

19th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC19
VTC, 9 - 10 June 2021
REPORT

1. Opening Remarks

Docs: CBSC19-01A List of Documents (Chair)
CBSC19-01B List of Participants (Chair)
CBSC19-01C CBSC Membership (Chair)
CBSC19-01D ToR and RoP (Chair)
CBSC19-01E ToR for the CB Coordinators (Chair)

The 19th meeting of the IHO Capacity Building Sub-Committee (CBSC) due to the COVID-19 pandemic was conducted by VTC on 9 and 10 of June 2021. The meeting was chaired by Mr Evert Flier, Chair of the CBSC who opened the meeting and welcomed the participants regretting that it was not possible to have a face-to-face meeting yet and appealed to an active participation in the meeting.

The Secretary explained that due to an issue with the registration system the list of participants will be created using the chat and described the defined procedures to ask the floor and to run the presentations.

The Chair mentioned that Japan will not be able to host the meeting in 2022 and asked if Indonesia would be able to host the meeting in 2022, having Monaco as backup.

IHO Director Luigi Sinapi welcomed the participants and mentioned that in spite of the pandemic situation, the activity of the Capacity Building Sub Committee has been intense, enhancing the Intersessional Meeting, the preparation of the 2022CBWP, the work of the project Teams and the approval of the Empowering Women in Hydrography project. He congratulated the Regional Coordinators by the management of the programmes and mentioned the need to have flexible programmes and recur to the VTC facilities recalling the importance that the IHO E-learning Center is expected to have when is operational.

The Chair presented Captain Marco Grassi from Italy as a new Member of the CBSC.

2. Approval of Agenda

Doc: CBSC19-02 Agenda and Timetable (Chair)

The Chair asked the Members if they have any inputs to the agenda. The Meeting approved the Agenda.

Decision 1: to approve the Agenda of the CBSC19 Meeting (doc. CBSC19-02V03).

3. Matters arising from Minutes of CBSC18 and CBSC19 Intersessional (CBSC19 Int) Meeting

Docs: CBSC19-03A Minutes of CBSC18 (Chair)
CBSC19-03B Minutes of CBSC19 Int (Chair)
CBSC19-03C Status of Action List from CBSC18 (Secretary)
CBSC19-03D Status of Action List from CBSC19 Int (Secretary)

The Members had no comments on the Minutes of the CBSC18 and CBSC19 Int, so the Meeting proceeded with the status of the respective List of Actions from those Meetings.

The Secretary presented a compilation of the current active actions from the CBSC18 and CBSC19 Int (documents CBSC19-03C and CBSC19-03D) to the Meeting and asked the Members to provide updated information, when possible, to CBSC18 Actions 5, 10 and 13 and enhanced CBSC19 Int

Decision 5 related to the 2021CBWP funded activities that will not be executed in 2021 which it was decided will be moved to the 2022CBWP.

Decision 2: to approve the Minutes of CBSC18 and CBSC19 Intersessional Meetings (doc. CBSC19-03A and CBSC19-03B).

Action 1: CB Coordinators to update the information on the status of actions 5, 10 and 13 of the List of Actions from CBSC18 (doc. CBSC18-03C) (deadline: 30 June 2021).

Action 2: Secretary to update the List of Actions from CBSC18 (doc. CBSC18-03C) (deadline: 2 July 2021).

4. Reports by the Chair and the IHO Secretariat

*Docs: CBSC19-04A Report by the Chair (Chair)
CBSC19-04B Report by the IHO Secretariat (Secretary)*

The Chair invited RHC Members and CB Coordinators to provide an update regarding the 2021CBWP.

It was highlighted that it will be important to receive information regarding the eventual cancellation of any project, in particular the funded one's. All the CB Coordinators intervened expressing a general intention to maintain the 2021CBWP funded activities, with a common strategy to increase the possibility of executing those activities, postponing some to the end of the year or moving them to the next year.

The report from the IHO Secretariat was provided by the IHO Director Sinapi reporting on the new 94th IHO Member State, Lebanon. The theme of World Hydrography Day (WHD) 2020 is "One hundred years of international cooperation in hydrography". The theme is designed to showcase progress in knowledge and technology over the past 100 years, while celebrating the ground-breaking work which was done during this period. The goal is to highlight the past, present, and future of hydrography by showing the important work of early hydrographers, progress in technology, and the technological state of the art. He summarized the activities of the IHO Centenary celebrations and announced the new website of the International Hydrographic Review. In relation with CBSC considered that probably most of the 2021 CBWP projects will be moved to 2022. Also, it highlighted the creation of the CB Project Team to draft a revised Strategy and the status of the Empowering Women in Hydrography (EWH) Project.

Decision 3: to note the Reports under agenda item 4.

5. Regional Assessment of CB Activities

5.1 Reports of the Regional Hydrographic Commissions (RHC)

*Docs: CBSC19-05.1A EAHC Report
CBSC19-05.1B EAHC Report
CBSC19-05.1C MACHC Report
CBSC19-05.1D MBSHC Report
CBSC19-05.1E NIOHC Report
CBSC19-05.1F RSAHC Report
CBSC19-05.1G SAIHC Report
CBSC19-05.1H SEPRHC Report
CBSC19-05.1I SWAtHC Report
CBSC19-05.1J SWPHC Report*

The EAHC Report was presented by Peter Hak from ROK mentioning that since CBSC18, in terms of CB, there were no activities in the region, except the participation of some MS in the UKHO online courses in March-June 2021.

The CBWP2021 P-15 is still planned for 2021, but the P-19 will be postponed. Also, hope that the P- 04 Training for Trainers - Basic Hydrography, funded by ROK could be in person or if necessary by remote learning. Stated the expected importance of the IHO E-learning Center for the CB but

revealed some concerns with the contents that is necessary to develop. The presentation was concluded highlighting the importance of the Online courses, such as the example of the ones provided by UKHO.

The EAHC Report was presented by Julien Smeckaert from France that informed the CBSC of the cancellation of the MSI/MSDI Seminar that was planned to be connected with the EAHC16 Meeting. The TV to Togo last year was executed such as the TV to Ivory Coast this year.

This year two activities are planned, a TV to Congo and an MSI/MSDI seminar if it is not possible to have it in face-to-face, will be by webinar. The biggest challenge in the region is related with the need to support the CB of the Western African Countries and then he reported on the status of the members in relation with the CB Phases. On the lessons learned from Covid-19, the impact of remote learning and VTC meetings that allow an increased attendance was raised, but the face-to-face activities still having important advantages. Also mentioned the opportunity to develop regional seminars in French and English.

The Chair suggested that if these Seminars are by VTC, it will be important to also allow attendees from other regions that could benefit.

The MACHC Report was presented by Lucy Fieldhouse from UK that highlighted the impact of COVID-19 due to the face-to-face dependency of the activities. The region is adapting to deliver some CB activities by VTC such as the SDB Webinar prior to MACHC21.

The Activities planned to be delivered in 2021 will be subjected to travel limitations. The P-17 Seminar on Raising Awareness of Hydrography, depending on the decision, might be delivered virtually. Also, some webinars from WG could be organized in the region such as the one in S-100 that is planned to September 2021. The main challenges of the region are complex, such as the intense navigation, the Panama Canal, the lack of bathymetric data in some areas, climate changes, the hurricanes and the high number of Small Island Developing States. On the lessons learned the region is looking for other partners such as the IMO, IALA, IOCARIBE and adjacent regions to share the costs of some projects like the Tides and Water Levels for Spanish speaker training planned for 2021.

The Chair commented that, if possible, it would be beneficial to provide access to the webinars for members of other regions. Also mentioned was the importance to have a standing action item for CB Coordinators to monitor some statistics on MSI messages.

The MBSHC Report was presented by Emre Gulher from Turkey that reported two CB activities that took place this year, the UKHO Online Courses and the IALA Webinars on AtoN, Monitoring, Buoy Moorings, AtoN Light Characteristics and AtoN Maintenance. For the rest of the year most activities are planned as remote events except the Cartographic Data Management scheduled for December. Another activity planned to the end of June is the Webinar on Satellite-derived Bathymetry and it is open to participants from other regions. Spain collaborates with other regions providing Courses and webinars in Spanish and Italy continues supporting Lebanon. The MBSHC short course requests are more now on CB Phase 2 & 3.

Director Sinapi raised the importance of the interregional collaborations specially in these times where most of the events are done by VTC, in special related with the courses.

To communicate and allow a wider participation of activities it was decided to create a CB Calendar where the relevant remote activities of the Regions (Seminars, workshops and courses) could be advertised.

The NIOHC Report was presented by Lucy Fieldhouse from UK that mentioned the IHO CB funded activities were postponed in 2020. However, other activities have been conducted such as: the MSDI Awareness Course and to support regional engagement and develop knowledge sharing, has established the 'Learn Through Each Other' Programme - a monthly VTC meeting for NIOHC Members to discuss topics important to the region such as: Crowd Sourced Bathymetry; MSDI; Seabed2030; Satellite Derived Bathymetry; ENC Production and Migration from S-57 to S-100. For 2021 is planned the "P-8 MSI Training" that could be delivered by VTC and the "P-13 Seminar on Raising Awareness of Hydrography" to be delivered on 08 Jul, via VTC. In relation to the

challenges experienced, Covid has impacted the engagement within the region, the region carries a heavy traffic of petroleum and derivatives, also there are environmental challenges such as cyclones and the difficult engagement with the Red Sea Maritime states. The relations with the RSAHC CB Coordinator has allowed that the CB activities were open to the Members of RSAHC.

RSAHC did not present a Report.

The SAIHC Report was presented by Lucy Fieldhouse that mentioned the impact of Covid that did not allow CB funded activities to be executed in 2020. The UKHO delivered a 2-day virtual MSDI Awareness Course for the SAIHC, NIOHC and RSAHC regions. For 2021, the A-02 Technical Visit to Republic of Tanzania was postponed to 2022, the P-09 MSI Training Course probably will be delivered by VTC and the P-16 Raising Awareness of Hydrography – Scheduled for delivery in December 2021 prior to SAIHC18. In the achievements, SAIHC has organised 3 successful virtual meetings for the ICCWG & MSDIWG, Seabed2030 session and plenary and UK delivered an online 2-day MSDI Awareness Course in January 2021 to SAIHC members (8 Countries attended with 21 delegates) plus additional members from NIOHC and RSAHC. The intention is to proceed the collaboration with neighbouring regions and the use of virtual methods to supplement the face-to-face engagement.

The SEPRHC Report was presented by Felipe Barrios from Chile that provided an overview on the Member states and mentioned the active participation from Panama. He summarized the Hydrography recognized courses in the region that are going on and also that Colombia had an IALA training course. The 3-year work Plan was aligned with the IHO strategy, having long, medium and short term goals. It was recognized that the four countries have a high level of hydrographic development, but wanted to improve it, so aligned the priorities and presented 6 projects for 2022 divided in two main priorities.

The SWAtHC Report was presented by Helber Carvalho from Brazil with an overview on the Member States assessment of the CB Phases provided. The planned Technical Visit to Bolivia if not able to take place in 2021, will be postponed to 2022. In 2020 there was a Hydrographic Awareness Seminar, just after the SWAtHC14 meeting for the associate and observer members. He mentioned the postponed projects to 2021 three of them funded and the projects proposed to the 2022CBWP. In relation with the challenges the impact of Covid-19 was stated and the need to keep encouraging Paraguay and Bolivia to become IHO Members, as well as the need to improve the transition to S-100. 10 hydrographers and cartographers participated in the Online courses offered by UKHO and some foreigner officers completed Hydrography courses in Brazil.

The SWPHC Report was presented by Matt Borbash from USA that mentioned the challenges of the Pacific Island Countries and Territories (PICTs) being geographically remote and fragmented where the marine sector plays an important role. At CBSC18 two projects were funded but were not executed and probably would not be completed in 2021. The NAVAREAs IX, X and XIV Coordinators and CB Coordinator met virtually to discuss methods, opportunities and challenges of delivering remote MSI CB. He also reported on other activities such as the distribution of SEABED 2030 data loggers to Palau to initiate a crowd source bathymetry project and on the activities planned for 2021 mentioning that CBWP 2021 P-06 and P-07 most likely will be deferred to 2022 due to COVID-19. On October 2021, NOAA will host a virtual seminar on a global Surge and Tide Operational Forecast System (STOFS) tool and he will provide information also for other regions.

Action 3: CB Coordinators to evaluate the possibility of having participants from other RHCs in the remote activities of the Region (Seminars, workshops and courses).

Action 4: Secretary and Chair to create a CB Calendar where the relevant remote activities of the Regions (Seminars, workshops and courses) could be advertised to provide more publicity and allow Members from other regions to participate (Deadline 9 July 2021).

Action 5: CB Coordinators to monitor and report on statistics on MSI messages within the RHCs.

Action 6: Secretary to provide an overview of the webinars that had been taken in the RHCs for CBSC Chair report to IRCC13 (deadline 15 June 2021).

Action 7: Secretary to update the CBWP2021 removing SEPRHC duplicated projects (P- 34, P-38, P-42 and P-45) (deadline 15 June 2021).

6. Regional or other projects for CB

Doc: CBSC19-06.1 Offer of Courses from Spain (IHM)

The Spanish Hydrographic Office (IHM) provided a presentation on the Hydrographic courses that they have and the possibility to accept international students under a plan of international cooperation with some scholarships granted to some students, with the applications being submitted through the Spanish Defence Attachés in the Embassies. IHM also expressed to be opened to collaborate in some seminars, courses and workshops, for Spanish-spoken language, with highly qualified educators.

Action 8: CB Coordinators to share the details of the Courses offered by Spain in the RHCs with Spanish speaking Countries.

7. Outcomes of the 2nd IHO Assembly and the 4th Meeting of the IHO Council

Docs: CBSC19-07A Outcome of the 2nd IHO Assembly (Chair)

CBSC19-07B Decisions and Actions from C-4 (Secretary)

A-2 approved the establishment of the joint IHO-Singapore Innovation and Technology Laboratory to coordinate and be the test-bed for several initiatives and also the Roadmap for the implementation of the IHO Universal Data Model (S-100).

A relevant aspect was the IHO Strategic Plan which lays out the organization's priorities for the coming years (2021-2026). Also was approved a new project proposed by Canada on Empowering Women in Hydrography - EWH, which aims to increase gender equity and the number of women in the hydrography leadership positions as well as the establishment of a new IHO e-learning centre hosted by the Republic of Korea at the Korea Hydrographic and Oceanographic Agency (KHOA) and the three-year IHO Work Programme/Budget (2021-2023) which allow the IHO to proceed with its work.

The Decisions and Actions of the 4th Meeting of the Council relevant to the CBSC were presented and was mentioned the need to discuss C4/28 and how the CBSC can contribute to support MS in meeting the IHO deadlines for the production of S-100 products, in special S-101.

The Chair mentioned that MS should be aware on the S-100 roadmap, the established deadline of 2024 and that the RENCs could help on the process.

Decision 4: to note the outcomes of the 2nd session of the Assembly and the updated status of the C4 decisions with impact in the CBSC.

8. Operational issues of the CBSC

8.1 Report of the CB PT Strategy

8.1.a Tailored CB approach for Regional Strategy

Docs: CBSC19-08.1A Capacity Building Strategy (PT Chair)

CBSC19-08.1B IHO Strategic Plan 2021-2026 (PT Chair)

Matt Borbash, the PT Strategy Chair, started his report mentioning the appreciation of the PT members effort and reported on the meetings that the PT had have so far. The Draft Capacity Building Strategy which is now in version 4, document CBSC19-08.1A, is available in the CBSC19 webpage. The PT conducted a gap analysis to monitor where the CBSC Strategy was and where it is wanted to be considering the IHO Strategic Plan and identified three work items: the Draft aligned CB Strategy; the updating of the phases of development (to potentially include a phase 0 on hydrographic governance); and, add a 5th step to the process of the CB Strategy (Awareness; Assessment; Analysis; Action) to address Measures of Effectiveness (MoE). It was also considered necessary to develop an allocation of the CB resources strategy and to have a balance in

accordance with the level of resources available. CB Members were asked to look at the Draft Capacity Building Strategy and provide comments. Chair raised the need to receive comments and will report to IRCC that the work will follow up by correspondence and request comments from the IHO MS. Thomas Dehling raised the importance to have a report on the current status of the Draft Capacity Building Strategy at IRCC13 to allow the IRCC Chair to report to C-5.

Decision 5: to note the Draft CB Strategy Report.

Decision 6: to acknowledge the effort and achievements of the CBSC PT Strategy.

Action 9: CBSC Members to review the Draft CB Strategy and provide contributes to the PT Chair (deadline: 18 June 2021).

Action 10: CBSC to Report on the Draft CB Strategy to IRCC13 (IRCC12/Action 7 refers).

8.2 IHO E-Learning Center

Doc: CBSC19-08.2 CB E-learning Project Team (PT Chair)

Helber Carvalho, the Chair of the CB E-learning Project Team provided some introductory information on the background of this project and its importance. He introduced the PT Members and reported on the three meetings of the PT and the activities developed so far. Mentioned were the development of the Terms of Reference, Rules of Procedure and the Implementation Plan. Some MS and organizations have already shared contents and experiences such as: MSDIWG, IC-ENC, SANHO, KHOA, SHOM and UNESCO. Also reported on were the Planned Activities for 2021 such as the draft of the Center Guidelines and the creation of the Center website. For 2022 is planned to finalize the Framework and test the site with the MS. The system architecture was described and revealed the different kinds of IHO e-learning Courses that is expected to have and the respective requirements and characteristics.

Decision 7: to note the E-learning PT Report.

Action 11: CB Coordinators to promote the need of support from Member States who have experience in developing and providing e-Learning contents to consider actively sharing contents, resources, and experience with the e-Learning PT (aligned with IRCC12 recommendation 16 and replace CBSC19 Intersessional Decision 8).

Action 12: IRCC and HSSC to ask the respective WGs to have a work item in the respective agendas to develop E-learning contents and share with the IHO E-learning Center.

8.3 Performance Indicators and Statistics

Doc: CBSC19-08.3 Performance Indicators (Chair)

CBSC Secretary updated the meeting on the established Performance Indicators and Statistics showing the graphics with: the CB funds; the submitted requests and delivered projects; the Technical Visits; and, the CB activities number of students. It was clear that 2020 was not a typical year since all figures were very affected by the Covid pandemic. The Chair mentioned that it will be interesting to have the figures of the virtual events that the CB Coordinators can provide to the Secretary. Thomas Dehling considered important to have more information on the situation in 2020 and to include statistics on the overall CB events that are not funded by the CB funds. Also mentioned the need to adjust the SPIs in accordance with the IHO Strategic Plan and the need to measure the effectiveness of CB activities. KHOA suggested to use some funds to develop e-learning contents since it is expected that 2022 will be also affected by the Covid pandemic and gave the good example of the UKHO Online Courses.

Decision 8: to note the Report on the Performance Indicators and Statistics.

Decision 9: to have a session on the next Intersessional Meeting to discuss the revision of the SPIs and statistics that should be reported, having in consideration the future CB Strategy and the developments of the CBSC PT Strategy.

8.4 CB Procedures

Chair asked if there are some inputs to the CB Procedures and asked if the CB Management System is operational. The Secretary explained that the information he has is that the CBMS was not used for the submissions. KHOA explained that the plan is to redesign the CBMS.

Action 13: KHOA to Report on the status of the CBMS on the next Intersessional Meeting.

Decision 10: to have a session on the next Intersessional Meeting to discuss the Procedures, having in consideration the future CB Strategy.

Action 14: CB Members to evaluate the need to review the Procedures, having in consideration the Draft CB Strategy.

8.5 Review of the 3-year RHC Work Plans 2021-2023

<i>Docs: CBSC19-08.5A</i>	<i>EAHC 3-year Work Plan</i>
<i>CBSC19-08.5B</i>	<i>EAtHC 3-year Work Plan</i>
<i>CBSC19-08.5C</i>	<i>MACHC 3-year Work Plan</i>
<i>CBSC19-08.5D</i>	<i>MBSHC 3-year Work Plan</i>
<i>CBSC19-08.5E</i>	<i>NIOHC 3-year Work Plan</i>
<i>CBSC19-08.5F</i>	<i>RSAHC 3-year Work Plan</i>
<i>CBSC19-08.5G</i>	<i>SAIHC 3-year Work Plan</i>
<i>CBSC19-08.5H</i>	<i>SEPRHC 3-year Work Plan</i>
<i>CBSC19-08.5I</i>	<i>SWAtHC 3-year Work Plan</i>
<i>CBSC19-08.5J</i>	<i>SWPHC 3-year Work Plan</i>

Chair invited the CB Coordinators to provide the updates of the 3-year Work Plans of each RHC. The meeting agreed on the importance to have such plans. It was also expressed the need to have the projects that do not require CB funds in the CBWP.

9. CB Management

9.1 Finance Report

Doc: CBSC19-09.1 Finance Report (Secretary)

The Secretary introduced the finance report mentioning that in 2021 the expenditures of the CB fund are expected to be much lower than the available funds and most of the projects probably will be moved to 2022. In 2022 the funds for the non-earmarked projects are expected to be lower than in the past years but, with the moved projects from 2021 there will be a significant number of projects to execute. The situation could be more difficult in 2023 with the expected reduction of the non-earmarked funds so, is each time more important to share resources and projects and invest in the remote activities.

Decision 11: to note the Finance Report.

9.2 Management Plan

Doc: CBSC19-09.2 Draft 2022 CB Management Plan (Secretary)

The Secretary introduced the 2022 CB Management Plan. The meeting considered several options regarding the funding of projects that all were valued with 39 points.

Decision 12: to select to be funded the projects with more than 39 points and from the projects with 39 points (Doc. CBSC19-09.2), the following:

- NIOHC Seminar on Raising Awareness of Hydrography;

- MACHC Technical Visit to Belize;
- EAtHC Technical visit to Sierra Leone.

Action 15: secretary to prepare the 2022CBWP in accordance with the approved CBMP and upload it (Doc. CBSC19-09.3).

9.3 Adoption of the 2022 CBWP

Doc: CBSC19-09.3 Adopted 2022 CBWP (Secretary)

Considering the approved projects of the 2022CBMP, the Secretary presented the Proposed 2022CBWP.

SEPRHC raised the issue of not having projects approved after and important effort of the Region to develop a 3-year work plan aligned with the IHO Strategic Plan.

The Chair mentioned that the non-earmarked projects are focused on the Phase 1 so regions need to develop strategies to find other solutions.

Decision 13: to approve the 2022CBWP (doc. CBSC19-09.3).

10. Report from the CBSC to the IRCC13 Meeting

Doc: CBSC19-10.1 CBSC Report to IRCC13 (Chair)

The Chair mentioned that the CBSC Report to IRCC13 is available on the website and asked the Members for comments or to receive inputs until next Monday.

Decision 14: Members to review CBSC Report to IRCC13 and provide contributes (deadline 15 June 2021).

11. Any other business

The Chair mentioned that there are two main challenges related with the data sharing with GEBCO, one related with the data that is not being shared and the other related with the funds to fund external ocean mapping activities. The CB coordinators should have an active role since they could try to convince the members to share data and sharing is not a yes or no question. If a Member State could not share at one specific resolution, the data maybe can be shared at a different resolution.

Action16: CB Coordinators to promote sharing of bathymetric data with GEBCO as part of improving ocean literacy.

12. Next CBSC Meetings (venue and date)

In relation with the next CBSC Meetings, the Chair mentioned that is expected to receive offers to host CBSC23. The following actions were agreed:

Decision 15: to have an Intersessional Meeting in February 2022.

Decision 16: to hold the next CBSC meetings as:

CBSC20: May / June 2022 – Indonesia (Monaco as backup)

CBSC21: May / June 2023 - Japan

CBSC22: May / June 2024 – Ecuador (TBC)

13. Review of the List of Actions

Doc: CBSC19-13 Draft list of actions from CBSC19 (Secretary)

CBSC reviewed the Draft List of Actions, Doc. CBSC19-13, drafted during the meeting.

14. Closure

Chair closed the meeting after acknowledging the work of those who contributed to the meeting.