POSITION PAPER

Underwater Noise Pollution

(Revision 2)

IACS
International Association of Classification Societies

Our Position

IACS supports the IMO as the appropriate and technically competent body to address the mitigation of underwater noise from commercial shipping globally. IACS is working to support the maritime industry by ensuring reproducible and comparable results when measuring underwater noise.

BACKGROUND

It is globally admitted that maritime activities are tightly linked to the sustainability of sensitive areas including natural habitats and endangered marine species. The underwater noise induced by marine traffic and its impact on the aquatic fauna has increased in proportion to the increase of traffic. The shipping industry is generally aware of this situation and many stakeholders have already taken actions.

The International Maritime Organization (IMO)'s consideration on the underwater noise has set up global mitigation dynamics. Since 2014, the IMO's Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833) have proposed the basis to address this topic to the maritime industry.

In July 2023, MEPC 80 approved a revision of the guidelines (MEPC.1/Circ.906), in addition to Guidelines for underwater radiated noise reduction in Inuit Nunaat and the Arctic (MEPC.1/Circ.907). MEPC 82, in November 2024, approved a revision of the Guidelines in MEPC.1/Circ.906 to support their further implementation, and agreed to continue with the three-year Experience Building Phase (EBP) for the revised guidelines.

Scientific evidence of the impact of underwater noise on marine ecosystems is continuously growing, highlighting the need for further collaboration on addressing this issue by the international community. It clearly goes along with all sustainability efforts conducted by IMO, by its member states, also at national level, and by the various associations at international level such as IACS.

The whole maritime industry is thus following the dynamics of optimizing the design of future ships and the operations of existing fleet aiming at reducing its footprints under these different drivers, including underwater noise.

IACS POSITION

IACS highlights that establishing a common means for assessing underwater noise induced by shipping is a key step. A common quantification of the ship underwater acoustics and understanding of the various contributing factors can provide an effective means to drive industry efforts to reduce URN.

IACS supports that these efforts on underwater noise reduction should be put in close parallel with the continuous environmental improvements associated with EEDI and anticipated improvements associated with EEXI, CII and other GHGs emission reduction efforts and potential co-benefits.

IACS, which has already around 20 year return of experience on noise and vibration reduction on-board vessels, through the standardization of comfort consideration, will use its knowledge and expertise to support new measures that are technically feasible and capable of being applied globally and consistently.

IACS therefore confirms its willingness to contribute to development of harmonized assessment procedures for URN in order to support the maritime industry in response to the future need for quieter vessels.

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SUMMARY OF WORK CARRIED OUT BY IACS ON THIS ISSUE TO DATE

- IACS has published Recommendation No. 181 on the Measurement of Underwater Radiated Noise (new November 2024).

  Recommendation No. 181 aims to harmonize the methods used to measure URN from ships amongst IACS Members, ensuring harmonization, consistency and comparability of results across different class notations within inherent uncertainties.

  Using the established industry initiatives and emerging ISO standards, the Recommendation sets out:

  .1 common definitions and terminologies to be used for URN measurements;

  .2 relevant measurement methodologies for URN;

  .3 appropriate methodologies for post processing of data from the URN measurements; and

  .4 parameters to be included in the URN measurement reports to support the comparison of results.

- IACS is actively participating in the IMO Experience Building Phase (EBP) for the reduction of Underwater Radiated Nosie from shipping (target completion 2026) by contributing to the IMO Correspondence Group on the EBP and knowledge sharing through an industry tripartite working group.

- IACS has actively participated in the IMO work to revise the Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.906/Rev.1) (November 2024).

- IACS has actively participated in the IMO expert workshop on the relationship between energy efficiency and underwater radiated noise (September 2023).

- IACS has actively participated in the underwater related meetings organized and chaired by ICS together with the representatives of ISO working groups assigned to underwater noise issues.

- IACS has actively participated in the *Enhancing Cetacean Habitat And Observation (Echo)* Program Workshop convened by the Vancouver Fraser Port Authority in October 2020.

- IACS participated in the *"Quieting Ships To Protect The Marine Environment"* Technical Workshop hosted by Transport Canada in January 2019 at the IMO Headquarters in London, UK.

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