

18th Meeting of the IHO Inter-Regional Coordination Committee (IRCC-18) Lima, Peru, 16-18 June 2026

Contribution to the IHO Work Programme 2026

Task 3.1.1

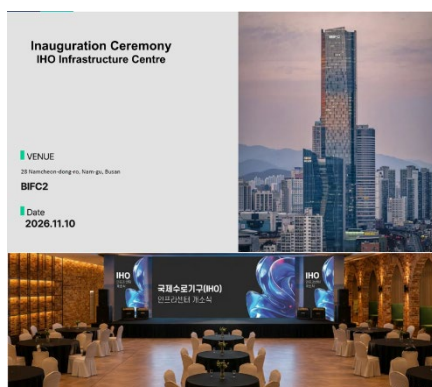
Organize, prepare and report annual meetings of the Inter-Regional Coordination Committee (IRCC).

High level summary

- IRCC-18 reviewed A-4 and Council-9 outcomes, focusing on the IHO Strategic Plan 2027–2032 and Work Programme 2027–2029.
- The S-100 transition remained central, including S-101, S-124, WEND-100, sea trials and digital infrastructure.
- RHCs reported regional progress, while noting challenges in resources, expertise, survey coverage and S-100 readiness.
- Capacity Development, MSI, e-Learning, IBSC standards, C-55 and Empowering Women in Hydrography were reviewed as key enablers.
- Cooperation with partners was strengthened, including ARHC-PAME, UN-GGIM, the European Commission, IALA, RENCs and industry.
- GEBCO, Seabed 2030, DCDB and CSB showed growing momentum, supported by the future GEBCO Secretariat.
- IRCC advanced SPI measurement and organizational alignment, and elected its Chair and Vice-Chair for 2026–2029.

Details:

The **18th meeting of the Inter-Regional Coordination Committee (IRCC-18)** was held in Lima, Peru from 16 to 18 June 2026, hosted at Centro Naval de la Marina de Guerra of Peru. The meeting was chaired by Mr. Thomas Dehling (Germany) and attended by 46 in person and 18 remote. The IHO Secretariat was represented by Director Luigi Sinapi and Assistant Director Leonel Manteigas. IRCC Chair Mr. Thomas Dehling, the Comandante General de la Marina de Guerra de Peru, Admiral Javier Bravo de Rueda Delgado, and IHO Director Rear Admiral Luigi Sinapi opened the IRCC-18 meeting. They warmly thanked the Republic of Peru, the Peruvian Navy and its Hydrographic Service for their outstanding hospitality and excellent arrangements, while recognizing Peru's important role in hydrography, oceanography and regional cooperation. In the context of the 4th IHO Assembly and the approval of the IHO Strategic Plan 2027–2032, they stressed the need to turn strategic ambition into coordinated action, with particular focus on the S-100 transition, technical infrastructure, workforce development, GEBCO governance, the visibility of hydrography and inclusive support to all regions and Member States.



IHO Infrastructure Centre – Inauguration's simulation

IRCC Chair Mr. Thomas Dehling provided the IRCC report, highlighting the outcomes of Council-9 and Assembly-4 affecting the IRCC. IHO Director Luigi Sinapi provided the IHO Secretariat Report, highlighting the actions taken by the Secretariat following

the Assembly, with particular attention to the IHO Work Programme 2027-2029, the IHO Infrastructure Center and the GEBCO Secretariat, and the preparations of the 10th meeting of IHO Council.

HSSC Vice-Chair presented on the progress of measuring the SPIs descending from the approval of the IHO Strategic Plan 2027-2032 and the JHIRPT thanks to an online survey, the Infrastructure Center, Security governance and the merge of ENCWG and S-101PT. A picture on the progress of the development of the S-1xx products belonging to the 3 Phases was presented. HSSC endorsed a quite high number of new S-100 products and IHO Publications, in particular the Ed. 3.0.0 of S-98. The ENDS tree diagram was also discussed and updated. A new category of *Marine management products* (Goal 2) was created. Finally, it was noted that Ms Julia Powell was elected as new HSSC Chair.

RHC and **HCA** Chairs and representatives reported on key regional achievements, findings and lessons learned. The main issues are grouped as follows:

1. S-100 transition and digital infrastructure:

- S-100 implementation is progressing alongside S-57 ENC production, but remains constrained by limited resources, expertise and workflow readiness.
- Stronger coordination is needed for S-101 coverage, transboundary areas, CATZOC/QoBD consistency, ENC overlaps and paper chart transition.
- Shared responsibility for S-1xx products requires improved national and regional coordination.

2. Capacity development and regional disparities:

- Capacity development remains essential, as Member States have different levels of readiness, infrastructure and funding.
- Tailored support is needed for small island States, remote coastal areas, inland waters and regions with survey gaps.
- Sustainable funding and wider participation in IHO activities remain key challenges.

3. Cooperation, partnerships and visibility:

- Regional cooperation remains central to knowledge sharing and implementation.
- Collaboration with RENCs, IALA, SPC, the European Commission, industry and other partners is delivering practical benefits.
- IHO membership enlargement and engagement with non-hydrographic stakeholders remain priorities.

4. Seabed mapping, GEBCO and emerging technologies:

- RHCs continue to support GEBCO and Seabed 2030 through regional initiatives, partnerships and data contributions.
- Satellite-derived bathymetry, crowd-sourced bathymetry, autonomous systems and deep Argo float data offer important opportunities.
- Offshore, polar, inland and remote coastal areas remain insufficiently surveyed.

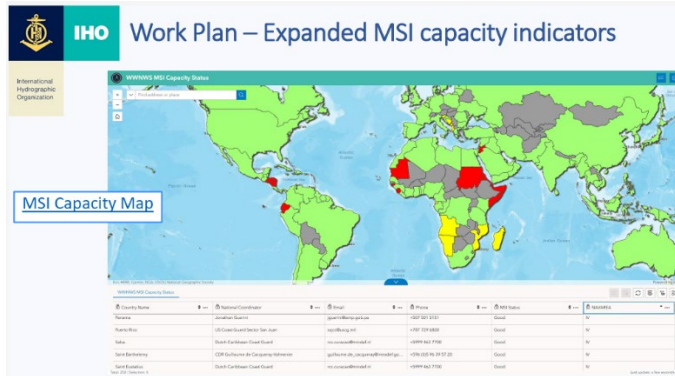
5. Polar and conflict-affected regions:

- The Black Sea region continues to face serious operational constraints due to the conflict in Ukraine.
- Arctic and Antarctic regions require increased attention due to climate change, navigation growth and environmental risks.
- Polar risk initiatives confirm the strategic relevance of hydrographic data collection and sharing.

6. Inclusion and participation:

- The Empowering Women in Hydrography Project continues to support training and international participation.
- Small island coastal States require continued support to participate fully in IHO activities.

The **IBSC** Chair reported on IBSC49, noting that 19 submissions were reviewed: 5 were recognized, 3 were not recognized, and 11 were offered intersessional revision due to significant shortcomings. The Board will continue supporting institutions through guidance and workshops to improve submission quality and promote the “*Right First Time*” principle. IBSC also discussed the future edition of IHO Publication C-47, as tasked by the 4th IHO Assembly, and requested IRCC endorsement of the new editions of S-5A, S-5B, S-8A and S-8B, with final Member State approval to be completed by Circular Letter from the IHO Secretariat.



Expanded MSI capacity Indicators

The **WWNWS-SC** Chair reported on WWNWS17, held for the first time in the United States. While recognizing its potential value for the transition to S-124, WWNWS could not reach consensus on the cessation of in-force bulletins and did not endorse the related plan or proposed amendments to IMO Resolution A.706. The “as a service” model was supported in principle as the preferred approach to ensure ECDIS access to all S-124 warnings, noting that it would require IP-based dissemination; SECOM was endorsed as one possible delivery method. WWNWS endorsed S-124 implementation targets for NAVAREAs of 40% by 2028, 70% by 2030 and 100% by 2032, and for EGC Coastal Warning, NAVTEX service and coverage areas of 40% by 2029, 70% by 2031 and 100% by 2033. It also agreed that initial S-124 areas of responsibility should mirror those in the GMDSS Master Plan, approved six MSI capacity indicators for Coastal States, proposed related updates to C-55, noted the 2026 MSI SPI at 89.6%, and reported two MSI courses delivered in Indonesia and New Caledonia.

The **CDSC** – Capacity Development Sub-Committee considered the new IHO Strategic Plan and relevant SPIs, including Maritime Safety Information and adequately surveyed areas reported through C-55. CDSC agreed to propose to IRCC the establishment of a Task Team to review the purpose of C-55 and identify improvements. The Chair highlighted the strong support to the Capacity Development Work Programme from PRIMAR, IC-ENC, the Republic of Korea and Japan through the Nippon Foundation, as well as the use of a CD activity calendar to improve planning and participation. CDSC also reviewed progress on Empowering Women in Hydrography, supported by Denmark and opportunities offered by the United Kingdom, France and Canada. CDSC encouraged further contributions to the IHO eLearning Centre and discussed basic Category B eLearning modules to be completed before S-5B courses, with potential benefits for course duration, cost and student capacity. Following A-4 Decision 29, CDSC allocated €113,080 to four additional 2026 CDWP activities and €86,920 to the 2027 CDWP. Finally, CDSC agreed to establish a Task Team to update the IHO CD Procedures and requested more efficient payment arrangements.

The **WENDWG** Chair reported on recent achievements, including completion of the expanded Guidelines on the Implementation of the WEND-100 Principles, now under Member State approval. To allow more flexible updates as S-100 implementation matures, WENDWG discussed revising IHO Resolution 01/2021 to delegate ownership of the Guidelines to IRCC or WENDWG. WENDWG invited RENCs to engage with WWNWS on their possible role in the delivery chain for navigational warnings. Hydrographic Offices reported an expected S-101 production readiness of about 42% by 2026, around 8% below the SPI 3.1.3 target. S-11 Part C is planned for submission to Council-10 under the IHO Resolution 2/2007 lifecycle process. WENDWG also addressed INTOGIS III input automation, S-98 solutions for harmonized management of overlaps in ECDIS and agreed that full WENDWG meetings should remain in person, with virtual meetings only for specific interim discussions. RHC reports showed varying S-100 readiness, with many HOs preparing initial S-101 production through S-57 conversion, while concerns remain over production environments, coordination capacity and cataloguing tools.

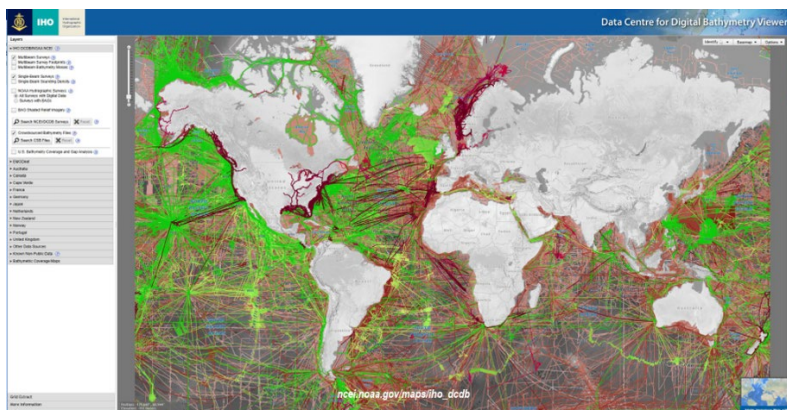
The **JWGMGI** - First Expert Meeting of the UN-GGIM and IHO Joint Working Group on Marine Geospatial Information was held in Chiang Mai, Thailand, from 4 to 8 May 2026, under the theme “Advancing Integrated Marine Geospatial Information Management”. The Group established its Vision and Mission, focused on making trusted, interoperable marine geospatial information accessible to all nations and integrated into national geospatial information infrastructures. Participants emphasized the value of

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the new Group in consolidating efforts, reducing duplication and providing a coordinated global platform for marine geospatial information management, including links with broader ocean coordination mechanisms such as UN-Oceans. UN-IGIF, UN-IGIF-Hydro and IHO C-17 were recognized as useful references, while delegations called for practical guidance, tools, training materials, case studies, templates and peer-learning. The meeting also discussed the relationship between marine geospatial information, the law of the sea and related legal frameworks, including IHO S-121. In light of the BBNJ Agreement, the Group offered to support related requirements for managing data in the marine domain, including those for Marine Protected Areas. The Group is also progressing an effort to propose a resolution for the UN General Assembly regarding the BBNJ and their support.

The **IENWG** maintains liaison between the IHO and the European Commission on shared priorities, including EU maritime policies, data collection, S-100 products for maritime transport and capacity development. In early 2026, the IENWG contributed to three EU consultations to promote hydrography, IHO standards, data, products and best practices. It was agreed to prepare a high-level meeting in Brussels in late 2026 with Commissioner Costas Kadi and relevant Directorates (e.g. DG MARE, DG MOVE, DG INTPA). The European Commission confirmed that hydrography is expected to be supported in future EU capacity development projects, and the IENWG and the IHO Secretariat will continue engaging with European institutions.

The **CSBWG** reported on the second annual CSB Tools Workshop, whose agenda was guided by the draft CSB Project Manual. The workshop addressed key practical topics, including stakeholder engagement, identifying contributors, Trusted Node requirements, available CSB solutions and tools, data submission and visualization, use cases, and feedback on the draft manual. For the coming year, the team intends to organize a CSB Coordinator Workshop to share successes, challenges, needs and ideas. The WG reviewed IHO Publication B-12 and requested IRCC to endorse Edition 4.0.0 for subsequent Member State approval. The CSBWG and GEBCO SCRUM Chairs also agreed to monitor GEBCO communication activities to ensure CSB is appropriately considered, while NOAA will explore possible communication support from its Coast Survey team. The WG further discussed the Theory of Change (ToC) model introduced at CSBWG16, recognizing its value in defining success metrics for the CSB Initiative. The IHO Secretariat led a group review of the draft model, and it was agreed that the Chair and Secretariat would refine the results into an initial set of target impacts and outcomes.



World reference for raw Bathymetry

The **DCDB** currently archives over 81 TB of uncompressed oceanic soundings collected by vessels during surveys or while on passage, with data discoverable and accessible through the DCDB web map viewer. The DCDB CSB Data Manager position, vacant since June 2024, was filled in September 2025. Recent DCDB enhance-

ments include a modern user interface, improved ingest pipelines with stronger error handling, automated U.S. Academic Research Fleet data ingestion, retirement of legacy processes, and upgraded applications, frameworks and Linux systems to reduce maintenance and deployment burdens. The CSB Coastal State Review Application provides a process for coastal States requesting pre-approval of CSB data collected within their jurisdiction before public distribution. The DCDB also hosts the GEBCO Gazetteer on behalf of the IHO, providing public access to information on more than 5,200 undersea features.

The **GEBCO** Guiding Committee Chair reported that GEBCO is now in a stronger position, with ocean mapping gaining increasing global momentum. The Nippon Foundation-GEBCO Seabed 2030 Project announced that directly measured coverage of the world’s oceans has reached 28.7%, up from 6% in 2017, reflecting growing data contributions to GEBCO. The 4th IHO Assembly approved the establishment of a dedicated GEBCO Secretariat, providing essential administrative support for the implementation of the GEBCO Strategy, which is progressing through its five strategic pillars. Efforts are also underway to have depth recognized as an Essential Ocean Variable. GEBCO’s gridded bathymetric datasets remain freely available through its website, including global grids, user-defined areas and Web Map Services. In 2025, GEBCO datasets were downloaded more than 537,000 times and are now also available through the NERC Centre for Environmental Data Analysis. The new GEBCO Secretariat will initially include a Programme Manager, a Policy Officer and the IHO Assistant Director for Survey and Operations.

IRCC Chair provided a presentation on the **IHO Strategic Plan SPI** and how to implement their measurement, starting from the initial work made by the HSSC. The measure of SPI 3, 4, 6, 7 and 9 remain under the IRCC’s bodies’ responsibility. The concerned IRCC subordinate bodies will provide feedback by the next IRCC19 meeting, June 2027.



JHIRPT discussions – Findings of SWOT analysis

The IRCC Vice Chair presented the work of the Joint HSSC/IRCC Restructuring Project Team (**JHIRPT**) and encouraged participation in the online SWOT survey to assess the current structure of IHO bodies. The aim is to rationalize and improve the IHO structure, built around HSSC and IRCC and their related Working Groups, Sub-Committees and Project Teams. IRCC participants worked in small groups to identify strengths, weaknesses, opportunities and threats of the current IRCC structure. The outcomes will be consolidated and submitted to JHIRPT by 3 July 2026, in support of a coherent proposal for Council-10, fully aligned with the new IHO Strategic Plan

and Work Programme 2027–2029.

To support the global rollout of the S-100 Universal Hydrographic Data Model, the U.S. proposed a virtual **IRCC workshop** on a **Unified Global Grid Scheme**. Fragmented legacy national grids risk data distortion, boundary misalignments and operational inefficiencies. A standardized spatial framework would help harmonize production pipelines, integrate navigational and environmental datasets, and avoid incompatible national systems. A dedicated international virtual workshop would be the most effective way to address this operational need and the U.S. will liaise with the IHO Secretariat for the preparation of the workshop and the diffusion of the information to the IHO MS via an IHO CL.

Canada reported on **ARHC**’s cooperation with the Arctic Council’s **PAME** Working Group in updating and issuing the Cautionary Note “*Caution Required When Navigating in Arctic Waters*”. This is a positive example of collaboration between an RHC and a regional intergovernmental body, achieving wider impact than either could have achieved alone. Based on a formal MOU, the ARHC-PAME model offers a useful example for IRCC and other RHCs to consider, particularly where shared objectives exist in maritime safety, sustainable ocean use and hydrography.

The HSSC Vice-Chair reported that **S-100 sea trials** confirmed clear operational benefits, particularly in confined waters and port approaches, while also highlighting challenges related to data availability and quality, connectivity, real-time delivery, metadata use, system implementation and user-interface design. Future sea trial areas should ensure early familiarization with systems and products, validate data integration through test beds, prepare robust data/scenarios/configurations, and engage HOs, OEMs, ports, mariners and pilots from the outset.

The IRCC elected Mr. Thomas Dehling as **Chair** and Ms Jennifer Jencks as **Vice Chair** for the next 3-year term 2026-2029.

Photo:



IRCC18 participants – Lima, Peru, 16-18 June 2026

The next IRCC meeting is planned to be held in June 2027 in Nigeria (venue TBD). Following meetings will be held in Australia or New Zealand (May/June 2028 – Venue TBD), and Denmark (May/June 2029).