

16th Meeting of the Worldwide ENC Database Working Group (WENDWG16) Hong Kong, China, 25–27 February 2026

Contribution to the IHO Work Programme 2026

- Task 2.1.2.7 Monitor and coordinate the worldwide implementation of S-100 based ENCs and ENDS through WENDWG activities.

High level summary:

- S-100 implementation entered its operational phase: WENDWG16 confirmed that the transition from S-57 to S-100 has now become the dominant strategic focus of the IHO, with the operational availability and voluntary use of S-100-based navigation products and services officially commencing on 1 January 2026.
- Strong emphasis on harmonization and coordinated global delivery: the meeting highlighted the urgent need to ensure harmonized global S-101 coverage, management of overlapping datasets, synchronized specification maintenance, and consistent “dual-fuel” governance during the co-existence period of S-57 and S-101 products.
- Progress on key infrastructure and governance tools: significant work was reported on the development of INTtoGIS III, S-128 implementation, S-11 Part C drafting for S-100 products coordination, and the refinement of the WEND-100 Principles.
- Growing engagement with stakeholders and industry: WENDWG16 demonstrated increased involvement of RENCs, industry partners, and regional hydrographic commissions in supporting S-100 implementation, including sea trials, interoperability testing, data distribution concepts, and capacity building initiatives.

Details:

The 16th Meeting of the Worldwide ENC Database Working Group (WENDWG16) was held in Hong Kong, China, from 25 to 27 February 2026, hosted by the Hydrographic Office of the People’s Republic of China and the Hong Kong authorities. The meeting was preceded on 24 February by an ice-breaking reception and welcome dinner.

The meeting was chaired by Jens Schröder-Fürstenberg (Germany), Chair of the WENDWG, with participation from representatives of Hydrographic Offices, Regional Hydrographic Commissions (RHCs), Regional ENC Coordinating Centres (RENCs), industry stakeholders, and the IHO Secretariat. Approximately 50 participants attended the meeting, including representatives from Hydrographic Offices, PRIMAR, IC-ENC, NAVTOR, Teledyne Marine, SuperMap, KQGEO and other industry stakeholders. The IHO Secretariat was represented by Director Luigi Sinapi.

In his opening address, IHO Director Luigi Sinapi welcomed participants and emphasized that WENDWG16 was taking place during a pivotal period for the Organization, immediately following the operational launch of the S-100 framework after more than 25 years of international development efforts. He stressed the importance of the upcoming 4th Session of the IHO Assembly in April 2026, where major governance and infrastructure initiatives would be discussed, including the proposed establishment of an S-100 Infrastructure Centre.

The WENDWG Chair highlighted that the meeting objectives were centered on assessing the readiness of the hydrographic community for S-100 implementation, strengthening coordination mechanisms,

reviewing S-100 governance and distribution concepts, and ensuring the continuity of worldwide harmonized ENC and ENDS services. A comprehensive review of WENDWG accomplishments since WENDWG15 was presented by the Chair. Main achievements included the advancement of the WEND-100 Principles and associated S-1XX implementation guidelines, continued monitoring of S-100 readiness status and strategic performance indicators, progress in the development of INTToGIS III and S-128, completion of the ENDS terminology task, near-finalization of S-11 Part C for Phase 1 S-100 products, and increased engagement of subject matter experts and stakeholders in WENDWG activities.

The meeting recognized that the transition towards S-100 is entering a highly demanding operational phase requiring close cooperation between Hydrographic Offices, RENCs, OEMs, industry partners, and end-users. WENDWG stressed that S-57 and S-101 coverage should remain identical during the “dual-fuel” transition period to ensure consistent ECDIS display and navigational safety. The RENCs (PRIMAR, IC-ENC and RECC) presented updates on their activities and reaffirmed their commitment to supporting S-100 implementation and capacity building. PRIMAR highlighted the development of overlap and consistency checking tools, while IC-ENC presented progress regarding S-1XX production planning among its members.

Regional Hydrographic Commissions provided updates on S-100 coordination activities and readiness assessments. WENDWG reviewed the status of S-100 implementation globally and carried out a live assessment of regional readiness levels for the 2026–2029 implementation milestones.

The WENDWG reviewed the outcome of S-100 readiness surveys and estimated the current global readiness level at approximately 42%, with a response rate of about 61%, consistent with previous years. The meeting emphasized the need to prioritize large-scale S-101 production, especially in areas covered by the World Port Index.

The IHO Secretariat presented progress on the development of INTToGIS III, which is expected to become a key component of the future IHO GIS infrastructure supporting INT charts, S-57 ENCs, S-101 ENCs, S-100 products, and S-128 interoperability. WENDWG agreed that implementation should follow a phased and incremental approach.

Extensive discussions focused on the management of overlapping S-100 datasets, S-57 sunset considerations, maintenance regimes for S-100 product specifications, governance of the dual-fuel transition period, delivery and licensing challenges for S-100 products, integration of S-124 navigational warnings within the RENC delivery chain, and the future role of WENDWG in the evolving S-100 governance structure.

Industry stakeholders contributed actively to the meeting. Teledyne Marine and NAVTOR presented papers addressing S-100 product delivery challenges, licensing issues, and non-SOLAS applications. Canada, the United Kingdom, France, and PRIMAR presented the outcomes of S-100 sea trials and interoperability testbeds, demonstrating important progress in operational testing under real navigational conditions.

WENDWG16 nearly finalized the draft of S-11 Part C covering coordination and management of S-100 Phase 1 products. The document is expected to be submitted to IRCC for endorsement under the IHO Resolution 2/2007 lifecycle regime. Work on Phase 2 products has also commenced.

The meeting reviewed the WENDWG Terms of Reference and agreed that no amendments were necessary at this stage, emphasizing the need for organizational stability during the ongoing S-100 transition.

Finally, WENDWG updated its Work Programme 2026–2027, maintaining focus on monitoring S-100 readiness and planned coverage, development of S-11 Part C, maintenance of the WEND-100 Principles, management of ENC overlaps, support to capacity development and harmonization activities, and monitoring the evolution of INTogIS III and S-128 integration.

Photo:



Participants in the 16th Meeting of the Worldwide ENC Database Working Group (WENDWG16) – Hong Kong, China, 25–27 February 2026 (Credits: Hong Kong Hydrographic Office / IHO)

Upcoming meetings:

The 17th meeting of the WENDWG (WENDWG17) is scheduled to take place in Istanbul, Türkiye, from 16 to 18 March 2027. The United Kingdom offered to host WENDWG18 in February 2028, followed by the Sultanate of Oman in 2029 and Brazil in 2030.