REFLECTIONS

by WISTA INTERNATIONAL Environmental Committee

Quieting the Seas

This issue of **Reflections *by* the WISTA Environmental Committee** explores the growing challenge of underwater radiated noise (URN) from shipping and its environmental impact. The article highlights current regulatory developments, industry responses, and practical steps to reduce noise while supporting a sustainable maritime transition.

The GloNoise Partnership* and the Global Drive to Reduce Underwater Radiated Noise from Shipping

***GloNoise Partnership:** The Global Environment Facility-United Nations Development Programme-International Maritime Organization (GEF-UNDP-IMO) Global Partnership for Mitigation of Underwater Noise from Shipping.

WHAT

URN from vessels, primarily generated by propellers and onboard machinery, is an increasing concern due to its impact on marine life, particularly mammals that rely on sound for navigation, communication, and feeding.The **GloNoise Partnership** supports countries in assessing and reducing this impact.

WHY

Rising maritime traffic and larger vessels are **intensifying noise levels** in oceans. This can disrupt ecosystems, affect biodiversity, and create pressure for regulatory action. Addressing URN is becoming an important part of the broader decarbonization and sustainability agenda.

NEXT STEPS

International and regional **efforts are advancing**, including the IMO 2023 Revised Guidelines, technical guidance, and potential future measures. In the near term, voluntary actions, technological improvements, and operational changes can help reduce noise while regulatory frameworks continue to evolve.

> "The reduction of anthropogenic underwater noise has not been given the priority attention it deserves at the international and national levels, and regulatory activity has mostly been focused within developed countries."
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> — GloNoise Partnership Gap Analysis of Policies and Recommendations, October 2025

THE OCEAN HAS A NOISE PROBLEM, AND SHIPPING IS CENTRAL TO IT

Beneath every major shipping lane lies a soundscape transformed beyond recognition. Propeller cavitation, engine rumble, and sonar pulses generate a constant underwater din that can travel hundreds of kilometres, disrupting species that have relied on acoustics for navigation, communication, and reproduction for millennia. Whales, fish, and entire food webs, along with the coastal communities that depend on them, are increasingly affected by this invisible but pervasive pollution.

A comprehensive gap analysis published under the GloNoise Partnership in October 2025 confirmed that regulatory action on anthropogenic ocean noise remains largely confined to developed countries. The same pattern that characterised early decarbonisation regulation is now emerging in the underwater noise space.

GloNoise PARTNERSHIP: A GLOBAL FRAMEWORK FOR LOCAL ACTION

Launched with formal implementation in December 2023 and extended through December 2026, the GloNoise Partnership is a joint collaboration between IMO, UNDP, and GEF. Its nine beneficiary countries, consisting of six Lead Pilot Countries and three Twinning Partner Countries, were selected to represent diverse maritime geographies, regulatory environments, and ocean biodiversity contexts (Figure 1). The project follows the proven "Glo-X" family of IMO projects, operating across three tiers: global toolkit development, regional coordination, and national capacity-building.

The Partnership directly contributes to the 2030 Agenda for Sustainable Development, particularly Sustainable Development Goals (SDGs) 14 (Life Below Water), 5 (Gender Equality), 9 (Industry, Innovation and Infrastructure), 13 (Climate Action), and 17 (Partnerships for the Goals).

A landmark achievement of the project is the development of the IMO URN Toolkit, which is a publicly accessible global resource. This interactive learning platform has been reviewed and validated through consultations and workshops in six LPCs, and it will be launched for global use by all IMO Member States and interested stakeholders.

The toolkit was initially developed to use decision-support and modelling tools to assist countries in developing environmental baselines and conducting risk and impact assessments using national data. It further integrates the Experience Building Phase (EBP – ongoing until 2028 to evaluate the uptake of IMO 2023 Guidelines on URN) repository within the URN Toolkit. This creates a centralized platform for IMO-related URN capacity-building, knowledge-sharing, and implementation support by bringing together learning modules, technical resources, methodologies, case studies and policy guidance in a manner that can continue supporting Member States beyond the lifetime of the project.

Progress to date by Lead Pilot Countries

ARGENTINA National Toolkit Workshop complete; baseline acoustic assessments in the South Atlantic; engaging port authorities and marine research institutions.	**CHILE** Workshop complete; leveraging cetacean hotspot data along the Humboldt Current; working toward URN integration in Environmental Impact Assessment frameworks.
COSTA RICA Hosted regional awareness workshop (May 2025) linking shipping noise to ocean protection; championing peer learning among Spanish-speaking countries.	**INDIA** Mumbai Toolkit Workshop (April 2026); adapting tools for port contexts; integrating URN into coastal planning; advancing South-South cooperation on acoustic research.
SOUTH AFRICA Cape Town Toolkit Workshop (March 2026); National URN Task Force established; Navy and fisheries engagement under Operation Phakisa; represented at UNOC3 in Nice.	**TRINIDAD & TOBAGO** Launched school URN education programmes and a national awareness brochure; workshop complete; building awareness in coastal communities.

Lead Pilot Country South Africa

South Africa is actively engaged as a GloNoise Lead Pilot Country. The South African Maritime Safety Authority (SAMSA), serving as the national focal point, has anchored the country's contributions through: a national URN awareness workshop in January 2025; a powerful intervention at the UN Ocean Conference (UNOC3) in Nice in June 2025; and the two-day URN Toolkit Workshop in Cape Town hosted by SAMSA with blueOasis and Aquatera.

The Cape Town workshop united South African maritime and environmental professionals with regional partners from Madagascar (South Africa's Twinning Partner) and Tanzania. Day 1 covered revised IMO 2023 Revised Guidelines, foundational URN acoustics, and the

RAINDROP Lite application for rapid risk screening. Day 2 deployed the full RAINDROP model, with participants processing AIS vessel traffic data and bathymetric inputs to map URN risk zones in South African coastal waters.

Left: Participants at the GloNoise URN Toolkit Workshop, Cape Town, 26–27 March 2026, hosted by SAMSA. Right: Maria Apolonia and Tiago Gomes from the Contractor delivered hands-on RAINDROP acoustic modelling training during Day 2 of the workshop. Participants applied the GloNoise URN Assessment Toolkit to map vessel noise risk in South African marine environments. © SAMSA / GloNoise Partnership.

KEEPING MOMENTUM: WHAT THIS MEANS FOR THE MARITIME INDUSTRY

For ship operators and shipyards, adopting the Revised URN Guidelines—including noise metrics in environmental reporting and investing in cleaner, quieter propulsion—offers low risk with strong reputational and commercial benefits. As energy efficiency and noise reduction align, noise-conscious design is becoming an operational necessity. As WISTA, we see inclusive engagement on URN as essential. Decarbonisation and biodiversity are interconnected. The future of maritime lies in ships that are both quiet and clean, with the GloNoise Partnership helping drive this progress.

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