

# Canada S-100 Sea Trials St Lawrence River Mid-Trials Report



Canadian Hydrographic Service (CHS)  
GC Data Conference, February 2026

Credits: Léandre Morin

# Outline

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Overview & Objectives



Our S-100 data offer



Achievements



Ongoing Activities



Feedback & Outcomes



Conclusion

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# S-100 Sea Trials - Overview

- **Offer:** S-100 Route Monitoring Layers
- **Duration:** June – November 2025
- **Approved by:** International Hydrographic Organization (IHO)
- **Who is involved?**
  - Canadian Hydrographic Service
  - Canadian Coast Guard
  - Teledyne Geospatial
  - PRIMAR
  - SEAiq, OSI
  - Others



# Available S-100 Products & Services



# Available S-100 Products & Services

S-101 – Electronic  
Navigational Charts

S-102 - Bathymetric  
Surfaces

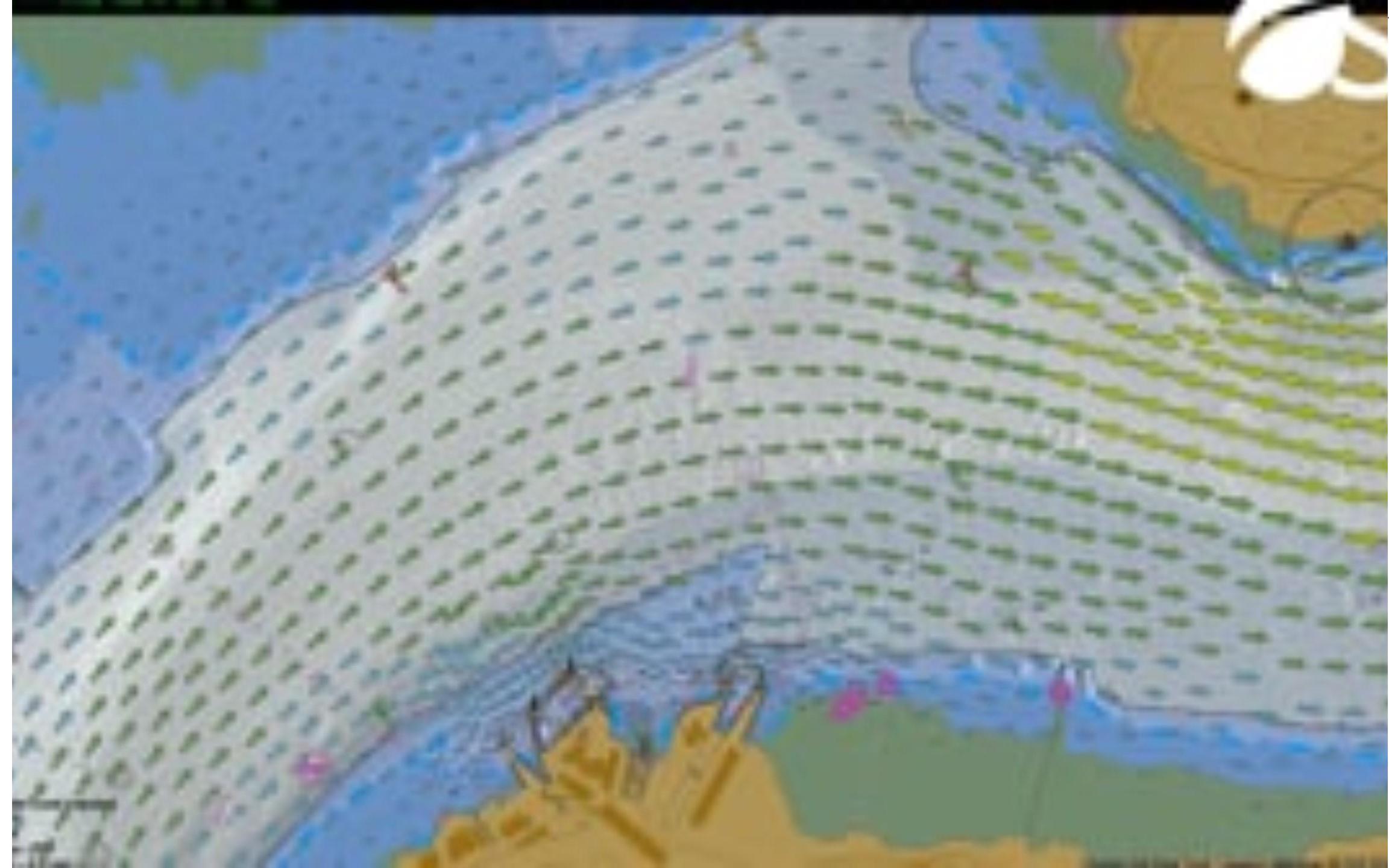
S-104 - Water Level  
Information

S-111 - Surface Currents

S-124 Navigational Warnings

S-128 Catalogue of  
Navigational Products

S-129 Under Keel Clearance  
Management (UKCM) Information



n-Classifié

# S-100 Sea Trials Objectives – Part I

## What This Means for End-Users

- Discovery of S-100 products
- Testing equipment and software
- Obtaining the data from a live subscription
- Exploration of New Possibilities
  - Assess how new S-100 products assist navigation/operations
  - Acknowledge overall improvements to navigation safety
- Integration with Existing Systems
  - Identify potential issues or areas for enhancement
  - Evaluation of System Performance
  - Ease of use



*Are we ready for January 2026?*

# S-100 Sea Trials Objectives – Part II

## What This Means for Software Manufacturers and Data Producers

- Adoption of the latest product specifications
- Trying out S-100 tools and procedures
- Integration with Existing Systems
  - Identify potential issues or areas for enhancement
  - Evaluation of System Performance
- Making adjustments from feedback
  - Specifications + Metadata
  - Tools and Procedures
  - Training / Acquiring expertise for the Production Teams

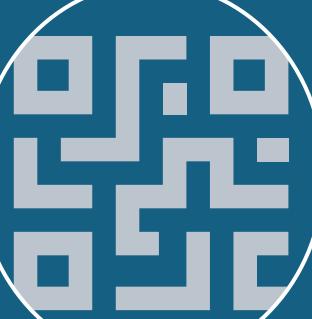


*Are we ready for January 2026?*

# Key Milestones & Achievements



IHO  
Approval



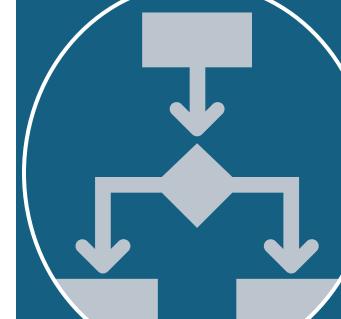
Sample  
Dataset  
+  
Feedback



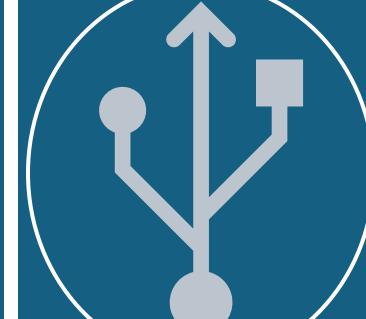
Dedicated  
Website  
+  
LinkedIn  
Channel



Pre-Trials  
Registration  
opens



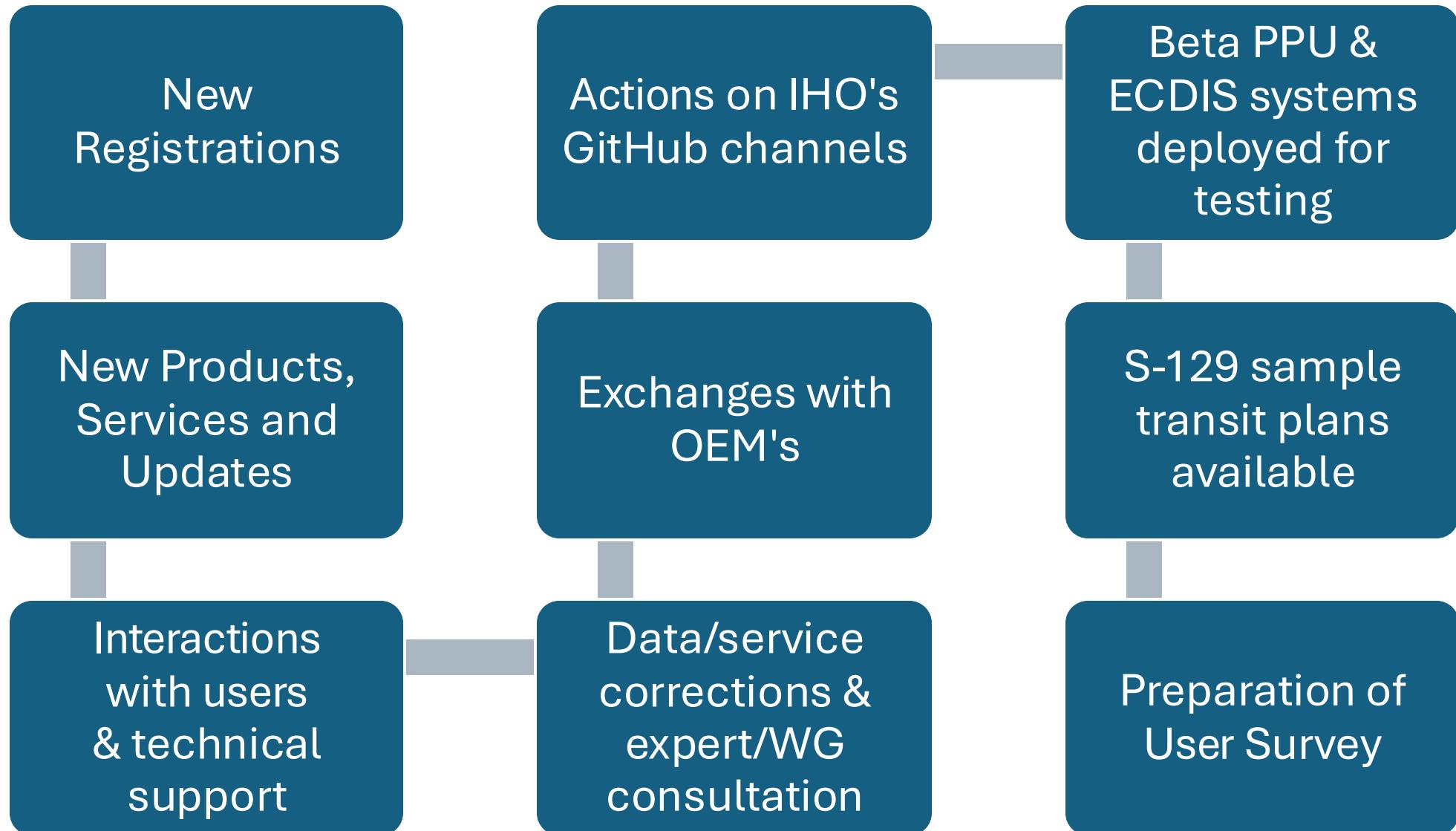
Online  
Data  
Service  
goes live  
as  
planned



OEM  
partners  
joined the  
Trials'  
Team



# Ongoing activities





Credits: [dbvirago](#)

## Some Statistics (August 2025)

**51 registered  
users**

**764 LinkedIn  
subscribers**

**1300 new visits on  
the website**

**25 issues flagged**

**2152 datasets**

**7 systems under  
evaluation**

# Issues flagged so far...

Data & Catalog Coding Issues

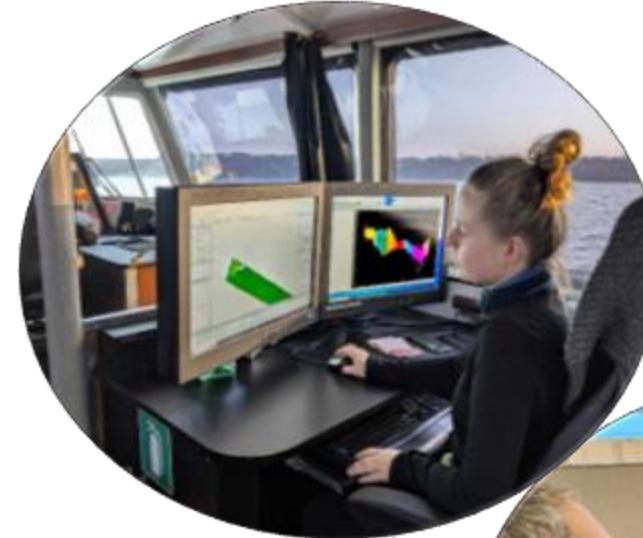
S-101 / S-102 Specifics

S-104 to S-111 File Management

S-111 Specific Concerns

Other Standards

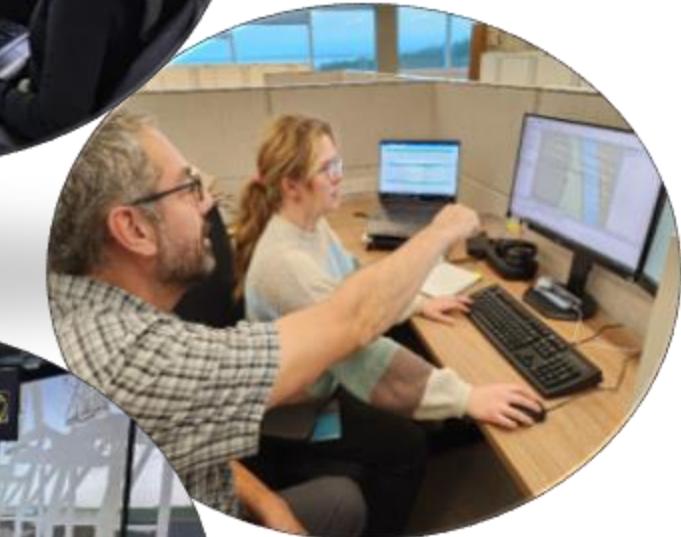
Data Provider & User Practices



Credits: CHS Staff

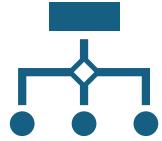


Credits: CHS Staff



Credits: Maritime Simulation and Resource Centre

# Outcomes & Actions



Issues  
compiled &  
Final report



Potential  
technical  
sessions



Promoting  
registration &  
contributions



Refining  
tools &  
procedures



Building  
S-100  
expertise



OEMs  
involvement



Credits: Pink Candy

# Reality Checks So Far : The good points



- ✓ Trials launched on time
- ✓ Immediate onboarding by local users & OEMs
- ✓ Early feedback from static dataset enabled quick adjustments
- ✓ Stable tools/procedures for production teams; only minor tweaks needed
- ✓ Technical exchanges with OEMs led to beta builds with fixes
- ✓ Real-life setup adopted to ensure January 2026 readiness
- ✓ Agile feedback loop with fast response from leads/experts
- ✓ Growing interest: more users & OEMs joining

# Reality Checks So Far

## : The flip side

- ✗ Many were unprepared for the scope of the Trials
- ✗ Few OEMs actively participating
- ✗ Most systems don't yet support full Phase 1 S-100 suite
- ✗ Some product specs released after Trials began
- ✗ Validation/portrayal rules still in development
- ✗ S-100 not yet integrated in navigation education
- ✗ Limited S-100-ready open-source tools; GIS apps used as workaround



# Conclusion



- Testing the S-100 platform for modern & safe navigation
- St. Lawrence River ideal for Trials
- Real S-100 data service & equipment tested in live conditions
- Team excited and grateful for participation

# Resources

## PRIMAR

- Register by contacting:  
[support@primar.org](mailto:support@primar.org)

## Sea Trial Website

- [Information & Updates about the Trials](#)
- Links about related S-100 topics  
[S-100 Products and services](#)

LinkedIn: **Canada S-100 Sea trial HUB**  
<https://www.linkedin.com/groups/10012018/>

Email: [chsinfo@dfo-mpo.gc.ca](mailto:chsinfo@dfo-mpo.gc.ca)

