



CANADIAN NETWORK  
FOR INNOVATIVE SHIPBUILDING,  
MARINE RESEARCH AND TRAINING | RÉSEAU CANADIEN POUR L'INNOVATION  
DANS LA CONSTRUCTION NAVALE,  
LA RECHERCHE MARINE ET LA FORMATION

## **2020 CISMART Online Workshop – Advancing Canadian Marine Technology**

Zoom Webinar, November 25 – 26, 2020

Website: <http://cismart.ca/2020-online-workshop-advancing-canadian-marine-technology/>

### **Day 1: Ship Underwater Radiated Noise**

**12:30 – 17:00 (Newfoundland Time Zone); Thursday, November 25, 2020**

#### **Overview**

The Canadian Network for Innovative Shipbuilding, Marine Research and Training (CISMART) held a workshop in Halifax, NS on November 28-29, 2018 on Ship Noise Mitigation Technologies. This was followed by a workshop hosted by Transport Canada at IMO Headquarters in London, UK on January 30 – February 1, 2019 titled Quieting Ships to Protect the Marine Environment. Following these events, the Transport Canada Innovation Centre (TC-IC) sponsored several projects in the subject area, many of which are undertaking or will undertake full scale measurements of underwater radiated noise (URN) from ships in Canadian waters.

The event advertised here is intended to assist in the identification of potential follow-on work to build on the current projects such that maximum value is extracted from the gathered data. Projects may be proposed to address gaps in the data, to further advance the work undertaken or underway, and to generally to take full advantage the data gathered and technology developed towards the overall goal of addressing the challenge of the negative effects of URN on marine mammals in Canadian waters.

#### **Workshop Approach**

In addition to being informed about full-scale URN data being collected in the various projects, workshop participants will be invited to evaluate the full-scale URN measurement projects currently underway and recommend projects that address any gaps and build of the work already carried out. The workshop approach is designed to seek the views of representatives of the wider Canadian marine community and the agenda will comprise the following elements:

1. Presentation - Overview of TC-IC policy initiatives related to Ship URN in Canadian Waters
2. Panel Session – Short presentations by leads of relevant projects involving vessel URN measurements. Approximately 10 presentations are expected to be followed by a Q&A session. See the annex below for outlines of presentations.

3. Breakout Sessions – brainstorming sessions by workshop participants to help identify possible follow-on projects
4. Next Steps – mechanism for call for project proposals
5. Concluding remarks

**Annex: TC-IC Projects that will be reported on at the workshop**

*Queen of Oak Bay URN and GHG reduction with hull maintenance* [Chanwoo Bae, BC Ferries]

*URN and GHG reduction program for Canada's inshore fishing craft* [Mo AlGermozi, Graphite Innovation and Technologies and Jim Covill, Lloyd's Register Advanced Technology Group]

*URN and GHG reduction for small vessel with side-by-side diesel and electric propulsion system* [Sue Malloy, Glas Ocean Engineering]

*URN monitoring for Orca-class training vessel* [Layton Gilroy, Defence Research and Development Canada, Atlantic Research Centre]

*Cavitation Monitoring and Management with KINETIX* [Tim Rees and Tom Gunston, AllSalt Maritime]

*Feasibility of real-time shipboard cavitation monitoring and management* [Bruce Martin, JASCO Applied Sciences]

*Support ISO TC43/SC3 to Develop Measurement Standard for Shallow Water Vessel Source Level Measurements* [Alex McGillvray, JASCO Applied Sciences]

*Real-time hydrophone deployment in Boundary Pass in the Salish Sea* [Dave Hannay, JASCO Applied Sciences]

*Marine Acoustic Research Station (MARS) in the St. Lawrence* [Gillaume St-Onge, Institut des sciences de la mer de Rimouski (ISMER)]

*URN Technical Bibliography* [Don MacPherson, Hydrocomp Inc.]