Corridors Concept and the OPP Initiative "Northern Marine Transportation Corridors and Governance for the Arctic Shipping Regime"

Oceans Protection Plan Workshop
October 16, 2017
Low-impact Shipping Corridors
Low-impact Shipping Corridors

• Current trends show an increase in marine shipping in the Arctic and growing awareness of fragile Northern ecosystems
• Need to develop/validate shipping routes that minimize impact on marine environment – low-impact shipping corridors
• Developed in consideration of current and historical traffic patterns/routes, cultural sensitivity, current science and traditional knowledge
• Corridors to guide future federal resources, services and activities to areas of highest need
What’s been done?

• Corridors framework established in 2014 by Transport Canada, Canadian Coast Guard and Canadian Hydrographic Service, which was based on current and historical traffic patterns
  o Geospatial modeling
  o Hydrographic surveys and testing of new technologies - Light Detection and Ranging (LiDAR), Satellite-Derived Bathymetry
• Initial engagement with Inuit and Indigenous communities on corridors
Northern Low Impact Shipping Corridors / Corridors de navigation nordiques à faible impact

Total area of water inside the NORDREG: 3,749,856 km²
Superficie totale de l'eau dans la zone NORDREG : 3,749,856 km²

Corridor Coverage: 453,638 km² (12.10%)
Couverture des corridors: 453,638 km² (12.10%)

Source: DFO-Science, CHS / MPO-Science, SHC
chainof@do-mpo.gc.ca
May / mai 2017
What next?

- Engage with the Inuit and Indigenous peoples on governance of low-impact shipping corridors and priority areas for investment
- Develop a collaborative governance model inclusive of Indigenous peoples and the Provinces and Territories to manage the low-impact corridors
- Chart highest priority areas
- Identify priority areas for service and infrastructure investment along the corridors
Cumulative Effects of Marine Shipping Impacts
What is the issue?

There has been heightened concerns around increases in marine shipping and other vessel activities having impacts on coastal and marine ecosystems and traditional ways of life.

Concerns have been heard through:

• Indigenous / Public consultations
• Environmental Assessments of Energy / Infrastructure / Mining Projects

The Government has committed to preserving and protecting our coastlines while advancing Canada’s ability to trade and keep the economy strong.
What is “Cumulative Effects of Marine Shipping”?  

Joint initiative with DFO to establish a shared approach to understanding regional marine shipping impacts on the environment.

This initiative will be rolled out nationally with study locations proposed on all three coasts:
- Northern BC
- Southern BC
- St. Lawrence estuary QC
- Bay of Fundy NB
- South Coast NL
- Arctic (TBD)
Partners in the Initiative

This Initiative is built on science; and will rely on engagement and collaboration with the following:

- Indigenous groups
- Coastal communities
- Marine science organizations/Academics
- Industry
- Other Government Departments
Key Activities

**Engage** Indigenous peoples, coastal communities and local stakeholders, to determine priority environmental issues and regional issues of concern related to marine shipping.

- **Identify** key stressors related to marine shipping that may affect potential valued components within the pilot site area.
- **Select** appropriate spatial and temporal boundaries and scope of marine shipping activities in the pilot site area.
- **Collect** and amalgamate existing regional shipping, environmental, cultural and traditional use data.
- **Determine** the linkages between the identified shipping stressors and selected valued components.
- **Develop** the Cumulative Effects Assessment Framework for Marine Shipping.
- **Identify** tools and strategies to mitigate the potential effects of marine shipping.
What are the outcomes of this Initiative:

- Baseline data collection (environmental, cultural, traditional use, shipping activities)
- A national cumulative effects assessment framework for marine shipping
- Regionally specific tools that can be applied to existing vessel movements/future project developments

There are linkages and shared outcomes with other OPP Initiatives such as Proactive Vessel Management and Enhanced Maritime Situational Awareness.
Point of Contact

Paula Doucette
Senior Environmental Advisor
Oceans Protection Plan
(604) 315-3776
Paula.Doucette@tc.gc.ca

For more information:
https://letstalktransportation.ca/OPP
Maritime Awareness Information System
Context

• There has been increasing interest in maritime activity – such as vessel traffic information – expressed by coastal partners and stakeholders.

  • Indigenous and coastal communities expect that local, near real-time maritime data will be shared in a user-friendly way that meets their needs.

• While many sources of marine information exist in the Canadian and international context, they are not always well integrated or easy to use.

• Opportunity to work collaboratively with coastal partners and stakeholders to develop an accessible system that meets user needs.
Maritime awareness information system (1/4)

What will it do?

• Integrate various **data layers and types of information** (marine and other) into an **easy-to-use** platform

• Improve **awareness and understanding** of what is happening in local waters.

• Enhance **transparency and access** to marine information for Indigenous and coastal communities and stakeholders.

• **Leverage marine information systems** and infrastructure that exist or are in development

• Provide access to **space-based (satellite) Automatic Identification Systems (SB-AIS) data services**, in partnership with the Canadian Space Agency.
Maritime awareness information system (2/4)

Why could the system be useful?

- Marine and environmental safety, reduced risk of incidents
- Monitoring marine mammals to avoid accidental interference
- Protection or action related to ‘areas of interest’ such as fisheries
- Increased transparency and flow of information
- Coordination of marine emergency response
- Discussions regarding vessel routing
- Support for analysis of patterns using archived information

POTENTIAL TYPES OF INFORMATION

- SHIPPING AND ROUTES
- WEATHER
- TIDES-CURRENTS
- MARINE PROTECTED AREAS
- OTHER SENSITIVE SITES
- USER-DEFINED AREAS
Maritime awareness information system (3/4)

Who would use the system?

- Indigenous and coastal communities
- Provinces and territories
- Marine safety and pollution response authorities
- Emergency managers, planners
- Port Authorities and the Pilotage Authorities
- Science and research organizations
- Post-secondary institutions
- Industry associations

- Government of Canada partners:
  - Transport Canada; Canadian Coast Guard; Fisheries and Oceans Canada; Environment and Climate Change Canada; Canadian Space Agency; and, Indigenous and Northern Affairs Canada.
Maritime awareness information system (4/4)

How will the system be developed?

• **Dialogue sessions** with Indigenous and coastal communities and marine stakeholders are planned in coastal regions to:
  • Gather input to better **understand information gaps and needs.**
  • Integrate **local knowledge and expertise** in the system.
  • Seek input on potential locations for pilot projects

• **Follow-up workshops** will take place in targeted regions in 2018 to further define project needs, seek feedback on proposed direction, provide training to users, and advance partnerships.

• **Pilot projects** will be launched in 2018 to test the system and ensure it meets the needs of coastal partners and stakeholders.

• Additional research and analysis of existing maritime awareness information systems is underway to benefit from best practices and lessons learned.
Conclusion and Next Steps

• The system will enhance access to maritime information – such as vessel traffic – to help improve awareness and understanding of what is happening in local waters.

• Your input, expertise and local knowledge will help create a system that meets your needs and supports marine safety, emergency response, and environmental protection activities.

• Information on funding opportunities will be posted on Transport Canada’s Community Participation Funding Program on an ongoing basis: http://www.tc.gc.ca/eng/marinesafety/Community-Participation-Funding-Program-4445.html

• Questions? Comments? The Government of Canada will work collaboratively to develop the system – in-person, by e-mail, or online.

  TC.MaritimeAwareness-ConnaissanceMaritime.TC@tc.gc.ca
  https://letstalktransportation.ca/OPP
Proactive Vessel Management
Background and Linkages

• Indigenous groups and coastal communities have increasingly expressed a desire to play a more active role in the design and delivery of Canada’s marine safety system, including the development of voluntary vessel traffic mitigation measures.

• A framework will be developed by Transport Canada to act as the foundation of PVM and will be operationalized via pilot projects.

• Related OPP initiatives:
  - EMSA
  - Cumulative Effects
  - Anchorages
  - Pilotage Act Review
What is **Proactive Vessel Management**?

- Collaborative approach to identifying and managing marine traffic in local waterways on all three coasts

- Led by Transport Canada; fosters area-specific discussions of environmental, social and cultural impacts from shipping

- Creates toolkit of management actions ranging from voluntary to regulatory

- This framework will be used to identify areas where local management actions, such as routing and speed controls, could minimize environmental, cultural and social impacts, as well as conflicts between users.
What are we trying to accomplish?

- Engagement:
  - The objective of the engagement sessions is to receive input from participants on what the PVM framework should be.
  - A second phase of engagement sessions will be aimed at reviewing and refining the PVM framework with partners.
  - Pilot projects will be conducted – locations to be determined.
  - Engagement will be an ongoing process.
Timeline

2017-18:
✓ Review Canadian and international best practices
✓ Identify regulatory and non-regulatory tools
✓ Design forum (format, participants, terms of reference)
✓ Develop framework

2018-19:
✓ Conduct pilot projects to evaluate framework
✓ Review and finalise framework

2019 –
✓ Incorporate framework into regular program delivery
Next Steps

• The development of the PVM framework will be done with partners incorporating the feedback from stakeholders.

• Online information

• Next round of engagement sessions will occur in spring 2018 to:
  • present a draft framework
  • to gather feedback from stakeholders
    • in order to improve the PVM framework
    • to develop the pilot projects.
Increased presence and Extended Season in the Arctic

&

Inshore Rescue Boat North
OPP – Expanding CCG Presence

*Increased Presence and Extended Season in the Arctic*
The presence of Coast Guard icebreakers in the Arctic will be extended to support mariners earlier and later in the season and complement investments to make Arctic resupply operations faster, safer and more efficient for remote communities.

*Inshore Rescue Boat North*
Coast Guard will implement a seasonal in-shore rescue boat station in the Arctic, with trained local personnel, which will support near-shore search and rescue operations. This initiative will complement the expansion of the CCG Artic Auxiliary. Coast Guard is currently conducting outreach and recruitment sessions across the Arctic and at university campuses.
OPP - Expanding the CCG Auxiliary

Arctic CCG Auxiliary Chapter

An Arctic Auxiliary Chapter will be established, to ensure sustainable funding to support Auxiliary growth in the Arctic, and community-based marine emergency response.

Expand Indigenous Community-boat Volunteer pilot to Arctic

To support Indigenous participation in the CCGA, Coast Guard has expanded the scale and scope of the Indigenous community-boat volunteer pilot program to allow Arctic communities to apply for funding to purchase an emergency response capable boat and/or equipment required to participate in the CCGA.