

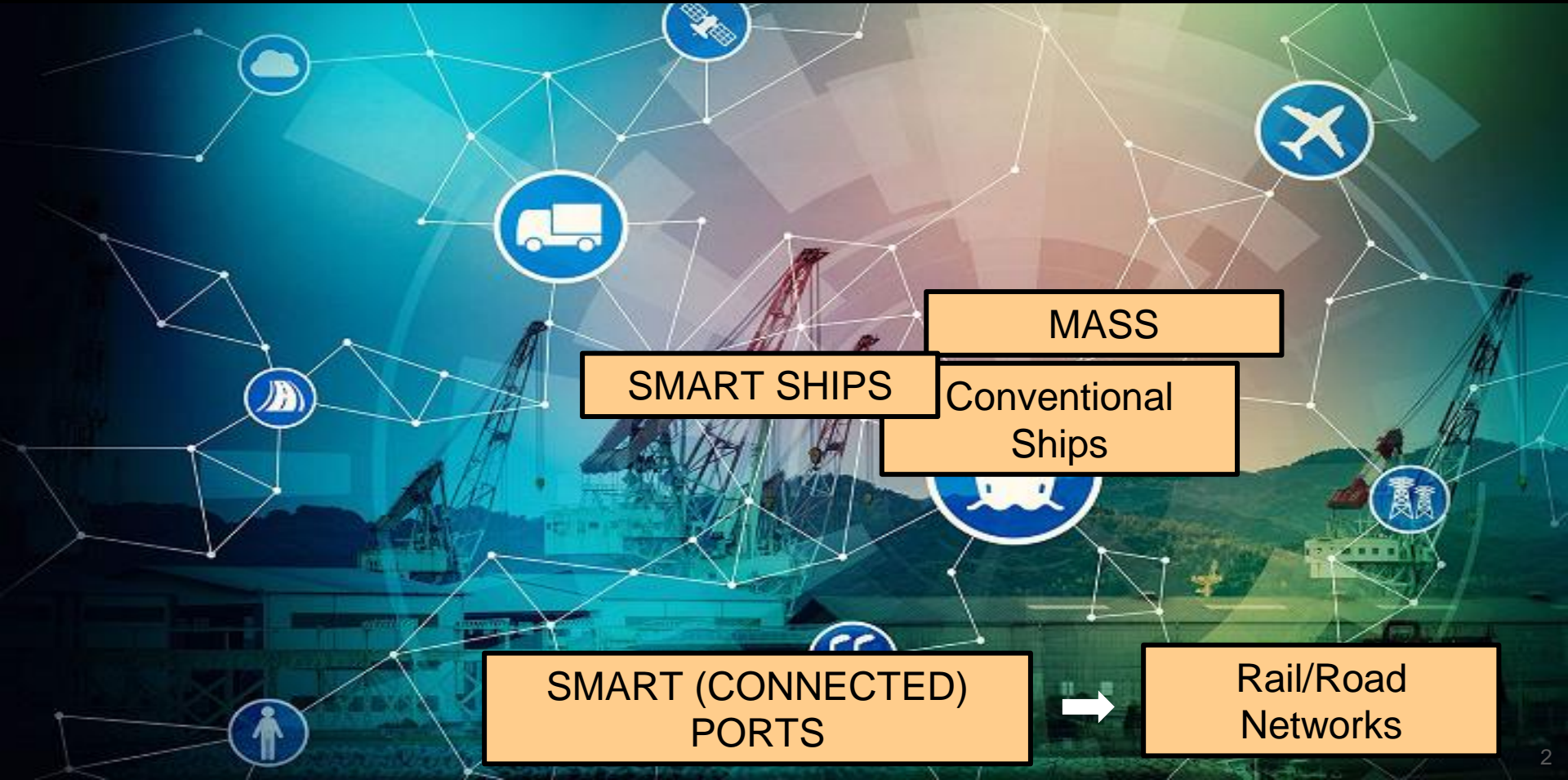
Overview of the ITS Canada Technical Committee on Maritime Transport and Multimodal Supply Chains (MMSC)

Kevin Heffner, co-chair MMSC Technical Committee
Email: k.heffner@peretec.com

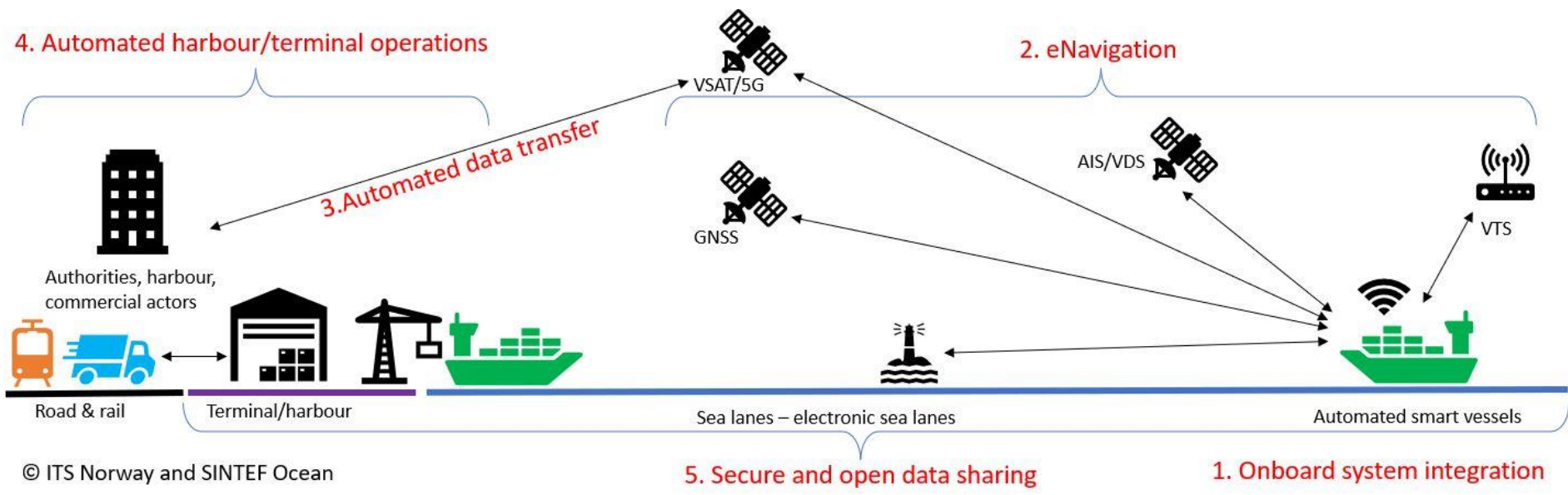


Mariners' Workshop 2022 – January 25-27th

Smart Shipping Ecosystem



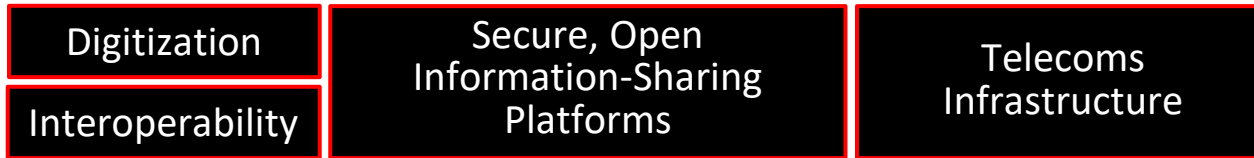
Smart Shipping Ecosystem



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AI-enabled solutions enhance system-level capabilities, but without an overarching digital-information sharing strategy and platform, the “system of systems” big picture remains incomplete.

Observations from an AI and Interoperability Subject Matter Expert



INTERNAL INTELLIGENCE – Smart Systems

The individual internal intelligence of Canada's Marine Sector seems **very good and improving steadily**.

OVERALL INTELLIGENCE – *Not-so-smart* Shipping Ecosystem

Informed decision-making depends on the availability of “actionable information”. **The 6+ communication aspect is an essential part of collective intelligence currently is lacking.**

OVERARCHING INTEROPERABILITY AND INFORMATION-SHARING STRATEGY

This is not a nice-to-have: it is currently one of the Canadian Maritime Transport and Logistics Sectors' **biggest obstacles to achieving safer, greener, more efficient and resilient supply chains.**

We are building a multimodal supply chain racecar, yet we forgot about the chassis !

Maritime & Multimodal Supply Chain TC

Maritime & Multimodal Supply Chain Technical Committee

ITS Canada, with support from Transport Canada and the National Research Council of Canada has stood up a Technical Committee to **collect stakeholder inputs and inform a federal digital information sharing policy that address interoperability challenges** in the areas of maritime and multimodal transport.

MMSC Technical Committee Co-chairs

Kevin Heffner - k.heffner@peretec.com

Dave Michelson – davem@ece.ubc.ca

MMSC Technical Committee

<p style="text-align: right;">GOAL</p> <p>Bring together a diverse set of Maritime and Multimodal Supply Chain stakeholders to facilitate the evolution and synchronized transition to the next stage of digital information sharing using a wireless digital infrastructure and shared data services.</p>	<p>ACTIVITIES</p> <ul style="list-style-type: none">• Collect information-sharing and interoperability requirements• Explore existing interoperability solutions• Formulate recommendations for Canadian Policy changes• Contribute to standards development• Help organize Pilot Projects among stakeholders
<p style="text-align: right;">MEMBERS</p> <ul style="list-style-type: none">• Transport Canada• Association of Canadian Port Authorities• Shipping Federation of Canada• Saint Lawrence Seaway Management Corp.• National Research Council• Pilotage Authorities• Ministry of Transports Quebec• CargoM (Logistics Hub)• ITS Canada• WSP Canada• Others	<p>STATUS</p> <ul style="list-style-type: none">• Kicked off in June 2021• Have held 6 monthly meetings• Have formed two working groups:<ul style="list-style-type: none">• MMSC Interoperability Strategy• Advanced Pilotage Services• Current Focus on Maritime Single Window

Maritime Single Window Historical Timeline

EMSA adopts Erika-II Measures
Traffic Monitoring Directive 2002/59/EC

EU adopts MSW Guidelines
Directive 2010/65/EC

EU replaces MSW Guidelines
with Regulation 2019/1239/EC

IMO FAL 45 mandates MSW
for all Member States

Norway Develops
SafeSeaNet

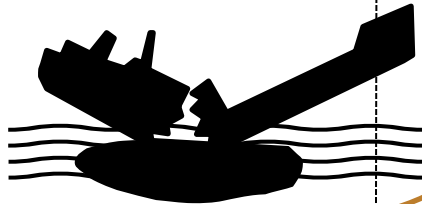
IMO mandates electronic
exchange of information

Shipping Federation of Canada
comments on 2018 Treasury
Board of Canada Regulatory
Modernization Initiative: See [link](#)

CCG includes mid-term
MSW Marine Services
Modernization roadmap

TC announces a
*"proposal for a MSW
multi-year analysis"*

Erika and Prestige Oil
Tanker Disasters



1999

2002 2003

2009 2010 2019

Apr

Jun

Nov

2021

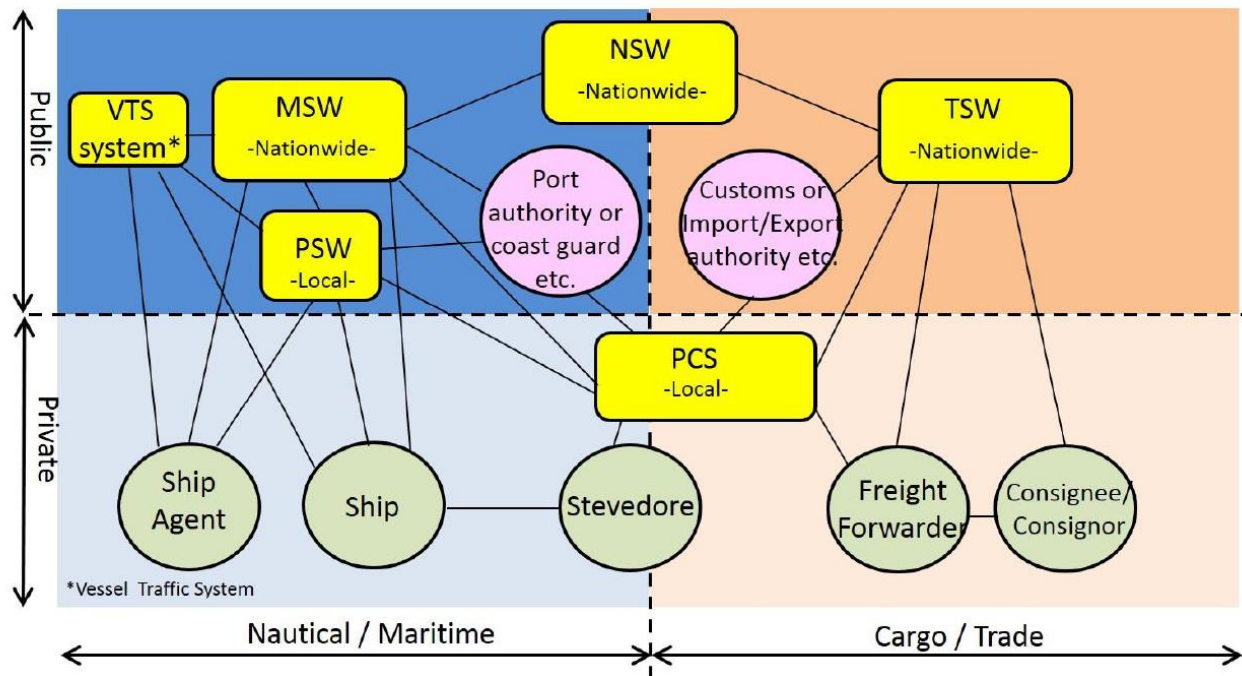
Southeast Asia, Africa
and ROW also follow
suit with MSW.

National, Maritime, Port, Custom/Trade Single Windows

“Maritime Single Window” [...] all the information required by public authorities in connection with the arrival, stay and departure of ships, persons and cargo would be submitted through a single portal without duplication.

NSW – National Single Window
MSW – Maritime Single Window
VTS – Vessel Traffic Service
PSW – Port Services Window
TSW – Trade Single Window
PCS – Port Community System

Goal is both safety and efficiency



[IMO MSW/NSW Guidelines - IMO FAL.5/Circ.42/Rev.1](#) - 1 July 2021

See: [Shipping Federation of Canada comments on regulatory modernization \(maritime single window\)](#), submitted to the Treasury Board of Canada (September 2019)

Maritime Single Window Conclusions

The maritime transport industry is competitive, and the EU and Asia currently are more advanced than North America, in some respects.

EU and many nations in Asia and ROW have instituted NSW, MSW and TSW policies and already deployed Single Window platforms. This seems to have reinforced their competitive advantage, in some cases cutting costs by more than 25%.

Although Canada has instituted a Trade Single Window, there currently is no overarching National Single or Maritime Single Window policy.

The need for a federal policy on Maritime Single Windows could be considered a major obstacle to implementing smart shipping concepts and establishing resilient, efficient multimodal supply chains in Canada.

Transport Canada's new policy initiative in this area is therefore quite encouraging. But the longer Canada waits to define and implement a National/Maritime Single Window strategy, the more difficult it becomes to catch up to the ROW who continues to improve their digital information sharing capabilities.

MMSC Technical Committee Summary

ITS Canada has kicked off the MMSC Technical Committee to facilitate the transition to safe, resilient, and efficient multimodal supply chains in June 2021.

Membership includes good representation from Public and Private Maritime Transport and other Transport Modes. Still missing: CCG, Terminal Operators.

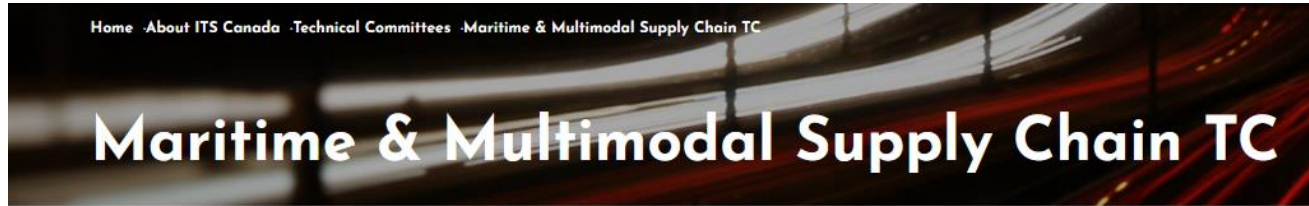
Despite Canadian specificities (bilateral agreements, vastness of territory, harsh weather conditions, etc.), initial MMSC Technical Committee work has highlighted the need for a top-down approach digital information sharing and interoperability approach, consistent with the IMO FAL Maritime Single Window Recommendations and Regulation.

Next step – To support Transport Canada MSW initiative

- MSW approach has proven effective in Europe, Asia and elsewhere – It works !
- MSW has recently become regulation – Canada no longer has a choice it would seem.
- Key stakeholders in Canada have already shown support for MSW (e.g., CCG, ACPA, Shipping Federation of Canada)
- Cost of implementing national MSW is small compared to cost of supply chain disruptions!
- A National MSW will increase the resiliency of national supply chains and support marine commerce resumption in the case of cyber attacks and other disruptions.

Thank you for your attention.

For more information:



Maritime & Multimodal Supply Chain Technical Committee

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