
4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

Circular letter No.3901
23 November 2018

To: All IMO Member States
United Nations and specialized agencies
Intergovernmental organizations
Non-governmental organizations in consultative status

Subject: **International Technical Workshop on Quiet Ship Design
(30 January to 1 February 2019, at IMO Headquarters)**

1 The Secretariat has received a communication by the Government of Canada concerning the above workshop, with a request to circulate relevant information to all IMO Member States and other interested parties.

2 Attached in the annex is the information submitted by Canada on the International Workshop on Quiet Ship Design, to be held from 30 January to 1 February 2019, at IMO Headquarters.

ANNEX

INTERNATIONAL TECHNICAL WORKSHOP ON QUIET SHIP DESIGN (30 JANUARY TO 1 FEBRUARY 2019)

1 Underwater noise from commercial shipping is a serious environmental issue. It has the potential to adversely impact a range of marine species including whales, fish, turtles and invertebrates that use sound to communicate, navigate and forage. Current scientific estimates determine that at least 130 marine species are affected by underwater noise.

2 The International Maritime Organization recognizes the importance of addressing underwater noise from commercial shipping. In 2014, the *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (MEPC.1/Circ.833) were approved and the subject has been raised by Member States and other organizations at the seventy-first, seventy-second and seventy-third sessions of the Marine Environment Protection Committee. Furthermore, the subject was included in the discussions at the nineteenth meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, whose theme was anthropogenic underwater noise.

3 Improved ship design holds significant promise in reducing underwater ship noise, the leading contributor of anthropogenic noise in the ocean soundscape. While gradual progress has been made over the last decade, important knowledge gaps remain. To reduce uncertainties and accelerate progress and collaboration, Canada will be hosting an international technical workshop on quiet ship design.

4 The "Quieting Ships to Protect the Marine Environment" technical workshop is scheduled to take place from 30 January to 1 February 2019 at IMO Headquarters, 4 Albert Embankment, London SE1 7SR. The current working agenda for the workshop can be found in the annex. The workshop will be conducted in English only.

5 The technical workshop is open to all with expertise in ship design and its effect on underwater radiated noise, including those with specific expertise (e.g. propulsion systems, hull shapes). Member States are urged to make their respective national experts aware of this international workshop and to facilitate their participation where appropriate.

6 Participants are requested to register by 10 January, 2019. To register for the workshop, please access: <https://en.xing-events.com/FUPYYKX>

7 For more information, please contact Ms. Michelle Sanders, Transport Canada (+1-613-949-2753; michelle.sanders@tc.gc.ca) or TC.QuietShips-Naviresilencieux.TC@tc.gc.ca

CURRENT WORKING AGENDA

**QUIETING SHIPS TO PROTECT THE
MARINE ENVIRONMENT**
Technical Workshop
International Maritime Organization (IMO) Headquarters, London, UK
30 January to 1 February 2019
Host:
Government of Canada

Objectives:

This technical workshop will provide an opportunity for international collaboration and allow participants to share the newest research and technical solutions for quiet ship design and retrofits. The specific objectives of the proposed workshop will include, but are not necessarily limited to:

- .1 validating current technologies and identifying important gaps and challenges to further progress;
- .2 assessing areas by ship class for innovation potential to determine where more focused research may be needed;
- .3 understanding whether improvements made to ship design for fuel efficiency overlap with improvements made to reduce noise; and
- .4 documenting the conclusions of the workshop to guide future discussions on reducing underwater ship noise or as groundwork for a review of the existing *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life*.

Current working agenda:

Day One – Afternoon (30 January 2019) (begins at 2 p.m.)
1. Opening address to the workshop participants
2. Overview of the format and objectives
3. Setting the stage – context and challenges <ul style="list-style-type: none">• Impact of underwater noise on marine resources• Challenges in setting underwater noise targets• Efforts to date on reducing underwater noise• Industry examples of successful underwater noise reductions• Uptake of the <i>Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life</i>

<p>4. Overview of the study of <i>Technical Measures to Reduce Underwater Noise from Vessels</i></p> <ul style="list-style-type: none"> • Quantifying sources of noise – propeller and machinery • Advances in methods for noise prediction • Recent developments on propeller noise • Gap analysis and Validations
<p><i>Reception at the IMO Headquarters following plenary</i></p>
<p>Day Two – Morning (31 January 2019)</p>
<p>5. Breakout sessions – Technology Review</p> <ul style="list-style-type: none"> • Participants will break out into smaller groups/tables (chosen in advance) to collaborate on the technical details related to specific ship design topics and technologies
<p>Day Two – Afternoon (31 January 2019)</p>
<p>5. Breakout sessions – Technology Review (cont'd)</p>
<p>6. Report back from breakout groups to plenary</p>
<p>7. Structured brainstorming to identify ways to encourage the adoption of newer technologies (e.g. demonstrate co-benefits, energy efficiency index, design tools/checks to plan)</p>
<p>Day Three – Morning (1 February 2019)</p>
<p>8. Class Society silent notations</p> <ul style="list-style-type: none"> • Presentation of scenario modelling work • Demonstrate what soundscapes could look like if they met various quiet/silent class notations
<p>9. Presentation of first draft of Technology Review completed on day two</p>
<p>Day Three – Afternoon (1 February 2019)</p>
<p>10. Discussion/validation to refine the Technology Review further in plenary</p>
<p>11. Conclusion and next steps</p>
<p><i>Workshop concludes</i></p>