

19th Meeting of the Eastern Atlantic Hydrographic Commission (EAtHC/CHAtO) Abidjan, Côte d'Ivoire, 1-3 July 2026

Contribution to the IHO Work Programme 2026

WP 3
(task 3.2.1.6)

IHO Capacity Development – Regional Hydrographic Commissions. Attendance at the 19th Meeting of the Eastern Atlantic Hydrographic Commission (EAtHC/CHAtO), including industry seminar and main meeting sessions on S-100 implementation, capacity building and regional hydrographic development.

High level summary:

- The 19th EAtHC/CHAtO meeting was held in Abidjan, Côte d'Ivoire, with delegations from across West and Central Africa and representatives from the IHO, PRIMAR, UKHO, France and industry. The plenary conference was preceded by a two-days thematic seminar on *“Training in hydrography, oceanography and marine cartography in West and Central Africa: successes and prospects”*.
- The conference opened with high-level addresses linking hydrography to maritime safety, port infrastructure, sustainable development and regional sovereignty over marine data. The IHO 2027–2032 Strategic Plan was presented, with S-100 transition, capacity development and the new IHO Infrastructure Centre (Busan) as key pillars.
- Capacity development was the central theme of both days. Morocco announced a new IHO certified Category B training programme. Nigeria's Navy Hydrographic School presented its training portfolio (up to 6 course cycles in 2026) and IHO accredited Category B course, with intent to open to regional intake. Congo Basin representatives proposed a regional centre of excellence to 2035 under the aegis of CICOS¹ and its inland navigation training centre ERFMNI².
- PRIMAR presented the PRIMAR Capacity Development Fund (established 2024) and its S-100 online training portal (22 modules, >1,000 users, multilingual). An ECDIS S-100 seminar sponsored by PRIMAR is planned in Casablanca, 19–21 October 2026.
- National presentations covered Cameroon, Benin, Senegal, Guinea, Republic of Congo, Côte d'Ivoire, Democratic Republic of the Congo, France, Spain, Gabon, Gambia, Ghana, Guinea-Bissau, Liberia, Morocco, Mauritania, Nigeria, Portugal, United Kingdom and Togo. Common themes: inland hydrography, port infrastructure growth driving hydrographic demand, sedimentation challenges requiring regular dredging, equipment and staffing shortfalls, and desire for formal hydrographic services and IHO membership.
- Governance outcomes: Spain (Captain Francisco Diaz Rodriguez) elected as new Chair; Nigeria elected Vice-Chair. EAtHC Statutes signed by the Republic of Gabon now recognized as Associate Member of the commission.

Details:

The 19th EAtHC/CHAtO conference was officially opened by his Excellency Téné Birahima OUATTARA, Vice-Prime Minister and Minister of Defence and M. Hien Yacouba Sié, Minister of Infrastructure and Road Maintenance and M. Amadou Koné, Minister of Transport and Maritime Affairs in the presence of several high-level administrative authorities. IHO Director, Dr John Nyberg presented the 2027–2032 Strategic Plan and the establishment of the IHO Infrastructure Centre in Busan, emphasising that S-100

¹ Commission Internationale du Bassin Congo-Oubangui-Sangha

² Ecole Régionale de Formation aux Metiers de la Navigation Intérieure

represents the most significant IHO technical advance in a generation. His opening stressed that capacity development must be treated not as an isolated item but as a cross-cutting lens: states lacking technical practitioners risk becoming passive recipients of standards designed by others.

The thematic seminar, sponsored by the IHO CBWP, featured presentations from industry and hydrographic service providers and regional entities, with discussion on building a western African training hub taking advantage on existing training capabilities. A presentation covered compact bathymetric systems and drone solutions for port environments, including fixed GNSS reference stations for interference management, bathymetric USVs, LiDAR for above-water structures, and mini-ROVs for under-water inspection – illustrated with recent deployments at the ports of Abidjan and Pointe-Noire. PRIMAR presented the PRIMAR Capacity Development Fund and S-100 e-learning portal. The Regional Maritime University (RMU) outlined its Summer School, donated survey vessel and plans for a West/Central Africa regional centre of excellence in hydrography. CICOS/ERFMNI (DRC) proposed a regional centre of excellence for the Congo Basin with a 2035 horizon: certified diploma and MSc-level programmes, applied research, regional standards adoption and a co-financing model with international partners. Key gaps identified include insufficient hydrographers, cartographers and hydrologists, lack of in-region training pipelines and limited digital cartography for inland waterways. CICOS also pointed out a 1.5 million Euros worth grant by the World Bank to train and strengthen hydrographic expertise for inland surveying in the Congo Basin. The seminar closed with a visit of the Académie des Sciences et Techniques de la Mer (ARSTM), a training centre recognized as a regional Centre of Excellence by the IMO and the African Union.

France presented the regional S-100 coordinator report from the 16th WEND working group meeting (May 2026, Hong Kong). Of 15 regional responses, 42% of producers can generate Phase 1 S-100 products, below the 50% initial target, with significant disparity between states. The working group proposed drafting a guide on the end of S-57 for presentation in early 2028 and initiating revision of IHO Resolution on WEND-100 principles. The UK presented its multi-phase S-100 implementation strategy: awareness, scoping, 3-day workshops, and execution. An operational S-100 data package over the Port of Abidjan was showcased on a portable ECIDS terminal (data made available through PRIMAR platform under R&D licencing): a multi-layer S-100 product combining S-101, S-102 (HDF5 format, S-100 tiles, multiple resolutions) and S-104 enabling dynamic recalculation of safety isobaths with estimated fuel reduction benefits of 14.6% in modelled scenarios. Cameroon, Benin and Congo (RD) each presented national S-100 roadmaps: Cameroon has established a national nautical information architecture; Bénin is planning bathymetric campaigns at Porto-Novo from July 2026; Republic of Congo is extending Pointe-Noire terminal with dredging to 17 m draft and strengthening local hydrographic capacity.

Morocco announced its new IHO accredited Category B programme: 35 weeks, three phases with 30% of intake reserved for other African states. Admissions follow civil (Ministry of Transport) or military channels. The long-term ambition is to evolve toward Category A and establish a regional African training hub. IHO Circular 37 (revised S-5 and S-8) was noted; accreditation submissions will be evaluated under the new standards from 2027.

Nigeria's Navy Hydrographic School (Port Harcourt) presented its portfolio: up to 6 basic hydrographic course cycles in 2026, operator courses, equipment including multibeam, sidescan, and dedicated vessels. A favourable response to Category B accreditation has been received; once finalised the school intends to accept regional intake as an English-language complement to Morocco's French-language offer.

Côte d'Ivoire: the Port of Abidjan's hydrographic department (est. 1953) reported traffic growth from 22 Mt (2015) to 46 Mt (2025), with recent acquisition of multibeam systems, an aquatic drone and

new survey launches. The port trains approximately 500 maritime professionals per year at its autonomous training centre. Sedimentation management is ongoing following widening of the Vridi channel; dredging is programmed every two years at depths of 14–17 m. Senegal: the national hydrographic division reported treatment of three priority zones in 2025 and continuing hydrographic monitoring of over 700 km of coast, three navigable rivers and several high-risk port areas including infrastructure over 60 years old. Guinea: the session highlighted outdated charts, the effects of the Conakry port concession (2012) on channel sedimentation (~5 m/200 m width), and the need for a national hydrographic service and coordination committee. France, the UK and Morocco offered bilateral cooperation for targeted surveys, training and digital product development. DRC: an extensive inland network (approximately 15,000 km of classified waterways) with limited institutional capacity. Existing single-beam equipment and three marine stations (Matadi, Goma, Banana) are available; requests were made for technical, material and financial assistance for certification and chart updates with the UKHO. Spain presented progress on 99% Atlantic coastal coverage, drone deployments, fleet renewal and open-data policy. France reported new bilateral cartographic arrangements (Morocco 2025, Mauritania April 2026), automated chart production from ENC's (less than one minute per chart), and S-101/S-100 conversion training cycles.

Morocco (DHOC), Cameroon, Mauritania, Gambia and Ghana shared national trajectories toward hydrographic autonomy. Morocco described a structured 2008–2021 training plan culminating in full cartographic autonomy, built on Category A officer training abroad combined with field-based skills transfer. Cameroon's national hydrographic service (created 2023) is still in early operational development. Mauritania outlined a five-phase plan: legal consolidation (2026), compliance (2027), trials (2028), recognition (2029) and full autonomy (2040). Recurring themes: the importance of a clear strategic roadmap before acquiring equipment; ensuring tooling is available locally before staff attend courses so learning can be applied immediately; risk of losing trained personnel without career incentives; and the value of regional cooperation to avoid repeating others' mistakes. IHO consultative visits to Gambia were cited as a direct precursor to IHO membership.

Elections confirmed Spain (Captain Francisco Diaz Rodriguez) as Chair and Nigeria as Vice-Chair by applause.

The closing of the conference was followed by a visit to the Port Authority of Abidjan and its infrastructure, in particular its new deep water terminal build in 2022.

Upcoming meeting

The 20th EAthC/CHaTO conference will take place in Lagos, Nigeria in 2027 (dates TBC).

Group Photo

- 1) Opening ceremony 'photo de famille'
- 2) Republic of Gabon signing ceremony of EAthC Statutes
- 3) Closing Ceremony 'photo de famille'





