

11th East Asia Hydrographic Commission – Steering Committee Meeting Hangzhou, China 26-27th February 2025

Contribution to the IHO Work Programme 2025

Task 3.2.1.3

Facilitate regional coordination, cooperation and collaboration to improve hydrographic services and the provision of hydro-cartographic products through the structure of the Regional Hydrographic Commissions – here the East Asia Hydrographic Commission - and of the Hydrographic Commission on Antarctica.

High level summary (can be used for posting on social media. Please provide concise lists in bullet point format):

- From 2025, most of the EAHC members will begin S-100 production, four out of ten EAHC members will start regular provision of S-101 ENCs from 2026.
- EAHC Member were encouraged to conduct trial tests, share experiences, and accelerate S-100 production to support ENDS and IMO maritime services. EAHC will manage production plans through the S-100/101 coordinator, ensuring effective implementation.
- The IHO-Singapore Innovation and Technology Laboratory reported completion of the S-131 Project related API/GUI development, with trials begun at Montreal and Vancouver ports in November 2024.
- Seabed 2030 is progressing in the EAHC region. As of January 2025, the EAHC region's seabed mapping coverage has reached 12.40%, reflecting a 1% increase since January 2024.

Details:

The 11th Meeting of the East Asia Hydrographic Commission – Steering Committee (EAHC-SC11), was held from 26 to 27 February 2025 in Hangzhou, China.

The meeting was chaired by VADM Budi Purwanto, Hydrographer of Indonesia. Fifty-five participants representing eight EAHC Members (Brunei Darussalam, China, Indonesia, Japan, Malaysia, Republic of Korea, Singapore and Thailand) and four observers (Australia, United Kingdom, Vietnam and the regional GEBCO Coordinator) participated in the Conference. IHO Secretary-General, Dr Mathias Jonas represented the IHO Secretariat.

EAHC SC-11 was opened with a warm welcome from Mr. Wang Zhijun, the Director General of the Eastern Navigation Service Center, China MSA, emphasizing the importance of hydrographic surveying for maritime safety and economic growth in East Asia. His address highlighted opportunities and challenges from technological advancements and the S-100 implementation, stressing the need for regional cooperation to provide high-quality hydrographic services. EAHC's role in fostering communication, capacity building, and strategic development was acknowledged, along with its contributions to S-100 data testing and maritime infrastructure. China reaffirmed its commitment to collaboration and expressed gratitude to Indonesia and Japan for their support in organizing the meeting.

The Chair welcomed delegates, emphasizing the importance of collaboration in advancing hydrography for safer navigation, environmental protection, and sustainable development. He highlighted the



vital role of hydrographers in supporting maritime activities and align their work with UN Sustainable Development Goal 14.

Dr. Mathias Jonas, the Secretary-General of the IHO, delivered a speech to the EAHC Member States (MSs). He emphasized that the EAHC plays a vital role in uniting coastal states to advance hydrography, ensuring safe and efficient maritime trade in a region of immense economic significance. Standardization, capacity building, and technical collaboration remain essential, especially as we navigate digital transformation in hydrography.

The Chair summarized key discussions and decisions from IHO Council 8, highlighting global hydrographic initiatives, policy updates, and their impact on EAHC member states. Key topics included sharing best practices, the next strategic plan, and meeting modalities. The IHO Council also encouraged RHCs to fully utilize the S-100 International Sea Trial Area.

The Chair reported on key outcomes from IRCC-16, outlining important decisions and recommendations relevant to the region. Updates were provided on capacity-building efforts, regional collaboration, and the advancement of IHO programs. The presentation focused on progress in S-100 implementation, Marine Spatial Data Infrastructure (MSDI), and initiatives to strengthen hydrographic capabilities through capacity building initiatives. Additionally, the Chair conveyed IRCC's encouragement for RHCs to play a more active role in global initiatives such as Empowering Women in Hydrography (EWH) and Crowd Source Bathymetry (CSB), as well as urged member states to support IHO strategic objectives.

Dr Jonas reviewed the impact of IMO regulations on IHO's standardization efforts for e-navigation, including key outcomes from IHO Council 8 (October 2024) that affect the implementation of S-100 ECDIS. Discussions covered the consequences of recent IMO decisions on ECDIS, progress on the S-100 roadmap implementation, and IHO Secretariat activities related to Goal 3 of the existing IHO Strategy, along with its ongoing revision for the 2027-2032 period.

The meeting continued with detailed reports on several ongoing regional activities under the supervision of the Steering Committee such as the progress of the capacity-building efforts within the region, the regional ENC distribution center EA-RECC which serves as the regional S-101 ENC Coordinator and the regional MSDI Working Group.

A broad scope was taken for the region's advancement of S-100 and the application of Nautical Chart Data. China's S-100 Products Readiness Report highlighted the localization of standards, including the translation of S-100 standards into Chinese, which is now available on the IHO website.

China MSA reported on its progress in S-100 product development, following the IHO's phased approach. In Phase 1, focusing on route monitoring standards, China MSA conducted research and testing on various S-100 products, including dataset development for S-128, S-101 ENC conversion, and functional testing for S-102. It also completed production and service systems for S-104 and S-111, integrated S-124 into navigation warning systems, and tested S-129 on ECDIS. In Phase 2, focusing on route planning standards, China MSA has tracked and researched S-125 Marine Aids to Navigation and conducted trial production for S-122, S-123, S-127, and S-131.

China MSA highlighted challenges in S-100 implementation, including data production constraints, secure data transmission issues, and difficulties in upgrading OEM hardware/software and obtaining certifications. To address these, EAHC was encouraged to promote S-100 data globalization, strengthen international collaboration, enhance cooperation with IMO and IEC, and advance data sharing, testing, and the establishment of S-100 sea-trial areas in East Asia.



China's detailed presentation greatly completed the common vision of the Commission on the uptake of S-100 based services. From 2025, most of the EAHC members will begin S-100 production, four out of ten EAHC members will start regular provision of S-101 ENCs from 2026. EAHC Member were encouraged to conduct trial tests, share experiences, and accelerate S-100 production to support ENDS and IMO maritime services. EAHC will manage production plans through the S-100/101 coordinator, ensuring effective implementation.

The IHO Strategic Plan Review Working Group (SPRWG) Chair, RDML Benjamin K. Evans, provided a video briefing on the review of the IHO Strategic Plan for 2027–2032. He elaborated on the origins of the current review, the working group members, and recent activities, including the scoping phase key questions, the decision on three strategic goals, and the drafting of titles, narratives, targets, and SPIs for each goal.

Japan, as the NAVAREA XI Coordinator, reported on the status of NAVTEX stations, noting that the Manila station has been suspended since November 2023 for repairs, with service expected to resume in October 2025. Updates were provided on contact information and GMDSS Master Plan revisions by China and Vietnam, along with Japan's preparations for implementing S-124 in 2026.

The NAVAREA XI Coordinator reported also on WWNWS16 outcomes, highlighting S-124 developments, the transition to S-100 ECDIS, and the BeiDou Maritime Safety System (BDMSS). The S-124 project team updated its work plan, assigning tasks to Member States, with Japan and China taking specific roles. While S-124 Edition 2 awaits IHO endorsement, some NAVAREA coordinators face challenges in meeting the 2026 implementation deadline.

The IHO-Singapore Innovation and Technology Laboratory reported the completion of the S-131 Project API/GUI development, with trials begun at Montreal and Vancouver ports in November 2024. Another project, assigned to S-102 focused first on testing bathymetric data promulgation in different frequencies, creating S-102 datasets using S-100 python scripts. The Dual-Fuel ENCs Project held biweekly meetings, MSS-ENC workshops (June-July 2024), sea demonstrations in the Malacca & Singapore Straits (Aug-Sep 2024) and aboard the Amerigo Vespucci (Oct 2024). The Land-Sea Datum Integration Project was approved and launched in December 2024.

The Dual-Fuel ENCs Project (Phase 1) included harmonization workshops in Singapore (June 2024) and Japan (July 2024), followed by sea demonstrations in Indonesia (Aug 2024) and Singapore (Sep 2024). The MSS-ENC Dual Fuel Project, supported by IHO Lab, is a collaboration between Malaysia, Indonesia, and Singapore to test the transition from ENC S-57 to S-101 in the Strait of Malacca and the Strait of Singapore. Since January 2024, it has involved planning meetings, workshops, and sea trials, successfully displaying S-57 and S-101 data on Dual Fuel ECDIS.

Kevin Mackay from GEBCO presented the progress of Seabed 2030 in the EAHC region, highlighting its role in accelerating GEBCO's efforts to compile the most comprehensive bathymetric dataset. As of January 2025, the EAHC region's seabed mapping coverage has reached 12.40%, reflecting a 1% increase since January 2024. Seabed 2030 and GEBCO welcome various forms of bathymetric data, including sounding sheets, raw and processed data, ENC data, and regional bathymetric products as well as support for IHO's Crowdsourced Bathymetry (CSB).

The EAHC was requested to acknowledge the presentation, encourage positive responses to IHO CL 21/2020 and IRCC CL 01/2020, and actively support the adoption, contribution, and promotion of CSB data in the region.

Japan in its role as coordinator of the Strategic Team Advance Roadmap Technical Group presented a revised structure to enhance EAHC efficiency, a new framework that designates hydrographic services



and activities namely EAHC MSDI WG, TRDC BOD, SRWG, STAR TG, MSDI Ambassador, S-100 Coordinator, S-101 Coordinator, ENC Coordinator, CSBWG Coordinator, and MSI Coordinator as "Project Entities.

Following the intense discussions, all Steering Committee Members approved the new EAHC structure. The meeting discussed and recognized that there may be redundancies if both Steering Committee and Conference continue to be held. The STAR TG will look into this and propose an aligned meeting structure and subsequent amendments for the statutes.



Group Photo EAHC-SC11





Dr. Mathias Jonas and Wang Zhijun, the Director General of the Eastern Navigation Service Center, China MSA



EAHC Production Plan for S-100 based data service provisions

Upcoming meetings:

The next EAHC meeting is scheduled to be held in Tokyo, Japan, in 2026, with Brunei Darussalam proposing to host the 2027 meeting. Japan will provide details on the exact date and venue at a later stage.