Policy paper
March 2024

OUR VIEW

We welcome the IMO guideline on reduction of underwater radiated noise since it must be considered of utmost importance to reduce noise from ships.

We support the use of the IMO guideline on underwater radiated noise, and we encourage our members to establish a noise-baseline for the vessel by applying an Underwater Noise Management Plan which is a key element in the guideline. This plan will support the shipowner in deciding on what steps can be taken to reduce the noise.

FACTS

- Human activities, like shipping, subsea constructions, and naval exercises, contribute to underwater radiated noise.
- The noise travels far, disrupting communication, navigation, and feeding behaviors of marine life.
- Whales and dolphins, relying on echolocation, face threats as underwater noise masks their signals.
- Prolonged exposure to noise can lead to stress, hearing loss, altered reproduction, and strandings in marine organisms.

Underwater Radiated Noise

Underwater radiated noise from ships is a pressing environmental concern, impacting marine life and ecosystems. Despite its adverse effects, this aspect of ship regulation remains largely unaddressed by mandatory requirements. The International Maritime Organization (IMO) has taken a crucial step in mitigating the impact by providing guidelines for the reduction of underwater radiated noise. As an advocate for environmental sustainability, we encourage our members to adopt and implement these guidelines to protect the delicate marine environment.

THE IMO GUIDELINE

The guidelines that were approved in June 2023 recognize that commercial shipping is one of the main contributors to underwater radiated noise (URN), which has adverse effects on critical life functions for a wide range of marine life, including marine mammals, fish, and invertebrate species, upon which many coastal indigenous communities depend for their food, livelihoods, and cultures. The guidelines provide an overview of approaches applicable to designers, shipbuilders, and ship operators to reduce the underwater radiated noise of any given ship. They are intended to assist relevant stakeholders in establishing mechanisms and programmes through which noise reduction efforts can be realized.

WHAT ARE THE SOURCES OF NOISE?

Propeller cavitation is the most dominant source of noise from ships. This occurs when the blades of a ship's propeller move through the water and produce pressure differences that can create bubbles. And it is the collapse of these bubbles that generates noise. The mechanical vibrations from various components on a ship, such as engines, pumps, and machinery, can also contribute to underwater noise.

BIODIVERSITY

Prioritizing the mitigation of underwater radiated noise is in our view essential for the preservation of marine biodiversity. By understanding and addressing the impacts of human-generated noise on marine ecosystems, we can take meaningful steps towards safeguarding the intricate web of life beneath the ocean's surface. Policymakers, industries, and conservationists alike must collaborate to implement effective measures that reduce the impact of underwater noise, ensuring a sustainable and harmonious coexistence between human activities and the diverse array of marine life.

DANISH SHIPPING POLICY ON UNDERWATER RADIATED NOISE

We support the use of the IMO guideline on underwater radiated noise. It's important to note that while the guidelines are currently voluntary, they represent a significant step toward raising awareness and promoting actions to mitigate the impact of underwater radiated noise from ships. As the understanding of the issue evolves, there may be further developments in regulations and guidelines by the IMO to address this environmental concern. We also encourage research into noise sources from ships, i.e. to secure that reduction of underwater noise goes hand in hand with fuel efficiency.

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