

# Efforts to Address Underwater Vessel Noise at the IMO



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IMO Expert Workshop on the relationship between Energy Efficiency and Underwater Radiated Noise

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# Underwater Noise at the IMO

2014

- IMO adopted the voluntary *Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life* (MEPC.1/Circ.833)

2017/19

- Increased awareness of the issue and its impacts on the marine environment through various submissions, presentations/webinar, events & technical workshops

2020/21

- MEPC 75/76: New work item to undertake a review of the Guidelines and identification of next steps approved and referred to the Ship Design and Construction (SDC) sub-committee for action

2022/23

- SDC 8/9 undertook revision of the guidelines & identified preliminary next steps
- MEPC 80 approved revised guidelines, along with IMO GHG-URN workshop and a 3 year experience-building phase
- Correspondence Group under Canada's coordination, currently developing an action plan/next steps for finalization at SDC10

# Overview of the Revised Guidelines

Important **structural changes** to improve usability

Key substantive changes include:

- Updated application: Guidelines apply to **ships of all sizes and types** (including non-commercial ships)
- **Maritime administrations** included as a relevant stakeholder in helping establish mechanisms and programs through which noise reduction efforts can be realized;
- Reflects the **current state of knowledge** in **technologies** to reduce URN, including further distinction on measures to be applied for new vessels versus existing vessels;
- New guidance on **improved voyage planning** and **national and international designated protected areas**

# Overview of the Revised Guidelines

- **New sections:**

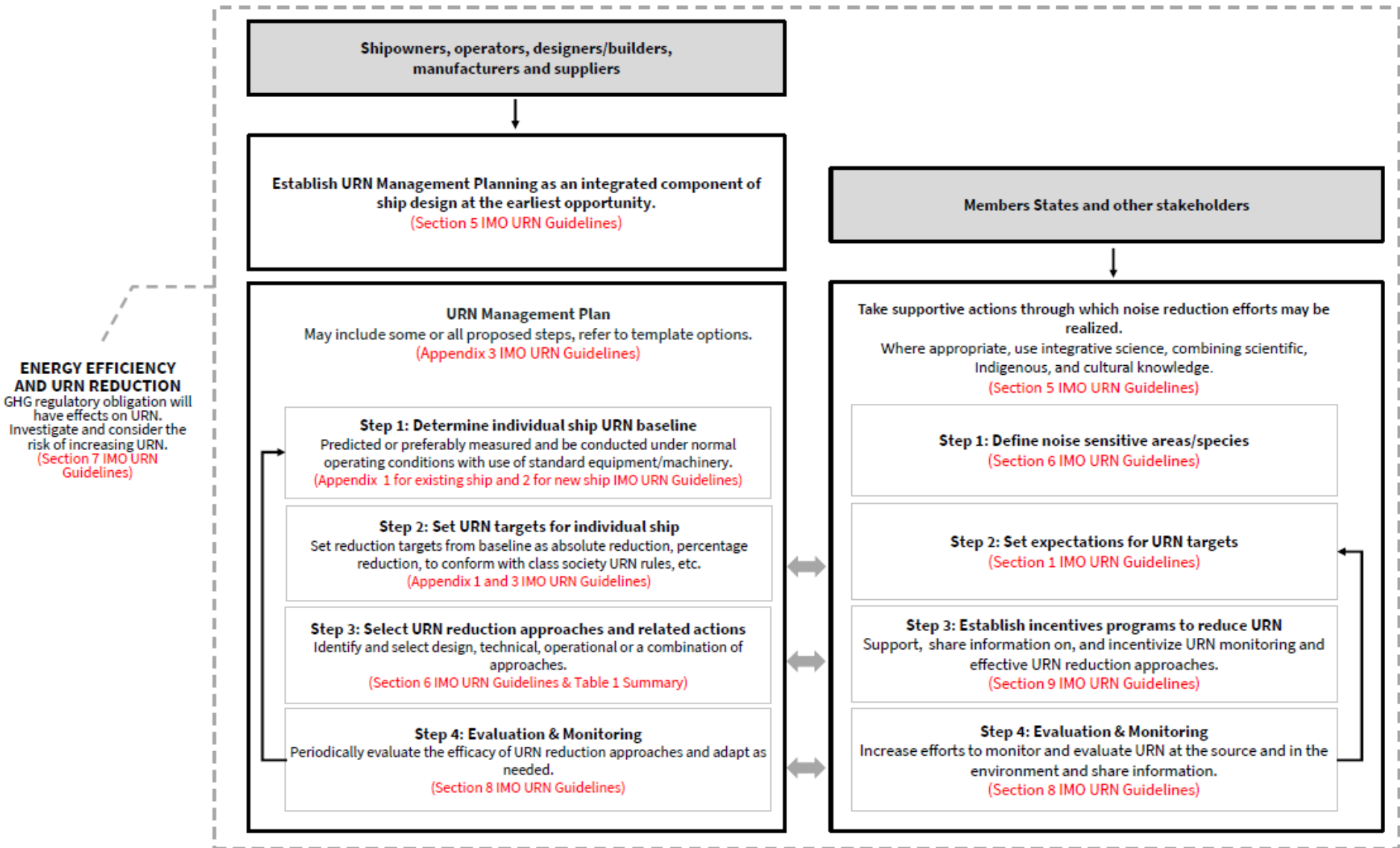
- **Underwater Radiated Noise Management Planning:**

- Guidance on how to prepare a noise management plan, including:
  - Establishing the baseline (predicted or actual) of a ship's URN;
  - Setting URN goals;
  - Evaluating/monitoring various technological, operational, and maintenance approaches while ensuring that these approaches do not come at the expense of other mandatory IMO requirements.
- Includes an Annex with templates for the preparation of a UNMP

- **Incentivization**

- **Energy efficiency and URN reduction**

# URN Reference Chart



# URN proposed Action Plan

Expecting Working Group at SDC  
10/January 2024

Over 40 proposed actions

Includes actions related to:

- Experience-Building Phase (EBP)
- Public awareness, Education and Seafarer Training
- Standardization of Noise Management Planning
- URN Goals
- Database/Tools
- Policy for URN Reduction (including proposal to develop an IMO road-map/vision)
- Ongoing research

# URN proposed Action Plan:

## - *Encourage research on URN and GHG*

- A few actions are being proposed to **encourage research on URN and GHG**, raising the importance of further evaluating the effects of the GHG regulations on global levels of URN. This includes:
  - **Continue research and development efforts** addressing commonly used energy efficiency measures, including IMO GHG regulations (EEDI, EEXI, CIII) and their impacts on URN.
  - Initiate research and development activities addressing **innovative technologies** that further enhance energy efficiency, address biofouling, and greenhouse gas and underwater noise reduction of ships.

# GloNoise Partnership Project

- Original work output approved at MEPC 76:
  - Requested that IMO Secretariat investigate possible funding with potential donors, such as the Global Environment Facility (GEF), to conduct a global underwater noise project, to:
    - Assist with the implementation of related IMO guidelines;
    - Build capacity in developing countries;
    - Spur global efforts to develop a solid scientific understanding of the marine URN issues; and
    - Stimulate industry to start adopting best practices to minimize the impact and create new design solutions.
- Call for proposals for pilot projects issued last fall



# Next Steps

- SDC 10 meeting (January 2024):
  - EE-URN workshop outcomes report
  - URN CG final report
  - SDC 10 WG:
    - Finalizing the next steps/action plan
    - Finalizing a flowchart on the URN Management Plan – to be used as an awareness tool
- SDC 10 report and recommendation to MEPC
- 3-year Experience-Building Phase to assess if further amendments to the Guidelines are needed.
- Official launch of the GloNoise Project

# Thank you !



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