



**16th Meeting of the Arctic Regional Hydrographic Commission (ARHC16)
and Open Forum / Technical Content Day
Victoria, British Columbia, Canada, 16–18 September 2026**

Contribution to the IHO Work Programme 2026.

3.2.1.1 ARHC – Arctic Regional Hydrographic Commission

High level summary

- ARHC16 confirmed the Arctic as a strategic test bed for the practical delivery of hydrography: S-100 implementation, improved seabed knowledge, risk-based survey prioritization and new technologies must translate into reliable operational services for mariners and other users.
- The Open Forum / Technical Content Day on 16 September brought together government, industry and operational stakeholders around S-100 readiness, lessons from sea trials, autonomous and AI-enabled hydrography, marine geospatial intelligence and the challenges of navigating a rapidly changing North.
- ARHC16 initiated a structured regional process toward a possible IHO Secretariat application for Observer status at the Arctic Council. Members and Associate Members, through the newly renamed Arctic Council Project Team (ACPT), will consider the issue and report back to ARHC17, while broadening engagement beyond PAME to EPPR and the wider Arctic Council framework.
- The Commission approved the establishment of a one-year Satellite Data Project Team, co-led by Canada and the Kingdom of Denmark. The discussion also advanced the broader concept of Satellite Assisted Hydrography (SAH), extending the use of satellite information beyond bathymetry to a wider range of hydrographic applications.

Details

ARHC16 Open Forum / Technical Content Day – 16 September 2026

The 16th meeting of the Arctic Regional Hydrographic Commission opened with a dedicated technical forum at the Department of National Defence facility in Esquimalt. Hosted by Canada with the Canadian Hydrographic Service, the Department of National Defence and the Canadian Hydrographic Association, the day was designed to foster collaboration and identify shared technical priorities before the formal Commission sessions. The programme was organized around two closely linked themes: the transition to S-100 and innovation in Arctic hydrography.

Presentations and moderated discussions covered Canada's S-100 implementation framework, digital weather and ice information, lessons from IHO S-100 sea trial areas, production and validation issues, new sonar capabilities, autonomous and AI-enabled hydrography, and the use of marine geospatial intelligence in the North. The exchanges consistently linked technological readiness to operational delivery, emphasizing that S-100 implementation in the Arctic will depend on trusted data, connectivity, regional coordination and the ability to convert innovation into usable services.



Participants in the ARHC16 Open Forum / Technical Content Day, Victoria, 16 September 2026

16th Arctic Regional Hydrographic Commission – 17–18 September 2026

The formal meeting was chaired by Dr. Manon Larocque, Director General of the Canadian Hydrographic Service. The IHO Secretariat was represented by Secretary-General Rear Admiral Luigi Sinapi, who addressed the Commission for the first time in his new capacity. National reports from ARHC Members and Associate Members, together with reports from the Commission's working groups and project teams, provided an overview of continuing survey programmes, S-100 readiness, charting coordination, marine geospatial information, data sharing and technology development across the region.

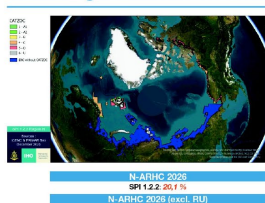
A deliberate polar focus

Direct Secretariat responsibility for ARHC under CL 48/2026



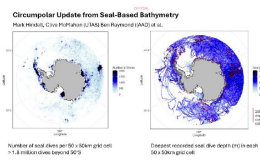
ARHC and a structured Arctic–Antarctic exchange

What changes did we see for 2026



IHO SECRETARY-GENERAL

institutional leadership
strategic direction
high-level partnerships
delivery



ARCTIC - ARHC: rapid change, navigation risk, S-100, seabed mapping, PAME/Arctic Council

ANTARCTIC - HCA: SG as Chair, ATCM liaison, polar S-100, data sharing, risk assessment

Purpose: create structured cross-polar exchange while respecting distinct governance frameworks.

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ocean science, environmental protection and wider ocean governance. As Chair of the Hydrographic Commission on Antarctica (HCA), the Secretary-General also highlighted the opportunity for systematic cross-polar exchange while respecting the very different institutional frameworks of the Arctic and Antarctic.

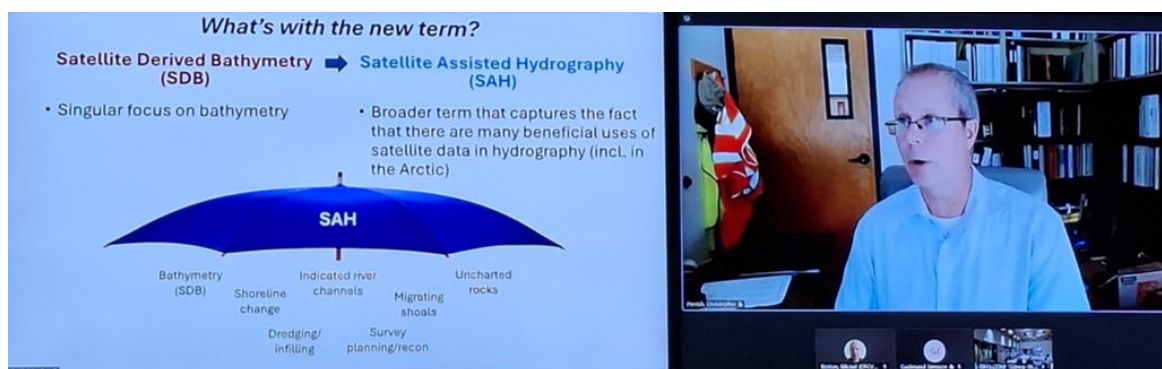
The IHO Secretariat Report placed ARHC16 in the context of the decisions of the Fourth IHO Assembly and the new Strategic Plan 2027–2032: navigate the digital transition, map the unknown and build for the future. For the Arctic, these objectives converge in regional S-100 implementation, stronger seabed knowledge, resilient coordination and the delivery of reliable operational services. The report also highlighted the IHO Infrastructure Centre in Busan as the operational backbone of the S-100 ecosystem and the new GEBCO Secretariat in Monaco as a major reinforcement of global seabed-mapping capacity.

ARHC's work on the Arctic Hydrographic Risk Assessment was highlighted as an example of regional practice already informing the other polar region. The methodology combines survey confidence, water depth and seafloor complexity with vessel traffic to support risk-based prioritization. HCA has already considered how elements of this approach could be adapted for Antarctica, demonstrating the practical value of cross-polar cooperation.

ARHC16 initiated a structured regional process to consider whether the IHO Secretariat should pursue Observer status at the Arctic Council. Under ARHC16 Action A-3, Members and Associate Members, through the relevant project team, will reflect on the issue and report to ARHC17. This is a consultation and assessment process and does not itself constitute a formal application.

The Commission also reinforced its established cooperation with the Arctic Council's Protection of the Arctic Marine Environment (PAME) Working Group. The former PAME Project Team was renamed the Arctic Council Project Team (ACPT), with a broader remit covering Emergency Prevention, Preparedness and Response (EPPR) and wider Arctic Council engagement. The ACPT will continue developing practical cooperation with PAME, support inclusion of ARHC–PAME activities in the PAME 2027–2029 work plan and scope further areas for collaboration.

The Commission approved a Satellite Data Project Team for an initial one-year period, co-led by Canada and the Kingdom of Denmark, with a case study and analysis to be presented at ARHC17. Discussion also broadened the focus from Satellite Derived Bathymetry (SDB) to Satellite Assisted Hydrography (SAH), recognizing satellite support for shoreline change, river-channel indication, survey planning, migrating shoals and potential uncharted hazards.



From Satellite Derived Bathymetry to the broader concept of Satellite Assisted Hydrography (SAH)

The Operations and Technology Working Group reported continued work to mature and automate the Arctic Hydrographic Risk Assessment, including cooperation with PAME on AIS-based traffic information. ARHC encouraged continued DCDB contributions, greater use of crowdsourced bathymetry and reporting at ARHC17 on practical use of such data in national products. The Arctic Marine Spatial Data Infrastructure Working Group will continue with a more limited scope under new Norwegian leadership.

The Arctic International Charting Coordination Working Group reported that most ENC overlap issues in Region N have been resolved or are operationally irrelevant. National S-100 timelines remain uneven, however, confirming the need for coordinated delivery. Canada's 2025 IHO–Canada S-100 Sea Trial, Norwegian production

experience and other national preparations showed steady progress, while high-Arctic gridding remains a regional issue.

National reports showed sustained investment in Arctic capability, including Canadian survey and service development, Icelandic multibeam surveying, Italy's tenth HIGH NORTH campaign and UK development of autonomous, AI-enabled and near-real-time polar information capabilities.

ARHC16 demonstrated the value of a Regional Hydrographic Commission as an operational bridge between global IHO standards and regional conditions. The central message was that the next phase of S-100 should be judged by the reliability of services delivered to mariners and other users. Survey quality, seabed knowledge, sea trials, connectivity, cybersecurity, data sharing and realistic production schedules remain inseparable elements of the Arctic digital transition.

Photo



Participants in ARHC16, Victoria, British Columbia, 17–18 September 2026

Next meeting

ARHC17 will be held in Nuuk, Greenland, 6–10 September 2027. The Chairship passed to the Kingdom of Denmark and Norway became Vice-Chair.