Marine Domain Awareness (Arctic Canada)

Arctic Marine Tourism Project Workshop
3 February 2020







Overview

- Reporting requirements for ships in the Canadian Arctic (e.g. size, tonnage, location) and to whom
- Enhanced Maritime Situational Awareness (EMSA) initiative
- Guidelines for Passenger Vessels Operating in the Canadian Arctic – TP 13670

Legislative reporting requirements – Arctic specific

Northern Canada Vessel Traffic Services Zone Regulations (NORDREG)

Arctic Shipping Safety and Pollution Prevention
Regulations (ASSPPR)
Arctic Ice Regime Shipping System (AIRSS) and
Polar Operational Limit Assessment Risk Indexing
System (POLARIS)

- 300 GT or more
- engaged in towing or pushing another vessel, with combined gross tonnage of 500 or more
- carrying a pollutant or dangerous goods as cargo, or towing or pushing such a vessel

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Report to Canadian Coast Guard:

- Sailing plan
- Position
- Final
- Deviation

Minimum of one report per 24 hrs is required

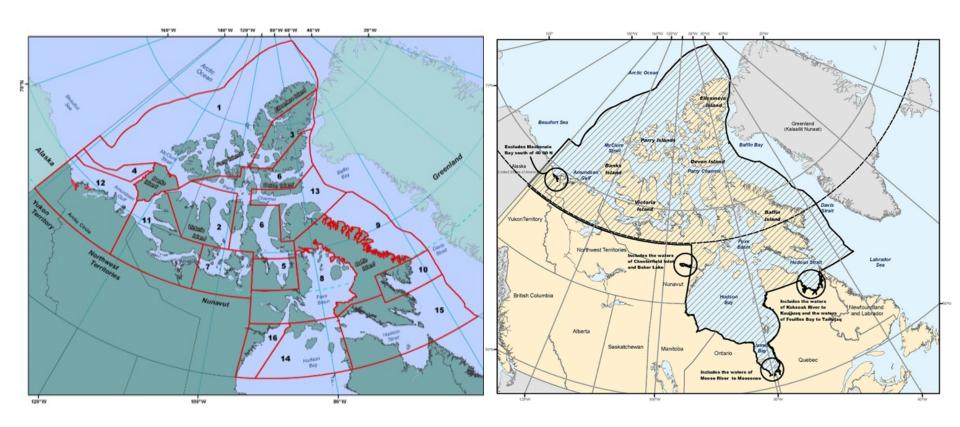
Report to Transport Canada and be provided to one of the Marine Communications and Traffic Services Centres that is designated by the Canadian Coast Guard to receive NORDREG reports

- Ice class
- Final destination
- Intended route
- Ice regime(s) to be encountered
- Ice Navigator(s) details

AIRSS reporting can potentially only be required once

Shipping Safety Control Zones

NORDREG



Legislative reporting requirements – non-Arctic specific

Vessel Traffic Management Information System (VTMIS) – identified as INNAV in Canada

one way to provide pertinent information on marine traffic to MCTS (Marine Communications and Traffic Services)

system used mainly by MCTS
 operational centres. Those centres
 are located all across Canada and
 cover all navigable waterways.

Examples of information available on this site:

- Vessels' current position, origin, destination, estimated arrival time, passage times at specific points, source position, etc.
- Detailed itineraries
- Detailed movement reports

Long-Range Identification and Tracking of Vessels Regulations – (LRIT) system

- Apply to Canadian vessels
 everywhere if they are engaged on
 int'l voyages and are cargo vessels of
 300 GT or more, or passenger vessels
 (carrying 12 passengers or more).
- Do not apply to pleasure craft or gov't vessels
- Requires vessels to be fitted with LRIT equipment
- Equipment automatically transmits the vessel's identity; position (latitude and longitude); and date and time of transmission.

Legislative reporting requirements – non-Arctic specific (cont.)

Implementation of IMO's int'l AIS carriage requirements via the *Navigation Safety Regulations*

e Regulations

Class A AIS carriage requirements

Current regime:

- vessels >150 GT and carrying >12 passengers on an int'l voyage
- vessels >300 GT on an int'l voyage (excluding fishing vessels)
- domestic vessels >500 GT

Forthcoming amendments to also include:

 vessels (not on a sheltered waters voyage) that carry >12 passengers or are > 8 m and carry passengers Vessels in Canada

 All Canadian ships outside Canada (both SOLAS and non-SOLAS)

Marine Transportation Security

Report to Canadian Coast Guard:

- Pre-arrival Information Report (96 hrs)
- If there's a change, it must be reported to the Minister

Enhanced Maritime Situational Awareness (EMSA) initiative

- Part of the government's Oceans Protection Plan
- Will enable coastal communities to be aware of vessel information from space-based satellite Automatic Identification Systems (AIS) data
- Transport Canada is partnering with 10 Indigenous communities across Canada to test and evaluate a new maritime awareness information system
- One-year pilot projects spring 2019 start two of which are in the Canadian Arctic
 - Ekaluktutiak Hunters and Trappers Organization, Cambridge Bay, Nunavut
 - Tuktoyaktuk Hunters and Trappers Committee Tuktoyaktuk, Inuvialuit Settlement Area (Northwest Territories)

ENHANCED MARITIME SITUATIONAL AWARENESS





ENVIRONMENTAL MARITIME ACTIVITY





EMERGENCY RESPONSE



KNOWLEDGE



SPACE **BASED DATA** OCEANS PROTECTION PLAN

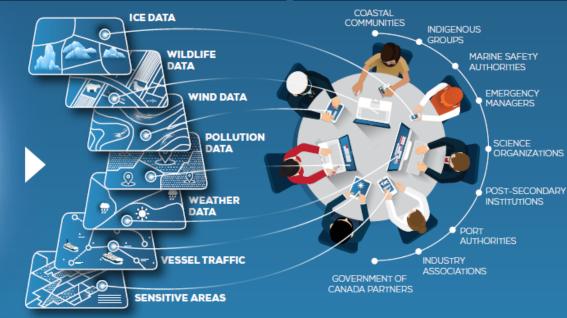
WHAT WILL THE SYSTEM DO?

Integrate various DATA LAYERS AND TYPES OF INFORMATION into an EASY-TO-USE PLATFORM.



- Tuktoyaktuk Hunters and Trappers Committee
- Ekaluktutiak Hunters and Trappers Organization
- Nunatsiavut Government
- Essipit Innu First Nation Council
- Maritime Aboriginal Peoples Council
- Mohawk Council of Kahnawà:ke
- 7 Council of the Haida Nation
- 8 Gitga'at First Nation
- Pacheedaht First Nation in partnership with
- T'Sou-ke First Nation

WHO WILL USE THE SYSTEM? COASTAL



1 2017-2018

ENGAGEMENT SESSIONS

To understand maritime information needs and gaps across Canada.

2 SPRING 2019

PILOT **PROJECTS**

Launch of new maritime information system, with partners hosting pilot projects across Canada.

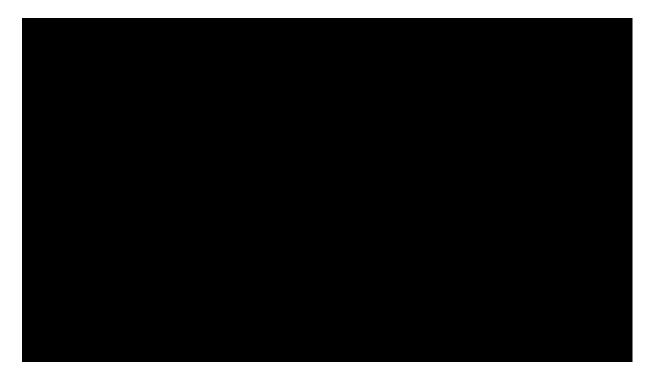
UPGRADES BASED ON USER FEEDBACK

ONGOING **UPGRADES**

Integrating local knowledge and priorities in an agile way that reflects evolving user needs.

Enhanced Maritime Situational Awareness (EMSA) initiative

 Tuktoyaktuk Hunters and Trappers Committee – Tuktoyaktuk, Inuvialuit Settlement Area (Northwest Territories)



Guidelines for Passenger Vessels Operating in the Canadian Arctic – TP 13670

- Purpose is to have one document outlining who to contact and when
- What regulations apply to a given voyage
- If and from whom specific approvals are needed
- What reporting requirements are to be followed
- What resources, publications and local knowledge operators and DVRs should be familiar with
- The length of time needed to make sure all of these requirements are met before departing for the Canadian Arctic
- Whether any costs are involved

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Questions

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