# 49th Meeting of the US/Canada Hydrographic Commission (USCHC49)

**Burlington, Ontario, Canada 23 & 24 March 2026**

| **Contribution to the IHO Work Programme 2026** | |
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| Task 3.2.1.15 | Prepare for and report meetings of the Regional Hydrographic Commissions (RHC) / USCHC |

## High level summary:

- The meeting agenda focused on the regional progression with the implementation phase of the S-100 framework through installation of data services for S-101 ENCs in combination with S-102, S-104 and S-111 data with a target year 2030.
- Canada reported the promising results of the S-100 Sea Trials on the St. Lawrence River between June and November 2025.
- Notable activities were reported for the transboundary collaboration, namely the share of Electronic Navigational Chart (ENC) products to support automated paper chart generation, reciprocal access to water subject to the jurisdiction of the Participants to conduct modern hydrographic surveys and the harmonization of seamless adjacency of gridded ENC schemes.

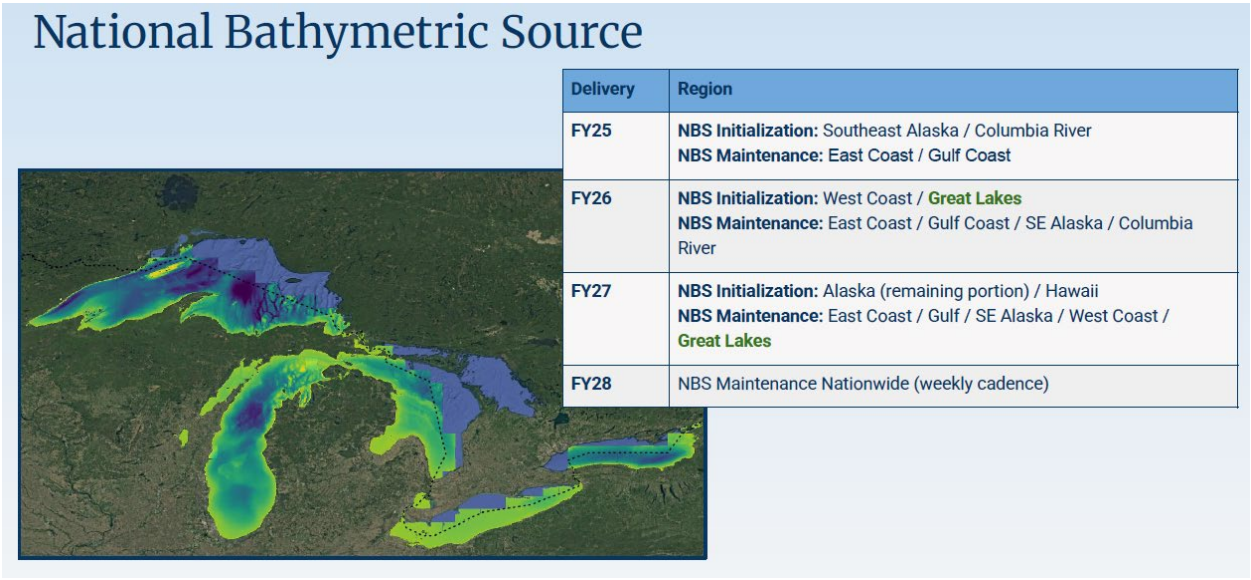
## Details:

The 49th Meeting of the US/Canada Hydrographic Commission (USCHC49), was held from 23 to 24 March 2026 in Burlington, Ontario, Canada. Deviating from common practice, USCHC49 was not held in conjunction with the biannual Hydro Conference Canada since the Conference schedule conflicted with the forthcoming fourth Assembly of the IHO in April 2026.

The meeting was chaired by Ms Manon Laroque, Hydrographer of Canada. Twenty two participants attended the meeting in person including representatives from the Canadian Hydrographic Service (CHS), the Royal Canadian Navy, the National Oceanographic and Atmospheric Administration (NOAA), National Geospatial-Intelligence Agency (NGA), U.S. Naval Meteorology and Oceanography Command and the United Kingdom Hydrographic Office (UKHO) as observers. IHO Secretary-General, Dr Mathias Jonas represented the IHO Secretariat.

The meeting commenced with opening remarks of the Chair, the Vice-Chair Rear Admiral Chris van Westendorp, Director of NOAA Office of Coastal Survey and U.S. National Hydrographer and the IHO Secretary-General. The meeting proceeded with the approval of the agenda and the matters arising from the previous USCHC48 Meeting and the respective list of actions.

National Reports were presented in sequence from Canada and US, followed by reports of the IHO Secretariat and UKHO. According to the two national reports, further progress was made in preparatory work for the uptake of S-100 dataset production and data services. It was confirmed that the provision of S-101 ENCs will be amended with S-102 bathymetric data sets for major and mid-size ports along the east and the west coasts. In this context US /NOAA also reported on the National Bathymetric Source (NBS) which maintains baseline information for all S-102 data services. The NBS program builds and maintains a seamless and high-resolution model compiled from the best available source data. The National Bathymetry is funnelled into several distinct pipelines that differ in contributing sources, vertical datums, and formats to support user requirements. The program's workflow is designed for throughput to ensure that bathymetry is available to professional mariners and the public as soon as possible. The NBS is predicted to be completely built out by 2027, with weekly maintenance cadence implemented by 2028.




Both USA and Canada presented detailed plans for the rollout for the entire suite of approved S-100 based data products over the years until 2030.

Canada reported the results of the S-100 Sea Trials on the St. Lawrence River between June and November 2025. The Trials offered mariners, equipment and software manufacturers and S-100 stakeholders, regardless of where they are located, a unique chance to test the S-100 data layers - either in the St. Lawrence River or in a simulated environment. Participants gained valuable hands-on experience with S-100.

The trials represent an exclusive opportunity for the user community to:

- Discover the potential of the S-100 products for enhanced safety and efficiency in navigation
- Test equipment and software in preparation for the new hydrographic models
- Obtain data and feedback from a live subscription service to refine and improve S-100 datasets

By evaluating and providing feedback on their experiences using S-100, the project results were regarded as substantial help to improve future S-100 products, services and functionalities build on further.

The US delegation reported on activities pertaining to hydrographic support on the Great Lakes which encompass geodetic themes such as International Great Lakes Datum (IGLD) 2020, intensified acquisition and processing of bathymetric data and ENC gridding as part of the national transition to grid schemes for all waters under national jurisdiction. As already reported on previous Commission meetings, the continued provision of nautical information in paper is maintained with certified printed ENCs and NOAA's custom chart mechanism to produce bespoke samples for domestic customers. Canada seconded to this item that a similar process is in place to create paper charts as much as compliant IHO S-4 Standards based on ENC content.

Notable activities were reported for the transboundary collaboration. The existing MoU was amended on agreements how Canada and the United States of America will share Electronic Navigational Chart (ENC) products and data in transboundary waters to support automated paper chart generation. Another amendment of the MoU regulates how to facilitate hydrographic survey collaboration through reciprocal access to water subject to the jurisdiction of the Participants to conduct modern hydrographic surveys. A new U.S. - Canada Gridded ENC Transboundary Agreement regulates the seamless adjacency of gridded ENC schemes which are not identical but match now with no gap or overlap.

Another notable highlight was the information about the progress in the installation of NOAA's new Center of Excellence for Operational Ocean and Great Lakes Mapping to be operated in association with the University of New Hampshire. Working in unison with and leveraging existing capabilities, including the Joint Hydrographic Center, the Center shall work across NOAA Line Offices, including NOS, OAR, and the Office of Marine and Aviation Operations (OMAO), to support and grow the Nation's deep water, shallow water and coastal mapping capabilities and data holdings, in partnership with industry. The Center layout is to become a focal point for

(1) activities transitioning developments in mapping platforms, sensors, and concepts of operations into operations;

(2) for applied training for mapping and surveying operations, to grow and diversify the pool of well-qualified talent in this expanding field;

(3) an agency-wide capability to provide technical support for ocean mapping technologies to operators in the field on an increasingly diverse set of platforms; and

(4) a mechanism to leverage public-private partnerships in advancing the nation's ocean and Great Lakes mapping goals"

*Artistic image of the planned Center of Excellence for Operational Ocean and Great Lakes Mapping expected to be opened fall 2027*

Canada presented considerations to invest into the better provision of the sub-ECDIS segment with modern ENC based navigation devices in tablet format. The general strategy is to adopt a recognized ECS standard as a baseline to support safe, efficient, and harmonized digital navigation for non-SOLAS vessels, while retaining the ability to add Canada specific safety enhancements to ECS that cover a range of other topics like mandatory backup navigation solutions, independent alternative power supplies, more flexible certification pathways, and operator training expectations. Building on an existing, peer reviewed standard like the RTCM would avoid unnecessary technical duplication, accelerate regulatory implementation and align Canada with other like-minded administrations that have already developed criteria for electronic navigation.

*ECS for sub-ECDIS navigation support*

The meeting continued with the reports of the respective national representatives in various IHO related activities, namely updates on the WENDWG deliberations with interrelations to IHO's MSDI activities – in particular the merger with the UN GGIM WG MGI to become the Joint Working Group Marine Geoinformation (JWGMGI) - and GEBCO/Seabed2030.

Based on the firsthand information provided by the Secretary-General, the Commission reflected on the expected debate and follow up decisions of the forthcoming Assembly. Since both members held a strong proactive role in the drafting phase of the new Strategic Plan 2027-2032, this subject gained specific consideration.

Dr Jonas took the opportunity to present the trophy of the *"Ex Abyssis ad Alta – IHO Award for Hydrographic excellence"* to the 2025 recipient Mr Louis Maltais, Director Navigation Geospatial Services and Support (CHS). He reflected his steady participation in the Commission's meetings during his tenure and expressed his corporate and personal gratitude for all support rendered to IHO by the Commission and its members.

Before closing the meeting, Manon Laroque handed over to Chris van Westendorp as chair and US as host of the forthcoming meeting. The 50$^{th}$ (jubilee) meeting is scheduled for spring to be in Wilmington, North Carolina, USA.