



Canadian Arctic Shipping and Transportation Research Network

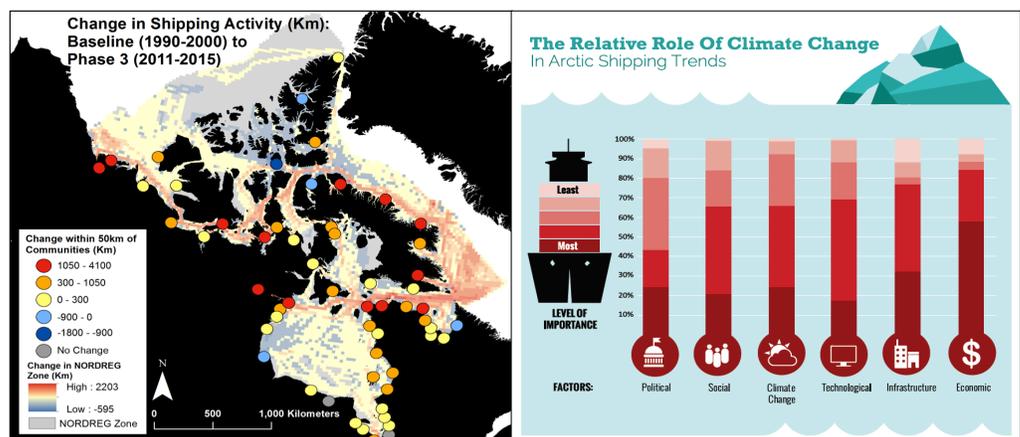
Specializing in applied interdisciplinary science on Arctic shipping to support decision-making on ocean governance and sustainable economic development

Vision

- To co-develop a world-class research network to undertake science that supports policy and decision-making for oceans governance, sustainable shipping and economic development, while training of the next generation of Arctic shipping research experts;
- To leverage the assets of such a network (ships, people, and coastal infrastructure) to improve ocean, ice, and atmospheric observations along Arctic shipping routes;
- To conduct science that supports; 1) decision-makers to establish evidence-based policy and to position Canada as a global leader in Arctic oceans and shipping governance, 2) industry to operate more efficiently and in a safer environment, and 3) Arctic communities to mitigate local impacts and enhance economic opportunities.

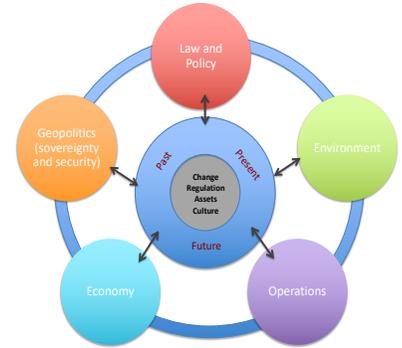
Context

Shipping and maritime transportation is a \$500 billion dollar industry and is a fundamental cornerstone enabling society growth and development. Between 80% and 90% of all bulk commodities are transported globally by ships, the majority of which occurs in temperate and tropical oceans. However, climate change and related reductions in sea ice are facilitating new opportunities for shipping through Arctic Canada where shipping routes such as the Northwest Passage offer significant distance and potential cost savings. Traffic through the Northwest Passage has tripled over the past decade and additional increases are expected considering the combined effects of climate change, technological developments in ship design and operations, and global economic and political interests. Canada is currently in an excellent position to be a global leader in Arctic oceans governance and development with its Ocean's Protection Plan and focus on Indigenous reconciliation. The establishment of a Canadian science group that focuses on Arctic shipping should be part of this vision. The idea of CASTnet emerged in 2015 and has been well socialized among end-users and stakeholders. In a recent 2017 survey of end-users 97% were in favour of its development over the next few years.



Research Focus Areas

- The initial focus areas are based on end-user surveys and will include: 1) Environment, 2) Operations, 3) Economy, 4) Geopolitics, and 5) Law and Policy.
- A set of research projects will be co-developed with project partners that respond to the identified information needs of industry, government (including Inuit Organizations), and communities and which look at challenge areas from a variety of lenses such as past, present, future, change, regulation, assets, and culture.



Partners

To take advantage of Canada's scientific funding structures (Tri-Council) CASTnet is a University led-Industry-Government-Community partnership. The host institution is the University of Ottawa. Core partner universities include Memorial (in partnership with Nunavut Arctic College) and Dalhousie. Industry partners include the seven industrial ship operators and three cruise tourism operators in Canada. Other potential partners include local Arctic communities, Inuit organizations, and relevant federal, territorial and local government agencies.

Funding and Support

This mini-research network could be viewed as a 'spin-off' of MEOPAR with initial foundational convening support provided by the network. Tri-council funding would also be sought via the Partnership funding streams.

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