

Seminar on the International Hydrographic Standard S-100 Casablanca, Kingdom of Morocco, 19 – 22 October 2026

Contribution to the IHO Work Programme 2026

3.2.1.4 EAtHC - Eastern Atlantic Hydrographic Commission and Capacity development and S-100 implementation support in the EAtHC/CHAtO region

High level summary:

- The Kingdom of Morocco, through the Division of Hydrography, Oceanography and Marine Cartography (DHOC) of the Royal Moroccan Navy, once again hosted a four-day seminar on the IHO S-100 standard in Casablanca, reaffirming its role as a leading regional champion of hydrography and digital navigation in Africa.
- IHO Director Dr John Nyberg delivered the IHO address at the opening ceremony, reporting back on the commitments made at the previous seminar: S-100 ECDIS may now be installed on ships, the IHO Infrastructure Centre (IHOIC) in Busan will open in November 2026, and every hydrographic office was encouraged to leave Casablanca with a clear S-100 production plan.
- A rich technical programme delivered with SHOM, PRIMAR, UKHO and IHM, together with national presentations from Morocco, Nigeria, France and Spain, covered the full S-100 chain, from survey to product (S-101, S-102, S-104, S-111), aids to navigation and port data (S-201, S-125, S-131), maritime safety information (S-124), and data protection and distribution (S-128, S-100 Part 15).
- The IHO warmly recognized Morocco's chairmanship of the EAtHC/CHAtO, now handed to Spain, and the seminar stood as a strong example of the practical, multi-directional regional cooperation that underpins S-100 readiness ahead of the 2029 IMO milestone.

Details:

The Seminar on the International Hydrographic Standard S-100 was organized by the Division of Hydrography, Oceanography and Marine Cartography (DHOC) of the Royal Moroccan Navy, in partnership with PRIMAR, under the National Defence Administration of the Kingdom of Morocco and held in Casablanca from 19 to 22 October 2026. This was the second time Morocco has hosted the seminar, a sign of the Kingdom's continued leadership in hydrography and digital navigation across the region. Building on the success of the previous seminar, the week brought together hydrographic and maritime stakeholders from Morocco and the Eastern Atlantic region.

The opening ceremony on 19 October was held at a high level, opening with the national anthem performed by the Royal Moroccan Navy band and a video presentation on the Royal Navy's progress in hydrography, oceanography and marine cartography. Opening addresses were delivered by Mr Abdelatif Loudiyi, Minister Delegate to the Head of Government in charge of the National Defence Administration; Rear Admiral Mohammed Tahin, Inspector of the Royal Navy; the Hon. Joseph Bukari Nikpe, Minister of Transport of Ghana; and IHO Director Dr John Nyberg. The level of national representation clearly signalled the priority that the Kingdom of Morocco attaches to hydrography, maritime safety and the digital transition to S-100.

The IHO was represented by Director Dr John Nyberg, who delivered the IHO address. He thanked the Kingdom of Morocco for once again hosting the seminar, observing that hosting once is generous while hosting again is a commitment from which the whole region benefits. He paid particular tribute to Morocco's chairmanship of the Eastern Atlantic Hydrographic Commission (EAHC/CHAtO), noting that, in handing the chair to Spain, Morocco leaves the Commission stronger than it found it. Rather than starting afresh, the Director structured his remarks as a report back on the observations and requests he had made at the previous seminar, in the spirit of holding institutions to what they say.

On S-100, Dr Nyberg noted that the transition is no longer approaching but has arrived. Since 1 January 2026, S-100 ECDIS may be installed on ships, and from 2029 new installations must be S-100 capable. Drawing on the experience of the past year, he observed that the offices making the most progress are not necessarily those with the largest budgets, but those that have chosen a starting point and moved forward. He invited every office without an S-100 production plan to leave the seminar with a clear idea of how to build one, by deciding which product to produce first (for many, S-101 for ports and approaches; for others, S-102 bathymetry built from existing surveys), naming a responsible staff member, and informing their Regional Hydrographic Commission so that capacity development support can follow national plans. He emphasized that S-100 places hydrographic offices at the heart of national marine data management, a position to be earned by stepping forward as custodians of quality, safety and the public interest.

The first day continued with presentations on the progress of S-100 implementation in Morocco, Nigeria, France and Spain, and on PRIMAR's contribution to S-100 implementation. SHOM presented S-100 within the electronic navigation ecosystem and the transition from S-57 to S-101. Moroccan national stakeholders shared their experience and plans, with DHOC presenting its feedback on the conversion of S-57 data to S-101, and DPDPM and DGM presenting their action plans for the transition to S-200 and S-400 respectively, an encouraging demonstration of a whole-of-government approach to S-100 in Morocco. The day concluded with a presentation on the way forward and regional perspectives (NHA), lessons learned from S-100 trials (UKHO) and lessons learned from the transition to S-100 (IHM).

The remaining days offered an in-depth and well-structured technical programme. Day 2, led by SHOM and PRIMAR, followed the path from hydrographic survey to product (S-57, S-101 and the paper chart), covered S-102 bathymetric surfaces, S-104 water level information and S-111 surface currents, and addressed S-100 validation, the PRIMAR S-100 training portal, data quality as the foundation of any S-100 ecosystem, and how to assess the expected benefits of S-100. Day 3, led by PRIMAR, focused on electronic navigation, the S-100 test bed and dual-standard ECDIS, the IALA S-200 series, S-201, S-124 and S-125 for the aids to navigation domain, S-131 marine port infrastructure, S-100 navigation data services, the role of S-128, and data protection, exchange sets, data signing and certificate management under S-100 Part 15. Day 4, led by SHOM, was devoted to maritime safety information and S-124 navigational warnings, from the SOLAS and MSI framework through to the production, dissemination and onboard reception chain, including a live demonstration using PING. Participants were also offered a cultural visit to the Hassan II Mosque.

The seminar was an outstanding success and a fine example of the leadership that Morocco continues to show in the region. Its timing, content and level of participation make a direct and practical contribution to the S-100 readiness of coastal States, and the close partnership between DHOC, SHOM, PRIMAR and other contributing offices illustrates exactly the kind of sustained, multi-directional capacity development that the IHO seeks to encourage. The IHO extends its sincere gratitude to the Kingdom of Morocco and the Royal Moroccan Navy for their outstanding organization and hospitality.

Photos



Dr John Nyberg delivering opening remarks



Participants of the Seminar on the International Hydrographic Standard S-100, Casablanca, 19 October 2026