

22nd MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC22
Santa Cruz Island - Galapagos, Ecuador
5-7 June 2024

DRAFT Report V1

1. a. Opening Remarks, Introductions and Administrative Arrangements

Docs: CBSC22-01A List of Documents (Chair)
CBSC22-01B List of Participants (Chair)
CBSC22-01C CBSC Membership (Chair)
CBSC22-01D ToR and RoP (Chair)
CBSC22-01E ToR for the CB Coordinators (Chair)

The 22nd meeting of the IHO Capacity Building Sub-Committee (CBSC) was held from June 5-7, 2024, on Santa Cruz Island, Galapagos, Ecuador, hosted by INOCAR. The meeting was chaired by Mr. Evert Flier.

Welcome Address: Captain Andrés Pazmiño Manrique, Director of INOCAR, emphasized the importance of Capacity Building (CB) for enhancing navigation safety and marine domain protection. He also highlighted Ecuador's commitment to environmental protection and the Galápagos Islands' role in marine research and sustainable tourism.

Chair's Remarks: Mr. Evert Flier expressed gratitude to INOCAR for hosting the meeting in a location exemplifying sustainable management. He discussed ongoing initiatives to secure additional funding for the CB Work Programme, including the creation of a Project Team for Funding Generation and support from the RENCs, Nippon Foundation, and Republic of Korea.

Director's Insights: Director Luigi Sinapi noted the meeting's significance in addressing IHO challenges, implementing the new Capacity Building Strategy, supporting the S-100 implementation roadmap, and developing hydrographic capacities in coastal states lacking Hydrographic Services.

This meeting underscored the importance of international collaboration and funding in advancing hydrographic capacity building efforts.

2. Approval of Agenda

Doc: CBSC22-02 Agenda and Timetable (Chair)

Participants were invited to comment on the agenda. The Chair proposed 2 amendments:

1. Include an update on the Fund Generation Project Team in agenda item 6, with information also in the IHO Report.
2. Discuss the paper submitted by the MBSHC CB Coordinator, recently received and available on the meeting webpage under agenda item 11.

With these amendments, the agenda was approved.

Decision 01 – The agenda was approved.

3. Matters arising from Minutes of CBSC21 and CBSC22 Intersessional (CBSC22 Int) Meetings

*Docs: CBSC22-03A Minutes of CBSC21
CBSC22-03B Minutes of CBSC22Int
CBSC22-03C Status of Action List from CBSC21
CBSC22-03D Status of Action List from CBSC22 Int*

The minutes from CBSC21 and CBSC22Int were approved.

Review and Update of Actions:

CBSC 21/Action 1: The e-Learning Center has been implemented and is ongoing. USCHC materials are available for the e-Learning Centre.

CBSC 21/Action 2 (Permanent): SWPHC conducted workshops on S100. MSDIWG is very active, and meeting recordings are available on the SWPHC Events & Recordings webpage.

CBSC21/Decision 4: The Secretary reported on the 13th (IHO/IMO/WMO/IOC/IALA/IAEA/FIG/IMPA) Joint CB Coordination Meeting held on 13-14 May 2024. A VTC will be held in September to discuss activities, with the annual 1.5-day meeting scheduled for early September 2025 in Ostend. The CBSC Chair is encouraged to attend if possible.

CBSC 21/Action 3: Norio Baba from Japan provided information on the JICA course. It is recommended to contact JHOD for assistance with the application process. The SWPHC Chair shared information on applying for the JICA Course.

Action 01 – SWPHC to provide the information received from JICA on how to apply to the JICA Hydrographic Surveying Cat. B courses.

CBSC21 / Decision 19: IHO Director Sinapi informed that the IHO Secretariat has Project Officers and interns available to support studies requested by the Committee.

CBSC23 (2025) Meeting Location: The meeting initially planned for Nigeria will now be held in Monaco alongside IRCC17, allowing participants to attend the UN Ocean Conference in Nice. Nigeria's offer to host the meeting should be considered for 2027, as Peru is confirmed to host in 2026.

CBSC22Int / Action 1: Only 2 requests were received to access PRIMAR's Training portal.

CBSC22Int / Action 2: Good phase 3 submissions on ENC's, S-57 to S-101 conversion, and S-100 production were received from CB coordinators for presentation to IC-ENC. Coordinators are encouraged to send submissions as soon as they are developed, rather than waiting for CBSC deadlines. The IC-ENC Steering Committee will provide more information on support in July. PRIMAR may also offer similar support.

Helber Carvalho (SWAtHC Coordinator) inquired about changing the priority of regional submissions for IC-ENC "opt in" funds. The Chair clarified that this offer does not affect the ranking of regions.

Rebecca Cusack emphasized the need for an overview of needs to find appropriate support. The Chair stressed the importance of good proposals. Lucy Fieldhouse noted the challenges in getting some submissions approved and suggested finding alternative ways to collect information for good phase 3 projects.

The Secretary informed that the IHO Secretariat seeks to participate in larger projects with the IMO to support the CB Work Programme.

4. Reports by the Chair and the IHO Secretariat

Docs: CBSC22-04A Report by the Chair (Chair)

CBSC22-04B Report by the IHO Secretariat (IHO Secretariat)

The Chair acknowledged concerns about low funding for Capacity Building (CB) and mentioned ongoing efforts to raise funds. The CBSC should be prepared to utilize additional funding when available. Developments in the Fund Generation Project Team and the Empowering Women in Hydrography (EWH) initiative were discussed. The latter is proposed to become a permanent IHO program on gender balance. Additional funding may bring new challenges and changes in the role of CB coordinators, which the CBSC will address.

Director Sinapi reported that on and stated the IHO Secretariat is ready to assist non-member States in all 15 Regional Hydrographic Commissions (RHCs) to become members.

From C-7, key highlights included the Champion of Hydrography Award, the PT on Fund Generation of IHO project initiatives under the IRCC, gender balance in hydrography, the Strategic Plan Working Group's new timeline for submitting the plan for A-4, and IHO Resolution Guidelines for making events more inclusive, with the IHO Secretariat ready to issue a questionnaire.

For C-8 in Monaco (15-17 October 2024), expected updates include activities of the IHO Fund Generation Project Team, the future of Empowering Women in Hydrography (EWH), contributions to the UN Ocean Decade, efforts to acquire new IHO Member States (MS), and the IHO Annual Report and Finance Report for 2023. The budget surplus for 2023 is proposed to be allocated, with 40k€ going to the CB Fund for 2024. The deadline for proposal submissions by IHO MS is 15 July 2024.

The 2024 CBWP has €293,265 for non-earmarked projects and €790,223 for earmarked projects, totaling €1,083,488. Significant funding increases from the Republic of Korea were noted for 2024 and 2025. The IHO Secretariat is working with the Nippon Foundation and UKHO on a questionnaire for the GEOMAC Project.

Recent CB initiatives include collaboration on the EWH project with IMO-WMU, progress on the e-Learning Center, cooperation with RENCs, the Project Team on Fund Generation of IHO Project Initiatives under the IRCC, IHO and EC cooperation in third countries for hydrographic capacity development, and the 13th Joint CB Coordination Meeting.

Matt Borbash noted that finances were limited in 2022, but the presentation indicates significant funds are now available. Director Sinapi explained that not all activities were completed, including some from the COVID period. Since 2023, the IHO has had an approved budget of €60,000 per year, with additional contributions from ROK for non-earmarked projects: €40,000 in 2024 and €60,000 in 2025. There are also earmarked contributions from ROK and NF.

5. Regional Assessment of CB Activities

5.1 Reports of the Regional Hydrographic Commissions (RHC)

CBSC22-05.1A NSHC Report

The Chair reported that several Members of the RHC are very active in the CB Subcommittee and are active contributors to CB activities and do not require funding support.

CBSC22-05.1B MBSHC Report

In the absence of the MBSHC CB Coordinator, the Secretary presented the regional report. The report highlighted several workshops: a Cartographic Data Management and MSDI workshop in Istanbul (December 2022) with 11 participants, a funded MSI Development & Implementation workshop (May 2024) with 13 participants costing €12,353, and an ENC Quality Assessment and Conversion Course (May 2024) supported by IC-ENC with 11 participants costing \$41,823. Four regional participants attended the IHO Singapore Lab Conversion Workshop. Planned activities for 2024 depend on funding availability. Bulgaria's request to utilize Primar's opportunity is on hold as they are not ENC producers. The report also referenced a paper presented to CBSC 22, listed as agenda item 11.

The Chair emphasized the importance of submitting proposals in advance to allow members sufficient time for thorough review and consideration. The submitted paper will be discussed at the relevant agenda item.

France questioned the notable cost difference between two workshops held in the same location and duration, with the more expensive one having fewer participants. The Chair acknowledged the observation and asked the Secretary to seek clarification from the MBSHC CB Coordinator.

Action 02 – Secretary to ask MBSHC CB Coordinator on the difference of the cost between two workshops held in Istanbul, since one, the Workshop on MSI Development & Implementation with more participants was almost five times less costly than the ENC Quality Assessment & Conversion Course.

CBSC22-05.1C BSHC Report

Thomas Dehling, CB Coordinator, provided update on how the Region addresses CB issues internally, funded by the European Commission and executed through bilateral or multilateral collaborations. The region will not submit proposals to the CBSC. Lithuania is not yet part of the IHO, and hydrography is not a significant focus for the country due to having only one major port and a limited role in hydrography.

CBSC22-05.1D USCHC Report

Jonathan Justi reported that The US and Canada are at a "mature" level in the IHO C B Strategy and do not need additional resources or support. Both countries are focused on developing a highly skilled and diverse future workforce. In September 2023, the US established the NOAA Center of Excellence for Operational and Great Lakes Mapping. NOAA supported the EWH project with internships aboard NOAA vessels. Canada is collaborating with indigenous communities on community hydrography projects. The Chair welcomed Jonathan as the new CB coordinator and thanked the US for its support to EWH.

CBSC22-05.1E EAHC Report.

Indragiri Wardhono, the CB Coordinator, reported on regional activities, including the Training, Research and Development Center – Board of Directors 13 Meeting held 5 March 2024, Bali. The 2023 Technical Visit to Cambodia was postponed to 2024, and the P-37 Workshop on

Hydrography for Disaster Mitigation and Humanitarian Support was conducted as a hybrid activity. The report covered executed activities and courses, as well as planned activities for 2024, including the P-19 Seminar on S-57 to S-101 Transition. The Technical Visit to Cambodia currently lacks funding. Several MS in the region benefited from the CB Programme courses.

CBSC22-05.1F EAtHC Report

Gabin Sogorb, the CB Coordinator, reported on the 2024 activities, which included 3 Technical Visits (DR Congo, Guinea Bissau, and Guinea (Conakry)), and a seminar titled "20 Years of Capacity Building Actions in EAtHC Assessment and Prospect." This seminar, held alongside the regional meeting in April 2024, saw strong participation from 20 out of 24 countries.

The report highlighted regional training efforts, including support from France through the EWH project. It emphasized the need to shift training cooperation from North to South within Africa. The Nigeria Navy's Hydrographic School offers a course for hydrographic surveyors, but it is not recognized by IBSC. Additionally, they recently acquired a hydro-oceanographic ship.

Challenges in the region were noted, such as the lack of IHO-sponsored training in French, the number of non-IHO members, and difficulties many African countries face in meeting Phase 2 and 3 obligations, with Morocco and Nigeria being exceptions. It was stressed that Technical Visits should provide recommendations on addressing issues like human resources, equipment provision, and budgeting, with progress monitored through follow-up meetings.

Thomas Dehling highlighted the European Union's 3-5 year program in the Gulf of Guinea and the need to address how to leverage such opportunities. The Chair noted that France offers the only recognized course for Nautical Cartographers in French. Gabin Sogorb mentioned Morocco's intention to submit a Hydrographic Surveyors course for recognition. The Secretary noted Nigeria's unrecognized program submission to IBSC three years ago and inquired about the submission related to visits to African training centers. Gabin clarified that the submission aims to evaluate regional training establishments for potential implementation of regional training activities.

CBSC22-05.1G SEPRHC Report

SEPRHC Coordinator was not present. The regional Report is available on the webpage. No activities were funded in 2023 or 2024. In terms of Challenges the migration to the IHO S-100 Universal Hydrographic Data Model, new survey technologies and the geomorphological identification of underwater features were raised.

CBSC22-05.1H SWPHC Report

Amanda Williams, CB Coordinator, reported that from February 2023 to February 2024, 3 workshops were planned and executed. In July 2023, a Maritime Safety Information (MSI) Training Course in Fiji was attended by 20 participants, 15 of whom were funded by CB Funds, marking the first such course since 2018. In February 2024, a Workshop on Disaster Response was held in Nadi, Fiji, alongside the SWPHC meeting. An online questionnaire assessing hydrographic capacity revealed that no PICTs are ENC producers and there is only one MBES in the area. Future CB efforts may include equipment donations, software and training, legal consulting, hydrographic governance, and PCA-led familiarisation workshops. The Hydrographic Leaders Program #2 (HLP2) is approved for 2024, and a Technical Workshop on Hydrographic Contracts and Maritime Law is submitted for the 2025 CBWP.

Lucy Fieldhouse expressed interest in the technical workshop on contracts and is keen to implement something similar.

CBSC22-05.1I MACHC Report

Lucy Fieldhouse, the CB Coordinator, reported on several activities since CBSC21, including technical visits to Belize, high-level visits to the Dominican Republic and Jamaica, and a Tides Workshop for Spanish speakers in Costa Rica. Planned activities for 2024 include technical visits to Costa Rica and Honduras, and an MSI course. Challenges in the region include increasing severity of hurricane seasons, lack of hydrographic governance in non-IHO MS, and difficulties for ENC producers in meeting IHO S-100 implementation timelines. Achievements highlighted include opportunities from the EWH project and activities earmarked by the CBWP for regional members.

CBSC22-05.1J SAIHC Report

Lucy Fieldhouse, the CB Coordinator, reported on activities since 2023, including an MSI Course in Oman and a Raising Hydrographic Awareness Seminar. For 2024, plans include a seminar before the SAIHC20 meeting, a technical visit to Uganda, and ENC training for Mozambique. Challenges in the region include diverse port traffic, limited IHO membership among associated states, and varying technical maturity affecting digital transformation. Priorities remain developing Phase 1 capabilities and engaging non-IHO states through the SAIHC African Great Lakes & Rivers Sub Working Group. The Chair noted that hydrographic capacity often relies on harbours, with some navies, like in Ghana and Cameroon, working to elevate hydrography nationally.

CBSC22-05.1K NIOHC Report

Lucy Fieldhouse, the CB Coordinator, reported on activities since 2023, including an MSI Course in Oman with RSAHC and SAIHC. For 2024, plans include another MSI Course with neighbouring RHCs and online workshops to support the Regional CB workplan. Challenges include limited engagement opportunities with some Red Sea Maritime States, the need to build sustainable Hydrographic Services, and accessing CB activities to develop Phase 2 capability. Achievements highlighted close coordination between NIOHC and RSAHC CB coordinators to enhance regional benefits and participation in CBWP earmarked activities.

CBSC22-05.1L RSAHC Report

In the absence of the CB Coordinator, the Secretary presented on her behalf, highlighting the Persian Gulf's strategic importance in global oil transportation, producing nearly one-third of the world's oil. RSAHC includes 12 coastal states, nine of which are IHO members. Planned activities for 2024 include technical visits to Iran and Iraq, an MSI course, and a workshop on S100/S-101. For 2025, activities include a technical visit to Kuwait, courses on S-100/S-101 production, MSDI and database management, and MBES processing. Challenges include political issues and varying participation levels among MS. Achievements include identifying training needs for the next three years and planning joint activities with NIOHC.

The Chair highlighted that is very recommendable to have CB activities shared by more than one Region.

CBSC22-05.1M SWAtHC Report

Helber Carvalho, the CB Coordinator, presented a regional assessment of the CB Phase. In 2023, activities included participation in the A-3 meeting supported by the EWH Project, a Multibeam Systems Operation Course in Brazil, and attendance at IHO-Singapore LAB workshop and representatives at the MACHC Tides Training Course in Costa Rica. In 2024, activities included a Hydrographic Awareness Seminar, a workshop on ENC S-101 production, and an ENC Validation Training Course. Proposed but unfunded activities for 2024 and planned activities for 2025 include courses on S-57 to S-101 conversion, MBES acquisition, and tides and water levels. Challenges include implementing S-100, limited

resources, and encouraging Paraguay and Bolivia to join SWAtHC. Prioritization of submissions for the 2025 CBWP was also proposed.

Decision 02 – to allow SWAtHC to change the priority in the Region (Procedure 4 item 6) between two submissions. The submission of “MBES Acquisition and Processing Survey Course” to have priority 1 and the submission “S-57 to S-101 conversion and S-100 production Course (5 days)” to become priority 2.

6. Regional or other projects for CB

Docs: TBA

IRCC Fund raising PT

Rebecca Cusack reported on the PT membership, which includes the Chair from the UK, the Vice-Chair from the USA, and the Secretary from Denmark. The PT has developed a broad workplan, initially focusing on creating a prioritized list of activities for review by IRCC and HSSC. This list aims to capture all known current and future needs. The next focus will be identifying recurring funding opportunities, divided into short-term and long-term options. The Chair inquired about other participating bodies, and Rebecca mentioned members from the IHO Secretariat and potential partnerships with other organizations. Rebecca noted the need for funds in areas beyond the CB Workplan like S-100 readiness. The Chair explained that the project was extended due to the need for broader support, as discussed at the A-3. Thomas Dehling emphasized the importance of linking the funding PT with CBSC, RHCs, and other groups. Director Sinapi highlighted the need to allocate funds to those who need them most, with earmarked funds being a certainty. Rebecca concluded by outlining the project plan and the goal of having it in place by A-4.

IENWG & EC

Thomas Dehling informed the Sub-Committee about the IENWG & EC's cooperation with the EU, focusing on using EU funds for CB outside the EU, particularly in the Pacific. Discussions have started, but new EC partners will be engaged post-elections. The INMAR project in the Gulf of Guinea is a key opportunity, with interest in other regions as well. All funds will be earmarked for specific projects. A presentation at IRCC next week will involve CBSC. The Chair requested Germany and France to keep CBSC informed about future engagements and noted a report from IENWG to IRCC.

7 Outcomes of the IRCC 15 and 7th meeting of the Council

7.1 Outcomes of the IRCC 15

Docs: CBSC22-07A Decisions and Actions from IRCC15 (Secretary)

The Secretary presented the list of decisions from IRCC15 that affect CBSC and highlighted those relevant.

IRCC15/Action 1: Ask subordinate bodies to review the respective ROP and TOR based on Decision 9b of the Assembly on gender-inclusive language.

Action 03 – Vice-Chair to review the CBSC TOR and ROPs in terms of gender-inclusive language as stated in Decision 9b of the 3rd IHO Assembly (deadline: next intersessional meeting).

IRCC15/Decisions 10, 11 and 13 are related to the importance of the CB funds to the RHC's and to note the need for more non-earmarked funds. Noted.

IRCC15/Action 2 tasked CBSC to liaise with RENCs to investigate which countries are not supplying CATZOC data to IHO Secretariat. Completed.

IRCC15/Action 3 asked IHO Secretariat to issue a questionnaire on gender balance via Circular Letter every 3 years before the Assembly. This permanent action was considered by the IHO Secretariat.

IRCC15/Decision 29 endorsed the IHO C-17 v 3.0 from MSDI as a CB document this was highlighted by the Secretary.

7.2 Outcomes of the 7th meeting of the Council

Docs: CBSC22-07B Decisions and Actions from C-7 (Secretary)

The Secretary presented the list of decisions from C-7 that affect CBSC.

Decision C7/22 - IRCC to establish a Project Team on Fund Generation of IHO Project Initiatives under the IRCC. The PT was established. Update provided agenda item 6 and a report will be presented to IRCC16.

Decision C7/24 - Council tasked the IRCC, to first define through the CBSC the regulatory framework (M-3) for a continued activity on this social theme through a proposal for an IHO Resolution. The Council agreed to continue with the EWH project led by the CBSC supported by remaining funds and future financial and / or in-kind support as currently announced by CA, NO, DK, US, but still to be confirmed. IRCC Chair Thomas Dehling clarified that this needs to be ready for IRCC17 (2025) to be present to C-9 and then submitted to the 4th Session of the IHO Assembly. The meeting discussed this issue further on agenda item 8.2.

8. Operational issues of the CBSC

8.1 IHO E-Learning Center

Docs: CBSC22-08.2 CB E-learning Steering Committee

The CBSC Chair, as Chair of the E-learning Center Steering Committee (SC), reported that 3 SC meetings have been held with good regional representation, though attendance has sometimes been limited. The SC has established its Terms of Reference and Rules of Procedure. The Republic of Korea is providing a technical manager, but a General Manager has not been identified, with tasks currently handled by a General Manager Team. CB Coordinators are responsible for identifying e-learning material for the center, which will also link to existing resources. Gabin Sogorb inquired about the certification model, and the Chair confirmed that access to the entire system, including certification, is currently free for both IHO members and non-members.

8.2 Framework for IHO Gender Balance

Docs: CBSC22-07B Decisions and Actions from C-7 - Decision 24

The Meeting discussed creating a framework for IHO Gender Balance to propose to IRCC. The Secretary suggested forming a Project Team (PT) and inviting IRCC16 participants to join. Thomas Dehling recommended including Canadian representatives. The Chair supported forming a PT under CBSC to build on the Empowering Women in Hydrography project and explore it as a gender balance program within IHO. Thomas Dehling noted the opportunity to involve more participants during IRCC due to the presence of key stakeholders, and other interested CBSC members can also join the PT.

Decision 03 – to create a Project Team under the CBSC in liaison with Canada, other potential stakeholders and interested CBSC Members to propose a framework for IHO Gender Balance by the end of 2024.

8.3 IHO Empowering Women in Hydrography (EWH) Project

Doc: CBSC22-08.3 Empowering Women in Hydrography (EWH) Project update (Secretary)

The Secretary updated the Meeting on the IHO EWH Project, focusing on recent developments since the last report in February. The Council tasked IRCC to define a regulatory framework for ongoing activities related to this social theme, proposing an IHO Resolution. The EWH project will continue with remaining funds and future support from CA, NO, DK, and the US, pending confirmation. Planned activities for 2024 include the UK's contribution to gender balance, NOAA's at-sea training opportunities, collaboration with IC-ENC on eLearning, hiring an EWH assistant, continuing the UKHO-supported Mentoring Programme, preparing more events, and organizing internships.

Action 04 – CB coordinators to inform the members of the respective regions of the UK gender balance fund as announced in the IHO CL 25/2024.

France and the USA expressed their intention to continue offering opportunities similar to those provided in 2024.

8.4 Update on Sponsored Courses in Hydrography and Nautical Cartography

Doc: CBSC22-08.4 Sponsored Courses (Secretary)

The Secretary updated the meeting on the regular CBWP-sponsored courses in Hydrography and Nautical Cartography, emphasizing their importance and the time required to prepare good candidates. CB Coordinators were encouraged to share these opportunities in their regional meetings. Additionally, the Secretary highlighted the importance of S-100 implementation, presenting offers from Primar and expected support from IC-ENC. The Chair acknowledged the significant contributions from ROK, RENCs, and the Nippon Foundation.

8.5 CBSC Statistics

Doc: CBSC22-08.5 Statistics (Secretary)

The Secretary presented the CBSC Statistics, noting a decrease in non-executed activities over the past year. Six technical visits were completed, and 121 students or participants were funded. For 2025, 29 submissions have been received, totalling €584,000.

8.6 CB Procedures

The Secretary requested a review of Procedure 4, part 8, concerning discounts for recent similar activities, and whether High-Level Visits (HLV) or Technical Visits (TV) should be considered on a regional or state basis. It was agreed that "similar" would refer to proposals for the same activity conducted in the same state.

Decision 04 – Procedure 4 part 8 in relation with TVs, an activity should be considered only similar if there was a TV to the same state.

Discussion on the paper submitted by MBSHC highlighted that the current CB Strategy is effective in addressing issues. However, the lack of budget prevents funds from reaching Phase 2 projects. The success of CB Coordinators should be measured by project execution rather than securing more funds. The CB Strategy was approved by all MS without comments, and Phase 1 projects remain important. Gabin Sogorb expressed uncertainty about the proposal's support from MBSHC, noting it had not been circulated among members to his knowledge.

Decision 05 – the paper submitted by the MBSHC CB Coordinator was considered and the MBSHC CB Coordinator is invited to present clarifications on how the current CB Strategy and procedures are not adequate and, on the recommendations, provided at the next CBSC intersessional meeting.

8.6 Review of the 3-year RHC Work Plans 2024-2026

Docs: CBSC22-08.6A MBSHC 3-year Work Plan

The activities planned for 2024 and submitted for 2025 are in the presentation reported during agenda item 5.1 (document CBSC22-08.6A).

CBSC22-08.6B EAHC 3-year Work Plan

Indragiri Wardhono, the CB Coordinator, reported on the TRDC BOD 13 Meeting held in 2024 in hybrid mode. The report covered activities executed in 2023 and planned activities for 2024, including a Technical Visit to Cambodia and a VTC Seminar on S-57 to S-101.

Participants from the region benefited from various CB opportunities, such as the KHOA Cat B Nautical Cartography Programme (Philippines), JICA Cat B Hydrography Programme (Indonesia, Philippines), GEOMAC Nippon Foundation Cat B Cartography Programme (Indonesia), and NOAA Empowering Women in Hydrography (Philippines).

No submissions were received for 2025, but the CB Coordinator plans to prepare some during the meeting for funding by IC-ENC.

CBSC22-08.6C EAtHC 3-year Work Plan

Gabin Sogorb reported on the planned activities for 2024, including a Technical Visit (TV) to Sao Tomé e Príncipe. For 2025, 3 TVs were proposed for Gabon, Sao Tomé e Príncipe, and Equatorial Guinea, along with a Training Center Visit (TCV), International Cooperation Agency Visits (ICAV), and a Technical Implementation Visit (TIV) by the UK. Proposals for 2026-2027 were also communicated.

New ideas included focusing TVs more on implementing recommendations, recognizing the significant hydrographic capacities in countries like Morocco, Ghana, Nigeria, and Angola, and the importance of revisiting African maritime academies to develop courses integrating hydrography and physical oceanography, and considering large-scale regional development projects.

CBSC22-08.6D SEPRHC 3-year Work Plan

Jose Cordova (Ecuador) presented on behalf of Felipe Barrios, the CB Coordinator. He reported that the region did not receive any IHO CB funds in the past year and highlighted a lack of training in S-101 and S-102 production. To address this, a proposal was made to support the CB Programme by increasing shares from ENC revenues, with an initial evaluation of how the Hydrographic Offices (HOs) are performing.

The Chair noted that potential IC-ENC funds could support Phase 3 proposals. Thomas Dehling. added that proposals might have a higher chance of success if more countries are involved.

CBSC22-08.6E SWPHC 3-year Work Plan

Matt Borbash, the outgoing CB Coordinator, reported on several key activities since the last annual CBSC meeting. In 2023, an MSI Regional Workshop was held in Nadi, Fiji, funded by CB Funds. In 2024, a Disaster Response Workshop and a CB Audit involving eight PICTs were

conducted, revealing a lack of funds for hydrography but a strong desire to build capacity, despite no current ENC production. Needs identified include systems, software, platforms, and trained personnel. The Hydrographic Leaders Program (HLP2) was approved for 2024, and a proposal for a 2025 Technical Workshop on Hydrographic Contracts and Maritime Law was submitted. Amanda Williams will replace Borbash as the new CB Coordinator.

CBSC22-08.6F MACHC 3-year Work Plan

CB Coordinator Lucy Fieldhouse reported that the activities for 2024, previously mentioned, now include proposed dates for funded Technical Visits to Costa Rica and Honduras. For 2025, plans include a Technical Assessment Visit to the Bahamas following the HLV submission, an HLV to Guatemala, a Hydrographic Awareness Seminar before the MACHC meeting, an ENC Quality and Conversion Course (S-57 to S-101), and a Tides and Levels Workshop for English speakers. In 2026, additional Technical Visits are expected, along with another Hydrographic Awareness Seminar, a Survey Planning Course, and an ENC Production & Quality Assurance Course.

CBSC22-08.6G SAIHC 3-year Work Plan

CB Coordinator Lucy Fieldhouse reported that for 2024, a funded Technical Visit to Uganda is expected in October, and a Raising Hydrographic Awareness Seminar is being prepared for Kenya in September. The delivery of Mozambique ENC training, initially funded in 2021 and to be delivered by Portugal, remains uncertain due to organizational changes in Mozambique. For 2025, plans include a Technical Visit to Zambia, a Hydrographic Awareness Seminar before the main SAIHC meeting, an S-10X Awareness Workshop, and a Phase 1 development activity. In 2026, additional Technical Visits are anticipated, along with another Hydrographic Awareness Seminar before the SAIHC19 meeting and an MSI training course.

CBSC22-08.6H NIOHC 3-year Work Plan

CB Coordinator Lucy Fieldhouse reported that for 2024, the Seminar on Raising Awareness of Hydrography before the NIOHC23 meeting in Thailand was cancelled, but the MSI course with RSAHC is expected to be hosted by Bahrain in October. For 2025, plans include a Seminar on Raising Awareness of Hydrography, an ENC Quality and Conversion course (S-57 to S-101) with RSAHC, and a Marine Spatial Planning Workshop with RSAHC. Although a Workshop on SDB application was not funded, it will be pursued in a VTC mode. In 2026, additional Technical Visits are anticipated, along with a Hydrographic Awareness Seminar before the NIOHC meeting and an MSI training course with SAIHC and RSAHC.

CBSC22-08.6I RSAHC 3-year Work Plan

In the absence of the CB Coordinator, the Secretary reviewed the provided document. For 2024, planned activities include a High-Level Technical Visit to Iraq, a Technical Visit to Iran, an MSI course with NIOHC, and a Raising Awareness Workshop on S-100/S-101 with NIOHC. For 2025, submissions include a Technical Visit to Kuwait, an ENC Quality and Conversion course (S-57 to S-101) with NIOHC, a Marine Spatial Planning Workshop with NIOHC, MSDI and Database Management with NIOHC, an MBES Processing Course with NIOHC, and a Basic S-100/S-101 Production Course.

CBSC22-08.6J SWAtHC 3-year Work Plan

Helber Carvalho, CB Coordinator, presented the plan during agenda item 5.

The Chair delivered a presentation on “How CSB Can Support Hydrographic Offices”

The presentation opened with a definition of Crowdsourced Bathymetry (CSB) and noting the vast number of ships on the water. In 2014, the IHO launched a project to encourage mariners to collect and contribute CSB to the IHO Database DCDB. The current database data and project examples were presented. Tools and resources from the CSBWG, including free data loggers, were highlighted for their support in data collection and delivery. A NOAA study found CSB accuracy to be generally CATZOC C capable. CSB aligns with the IHO Strategic Plan's three goals and supports several UN Ocean Decade Challenges.

The meeting discussed CSB as a topic for regional CB, with positive feedback from Matt Borbash. and Director Sinapi on its potential and impact.

9. CB Management

9.1 Update on the 2024 CBWP

Doc: CBSC22-09.1 Updated 2024 CBWP (Secretary)

The Secretary asked the CB Coordinators to provide updates on the 2024 CBWP via email, and to inform him of any cancelled events.

9.2 Finance Report

Doc: CBSC22-09.2 Finance Report (Secretary)

The Secretary presented the Finance Report to the CBSC for approval. For non-earmarked projects, the remaining funds from 2023, combined with contributions from the IHO Secretariat (€65,000) and ROK (€60,000), are expected to total €189,061.75 for the 2025 CBWP, assuming all activities are executed as estimated.

Thomas Dehling raised that previously any unspent funds would be used to fund pending activities in the workplan.

Decision 06 – if additional funds are attributed to the CB Fund in 2024 they will be allocated to the 2025 CBWP.

Decision 07 – The Finance Report for 2023 was approved.

9.3 Management Plan

Doc: CBSC22-09.3 Draft 2025 CB Management Plan (Secretary)

The meeting debated whether an HLV activity is similar to a TV and the best sequence of events but concluded that a one-size-fits-all decision is challenging. The CB Phase of Marine Spatial Planning was discussed, noting that raising awareness (phase 0) and representation (phase 3) are both important aspects of governance.

Decision 08 – on the preparation of submissions to CBSC an HLV is considered an activity similar to a TV item 8.

Decision 09 - for effects of procedure 4, MSP is considered to be a phase 2 activity of the CBWP, in general.

Decision 10 – EAthC decided to remove the submission for the Technical visit to Equatorial Guinea.

Decision 11: to increase the following submissions on the mentioned points in Procedure 4 item 9:

MBSHC	S57-S101 Conversion Training	2 points
MACHC	Technical Visit - Bahamas	2.1 points

Decision 12 - The meeting decided to fund the following activities, if the activities in bold they are funded by the IC-ENC:

EAtHC	Technical visit to Gabon	7,000
EAtHC	Training Center Visit (TCV) and International Cooperation Agency Visits (ICAV) in EAtHC countries	25,000
NIOHC	Seminar on Raising Awareness of Hydrography	17,250
SAIHC	Raising Hydrographic Awareness (for SAIHC Associate and Non-Members)	20,100
MACHC	Seminar on Raising Awareness of Hydrography	33,000
RSAHC	Technical Visit to Kuwait	5,680
SWPHC	Technical Workshop on Hydrographic Contracts and Maritime Law	6,000
EAtHC	Technical visit to S. Tomé e Príncipe	7,000
EAtHC	Technical Implementation Visit by UK	7,000
SAIHC	Technical Visit – Republic of Zambia	4,000
MACHC	High Level Technical Visit to Guatemala	5,000
NIOHC / RSAHC	ENC Quality and conversion course (S-57 to S-101 Conversion)	32,900
SEPRHC	S-101 Workshop – Electronic Navigational Chart / S-102 Workshop Bathymetric Surfaces	30,247
SWAtHC	MBES Acquisition and Processing Survey Course	16,360
MBSHC	S57-S101 Conversion Training	20,650
MACHC	Technical Visit - Bahamas	5,000
NIOHC / RSAHC	Marine Spatial Planning Workshop	37,900

Decision 13 - by 25 July CBSC to be informed by IC-ENC on the decision related with available funds for CB activities (Vice-Chair and IHO Secretariat to liaise with IC-ENC), 1 August the decision will be circulated to the CB Coordinators and on 8 August the CBSC will decide on the adjustment of the 2025CBMP and 2025 CBWP.

9.4 Adoption of the 2025 CBWP

Doc: CBSC22-09.4 Adopted 2025 CBWP (Secretary)

CBSC adopted the 2025 CBWP (Doc. CBSC22-09.4) drafted during the meeting following the approval of the 2025 CB Management Plan.

10. CBSC Report to IRCC16 Meeting

The Chair outlined the timings for drafting and review of the CBSC report to IRCC16.

Action 05 – the Secretary to send the draft CBSC22 Report to IRCC16 to the CBSC Members and participants of CBSC22 to receive comments until the end of Saturday 08 June 2024 (UTC-6).

11. Any other business

The Chair suggested renaming the Sub-Committee from Capacity Building to Capacity Development, a term used by other organizations.

Matt Borbash noted that "Capacity Building" refers to developing nonexistent capacities. Thomas Dehling emphasized that any change should add significant value and focus on how they address cooperating countries. Procedurally, a proposal must be assessed by the IRCC before being decided upon by the Council and Assembly. Director Sinapi stressed the need for a real advantage, given the recent approval of the CB Strategy. Lucy Fieldhouse felt more consideration was needed, and Thomas Dehling recommended allowing more time to review terminology used by other organizations.

Action 06 – the Chair team to investigate a possible change of the use of the term Capacity Building, to be discussed at the next intersessional meeting.

The EAHC CB coordinator suggested distributing funds equally by region. However, the Chair explained that this contradicts the CB Strategy, which received no objections from MS. Equal distribution assumes all regions need the same support, which isn't accurate. The focus should be on regions with greater needs.

The Chair announced progress in visualizing navigational warnings, following discussions with the chair of WWNWS. This development will be presented at IRCC16.

The Chair invited inputs for the review of the IHO Strategic Plan. Thomas Dehling noted that Capacity Building (CB) is well represented in the Strategy.

12. Next CBSC Meetings (venue and date)

Director Sinapi explained that the next meeting will be in Monaco to align with the UN Ocean Conference in Nice in June 2025. Thomas Dehling emphasized the tradition of holding CBSC and IRCC meetings back-to-back and the importance of allowing participants to attend the UNOC. Australia had offered to host the 2026 meetings, but the Chair suggested Australia and New Zealand consider hosting in 2028 to allow Nigeria the opportunity to host in 2027, highlighting the significance of holding these meetings in Africa.

Decision 14 – Pending on the confirmation from IRCC to have the next meetings as follows:

2025 CBSC Intersessional: 6 February 2025

CBSC23: 28 to 30 May 2025 – Monaco

CBSC24: May / June 2026 – Peru

CBSC25: May / June 2027 – Nigeria

CBSC26: May / June 2028 – Australia or New Zealand

CBSC27: May / June 2029 – Denmark (TBC)

13. Review of the List of Actions

Doc: CBSC22-13 Draft list of actions from CBSC22 (Secretary)

CBSC reviewed the List of Actions and Decisions of CBSC22.

14. Closure

The Chair ended the meeting thanking the host for their support and all participants for the fruitful discussions.