

CENTRE D'INNOVATION CENTRE

Transport Canada

CISMaRT Workshop on Ship Underwater Radiated Noise – 25 Nov 2020



Transport
Canada

Transports
Canada

Canada

Policy Update

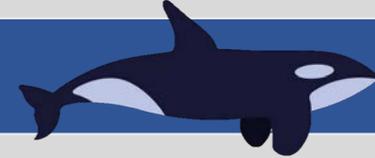
Quiet Vessel Initiative

- What it is
- How to get involved

Workshop objectives

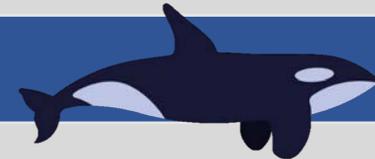
Questions and answers

NARW – Vessel Management Measures



- Mandatory slowdowns in designated zones
- Voluntary slowdown through Cabot Strait
- Restricted areas

SRKW – Vessel Management Measures



- Area-based fishery closures (DFO)
- Interim sanctuary zones, minimum approach distance (TC)
- Voluntary measures in line with US “Be Whale Wise” Guidelines
- Voluntary vessel slowdowns, lateral displacement (VFPA/ECHO)

Traffic Separation Scheme Feasibility Study



- to assess whether potential amendments to the TSS in SRKW critical habitat are technically feasible, and if so, recommend options

Underwater Vessel Noise Reduction Targets



- National working group on Underwater Vessel Noise Source Reduction Targets (UVNSRT) to launch this fall
- Will provide advice to Government of Canada officials by fall 2022 on effective and practical noise source reduction targets for vessels or fleets

International Collaboration



- **MEPC** - Submitted a new work output proposal to MEPC 75; co-sponsored by US and Australia; deferred to MEPC 76 (June 2021)
- **PAME (Arctic Council)** - Supported a project aimed at mapping noise levels from shipping in important ecological areas of the Arctic
- **EU** – Supporting (advisory capacity) the PI AQUO project and the SATURN project

Introduction

- **Transport Canada's Innovation Centre is a regulatory-focussed engineering & science research group.**
- **We support Research, Development & Demonstration to enhance the safety, security, efficiency, and environmental performance of Canada's transportation system.**
- **Our Marine Research, Development & Demonstration Program, is comprised of engineers, policy analysts, naval architects, and marine biologists**



Innovation Centre



**Decreasing the
impact of
transportation on
the environment**

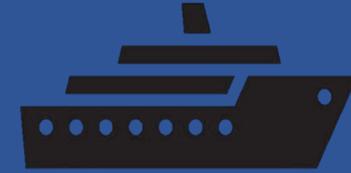


**Improving the
safety and
security of
transportation**



**Making our
transportation
systems more
efficient**

Clean Marine



- Advancing technologies to reduce air emissions from vessels
- Ex: Alternative fuels, hull cleaning, performance coating

Marine Mammal Protection

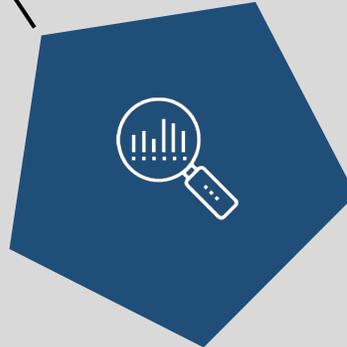


- Advancing technologies to reduce acoustic and physical disturbance caused by vessels
- Ex: Marine mammal detection, vessel acoustic profiling, noise mitigation technologies

Quiet Vessel Initiative (QVI)

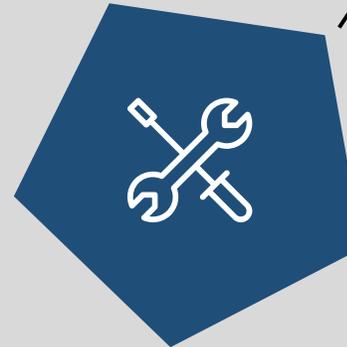
WHAT IS QVI?

QVI is one of the accommodation measures that have been implemented to help address the environmental concerns associated with the Trans Mountain Expansion Project.



WHAT DOES QVI DO?

QVI is about testing safe, environmentally-responsible and effective quiet vessel technologies, retrofits, designs, and operational practices to reduce the impacts of underwater noise on vulnerable marine mammals and the marine environment.



WHY IS QVI DOING THIS WORK?

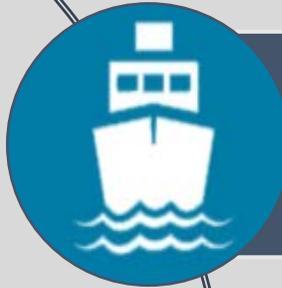
To advance sustainable marine shipping – domestically, and internationally – by accelerating the adoption of quiet vessel designs, retrofits and operational practices.



HOW CAN YOU GET INVOLVED?

QVI funding is available to support projects procured via annual calls for proposals. There is also an opportunity for Indigenous communities to apply for contribution funding.

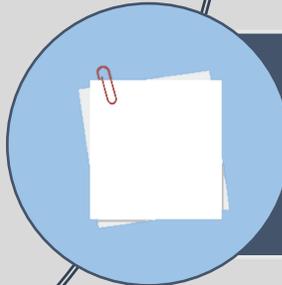
List of Vessel Owner/Operators



Current challenges with finding prospective vessel owner/operators partners.



IC would like to develop a list of partners to contact for projects



Please provide information at the following link: <https://forms.gle/zeFXyAH9MJb7Xofn6>

QVI Targeted Call for Proposals – Contribution Funding

Eligible Recipients:
29 Indigenous communities located
along the Trans Mountain Expansion
Project marine shipping corridor



**Maximum contribution per project is
\$150,000**



Contribution funding has been
allocated over
3 years to support Indigenous
participation in QVI



Research & testing – e.g. evaluating retrofits to Indigenous fishing vessels to decrease underwater noise, such as quieter propeller



Underwater noise monitoring – e.g. deploying, retrieving and conducting data analysis on hydrophones, funding to hire professional services/consultants to undertake noise modelling studies and analysis



Capacity building activities – e.g. funding for training, and participation in technical workshops

Examples
of
potential
projects
include:

QVI Open Call for Proposals – Research Contracts

Call Open: 6 Dec 2019

Call Closed: 20 Jan 2020



Marine Mammal Protection:
Total Value of Projects \$1,525,427



Marine Mammal Protection:
4 projects funded



Safety Assessments and Technology Scans – Impact of underwater radiated noise on compliance with EEDI criteria; Feasibility of real-time shipboard cavitation monitoring and management



Development of Models and Predictive Tools– Standards for measurement of underwater noise from ships in shallow water



Testing and Evaluation of Technologies– Preference was given to projects that addressed technologies applicable to ferries, tugs, fishing vessels and whale watching vessels.

Marine
Mammal
Protection
Project
Themes:

Share Information – Full Scale Data Collection



Provide Feedback – Next QVI Call for Proposals



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