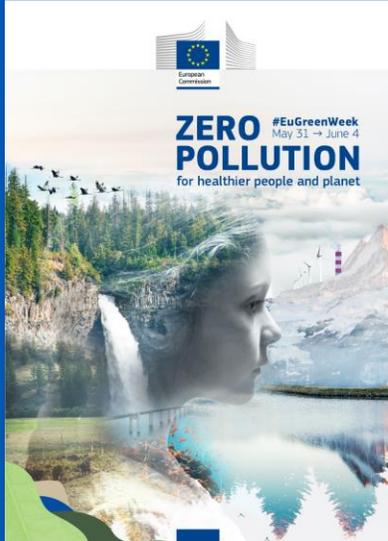
TG Noise advice is to set the threshold values to:

- ✓ 20% or lower of the target species habitat having noise levels above LOBE not to be exceeded in any month of the assessment year

Ongoing actions on underwater noise at EU, regional and global level

- ❑ **EP pilot project on underwater noise** to develop a prototype library of underwater noise sound signatures.
- ❑ **Regional cooperation is essential to ensure coherence in MSFD implementation** : joint monitoring, regional noise registers, regional action plans in HELCOM and OSPAR.
- ❑ EU supports work in **International Maritime Organisation (IMO)** for new guidelines on reduction of underwater noise.

Smart and Sustainable Mobility Strategy



□ Under the EGD, the Commission and the Member States **deliver on the zero pollution and climate neutrality ambitions, incl from maritime transport**

✓ *Fit for 55 legislations on climate neutrality:*

✓ *Fuel EU Maritime, improve energy efficiency -> to reduce emissions and noise from big ships in navigation and in ports (On Shore Power Supply)*

✓ *Coherence with regional and global action (RSC, IMO):*

✓ *North West Med protected area to reduce ships collision with cetaceans to launch work in IMO in Dec 2022, incl on noise and speed*

✓ *Med Emission Control Area for Sulphur Oxides in 2025 to protect Med citizens health – to be adopted by IMO in Dec 2022*

Climate neutrality
and Zero Pollution
for shipping – a win
win approach

Thank you



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